

# EPA Norwood Landfill Virtual Public Meeting

**Marion Cox, Neutral Facilitator**

**December 9, 2021**

If you have problems joining by phone or online, please contact Philip Workman (EPA's Information Services Branch representative) at **267-294-7825** or **Workman.Philip@epa.gov**



# Tonight's Meeting Purpose

- Present EPA's findings and recommendations for next steps at the Norwood Landfill Site
- Provide an update from ATSDR and PA DOH on their Public Health Evaluation
- Receive comments and address questions from area residents about the site



# Agenda

- Welcome + Review (*5 minutes*)
- EPA Overview of Findings and Recommendations (*10 minutes*)
- EPA Round 2 Sampling Results (*20 minutes*)
  - Q&A Session (*20 minutes*)
- ATSDR Public Health Evaluation (*15 minutes*)
  - Q&A Session (*20 minutes*)
- Norwood Landfill Outcomes + Q&A (*20 minutes*)
- Wrap Up (*10 minutes*)

Joe Vitello  
EPA Site Assessment Manager



Karl Markiewicz  
Senior Toxicologist, ATSDR



Nathan McCray  
Health Assessor, PA Dept. of Health



Josh Barber  
EPA Remedial Project Manager



# Q&A Process

- Questions will follow each presentation.
- Type questions into the chat box, or “raise your hand” by clicking on the “reactions box” at the bottom of the screen.
- Marion will take questions from the chat box and raised hands until the 20-minute session is complete.
- Type any remaining questions into the chat box, along with name + email, and EPA will respond following the meeting.
- EPA IS RECORDING THE ENTIRE MEETING.
  - This recording will be made available on [epa.gov/Norwood](http://epa.gov/Norwood)



# Norwood Landfill

## Expanded Site Inspection Data Results

Joseph Vitello, EPA  
Karl Markiewicz, ATSDR  
Nathan McCray, PADOH  
Joshua Barber, EPA



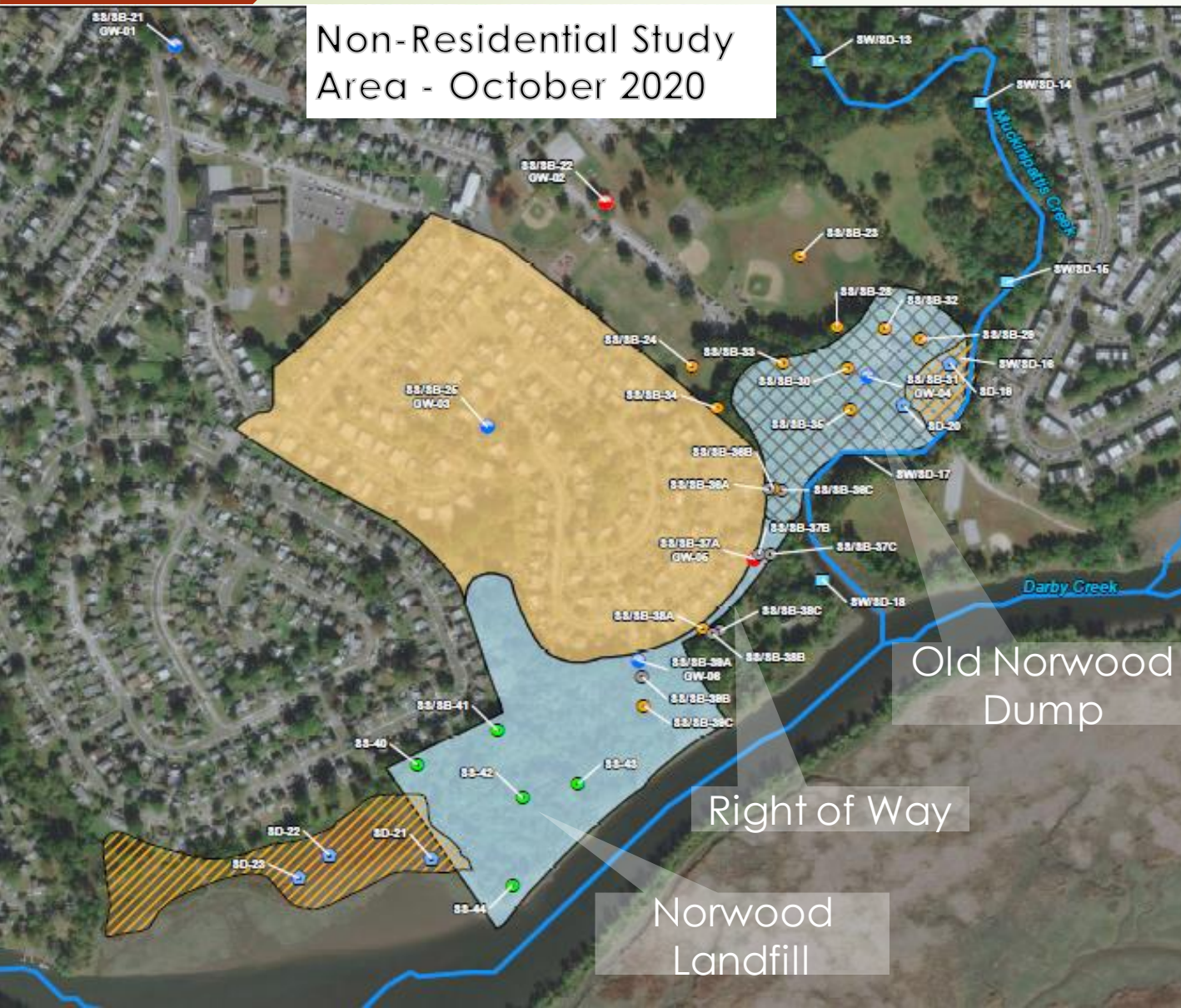


# Key Highlights – Fall 2020

- ❑ Round 2 Sample Results consistent with Round 1 findings
- ❑ Residents are not exposed to contaminants in soil at the Norwood Landfill, the Old Norwood Dump, or in Winona Homes at levels of concern.
- ❑ The Norwood Landfill Site does not qualify for inclusion on the National Priorities List.
- ❑ EPA will conduct additional sampling at 5 residential properties to determine the type of chromium present in the soil.
- ❑ Contaminants present in the soil of Old Norwood Dump and Norwood Landfill have the potential to migrate into Muckinipattis and Darby Creek, posing a risk to aquatic organisms that live in the sediment.
- ❑ EPA will continue evaluating sediments in the local streams to see if the landfill areas are contributing to contamination in Darby Creek.



# Round 2 Non-Residential Sample Results



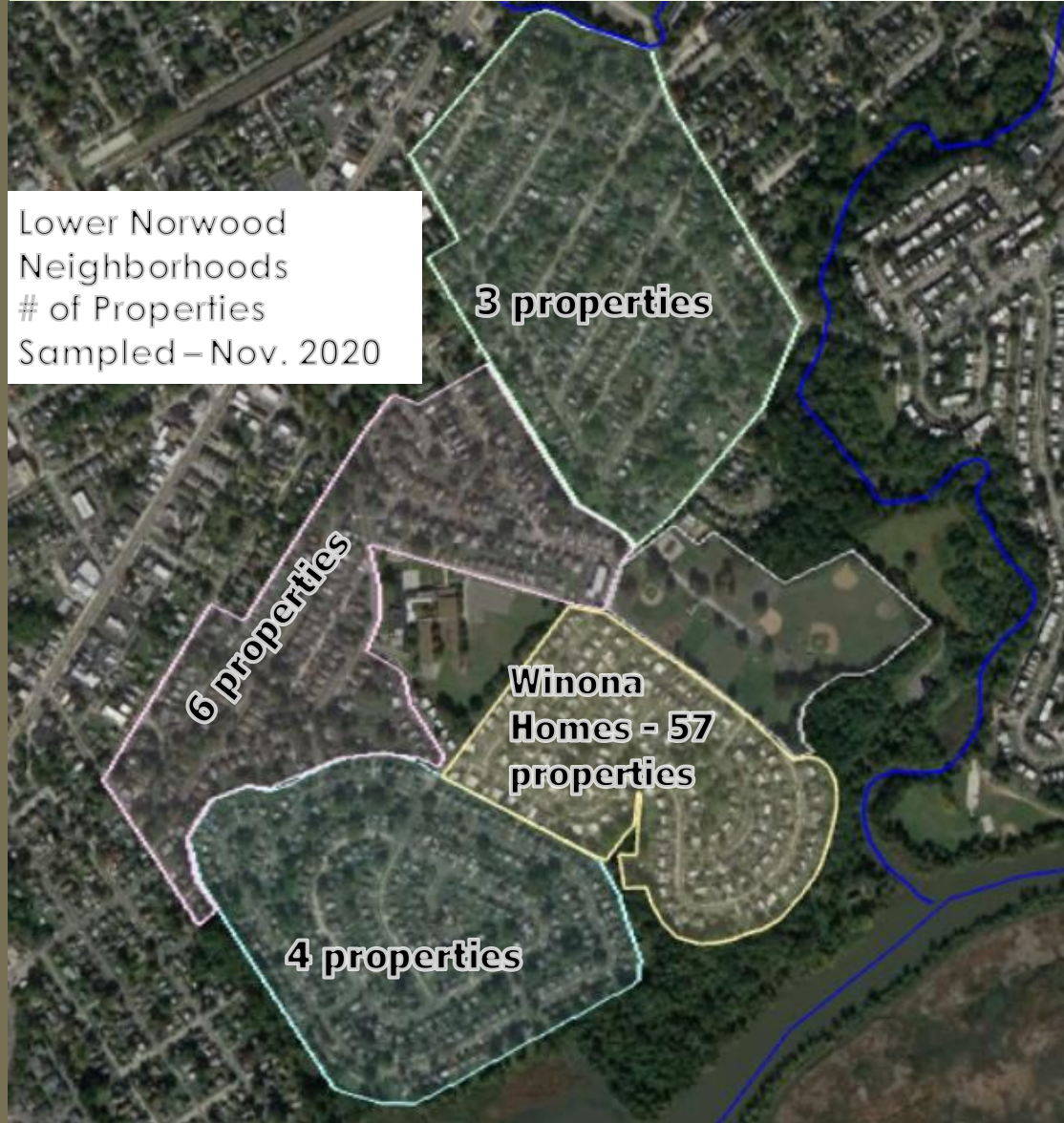
- 65 samples across the study area analyzed for VOC's, SVOC's, PCBs, pesticides, inorganic metals.
- Consistent with 2017 Sample Results
- Contaminant levels are greater in the Landfill and Dump area soils.
- Groundwater does not present a threat for vapor intrusion
- Wetlands in Muckinipattis and Darby Creeks may be impacted by contaminants also found in the Dump and Landfill.
- EPA will continue evaluating surface water and sediment near the site.







# Round 2 Residential Sample Locations and Results



- 70 properties sampled – nearly 1000 total data analyses
- Surface and Sub-surface samples from 2'-4' and 8'-10' below ground.
- Consistent with 2018 Sample Results
- Types of contaminants and concentrations are consistent with an urban environment
- No detections at levels of concern
- No additional long-term investigation of soil required
- Additional samples from up to 5 properties in Winona Homes will be taken to determine the type and amount of chromium present in the soil.



# Human Health Risk Assessment

- ❑ Focused on soil data from Norwood Landfill, Old Norwood Dump, and Winona Homes
- ❑ No exposure to contaminants at levels of concern
- ❑ Most properties in Winona Homes fell within normal background ranges and failed to exceed any of EPA's risk criteria.
- ❑ There are 5 residential properties where EPA will conduct further tests to determine what type and amount of chromium is present.





# Ecological Risk Assessment

- Similar to the Human Health Risk Assessment, EPA performed an ecological risk screening for both Muckinipattis and Darby Creeks.
- Unacceptable risk to aquatic life in Muckinipattis and Darby Creek, driven by contaminants found in wetland areas.
- Study of contaminants in both creeks will continue through a separate investigation focused on point and non-point sources of pollution impacting the Lower Darby Creek Watershed.



# Options EPA Considered for Next Steps at the Norwood Landfill Site

- **Emergency Response Action:** When contamination poses an imminent and substantial endangerment to human health or the environment” that merits an emergency removal of contamination.
- **National Priorities List (NPL):** EPA has determined that there is no long-term investigation and cleanup required at this site - therefore EPA is not recommending NPL listing for the Norwood Landfill site.
- **No Action** – When a site does not qualify for the NPL or any other response, EPA stops all assessment activity.
- **Further evaluation** of the wetland areas as well as the sediment and surface water of both Muckinipattis and Darby Creeks is needed and will be evaluated through Aquatic Studies planned for the Lower Darby Creek Watershed.



# Key Takeaways

- ❑ Round 2 Sample Results consistent with Round 1 Sampling
- ❑ Residents are not exposed to contaminants in soil at the Norwood Landfill, the Old Norwood Dump, or in Winona Homes at levels of concern.
- ❑ The Norwood Landfill Site does not qualify for inclusion on the National Priorities List.
- ❑ EPA will conduct additional sampling at 5 residential properties to determine the type of chromium present in the soil.
- ❑ Contaminants present in the soil of Old Norwood Dump and Norwood Landfill have the potential to migrate into Muckinipattis and Darby Creek, posing a risk to aquatic organisms that live in the sediment.
- ❑ EPA will continue evaluating sediments in the local streams to see if the landfill areas are contributing to contamination in Darby Creek.





# Question and Answer

20 Minutes



## Agency for Toxic Substances and Disease Registry (ATSDR)

- Dr. Karl Markiewicz, PhD

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## Pennsylvania Department of Health (PADOH)

- Nathan McCray, Health Assessor

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# Question and Answer

20 Minutes

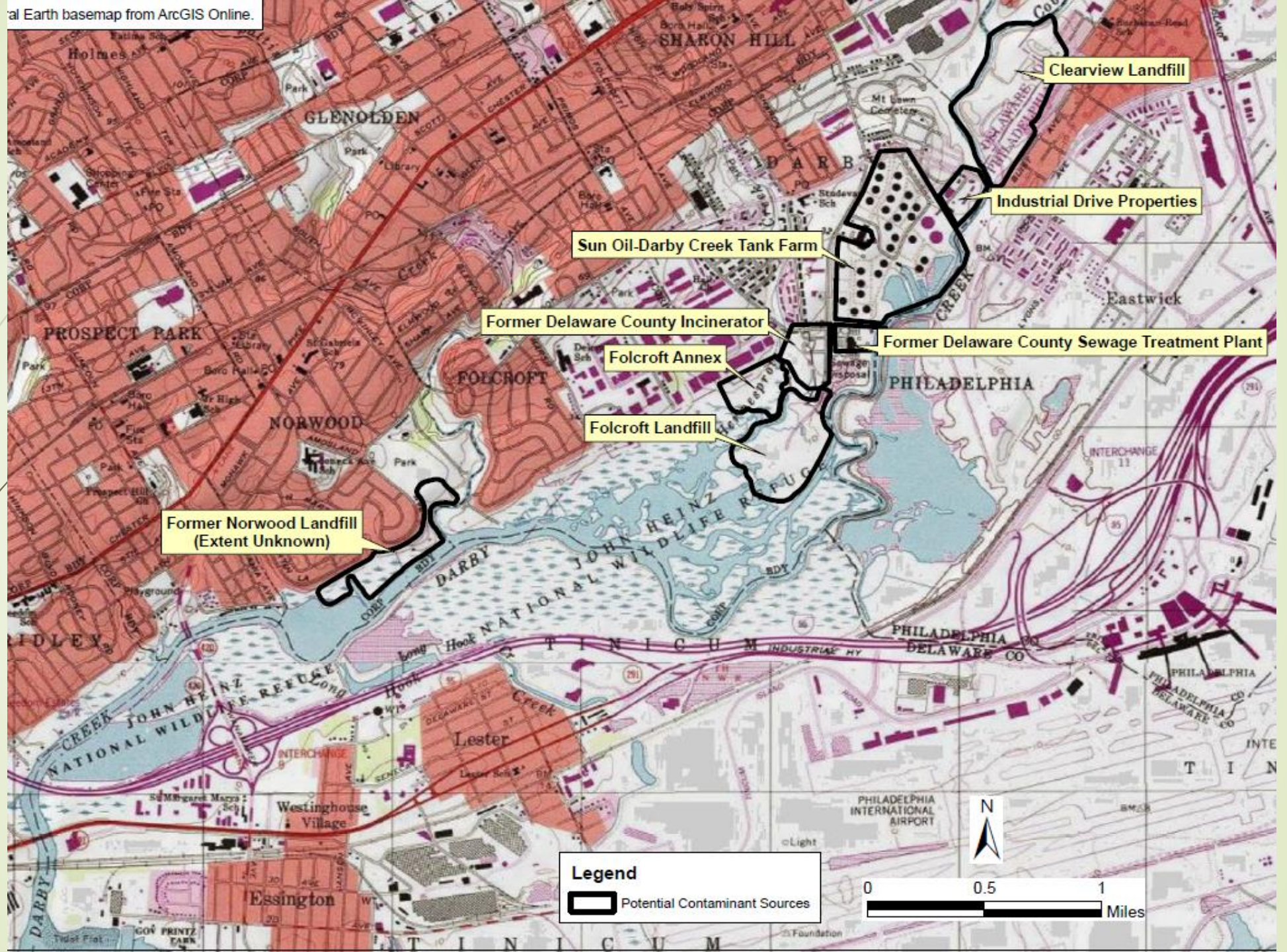




# Outcomes For Muckinipattis Creek and Wetland Areas

Joshua Barber, EPA  
Remedial Project Manager for the  
Lower Darby Creek Area  
Superfund Site









# Aquatic Risk Assessment for Lower Darby Creek Area (LDCA)

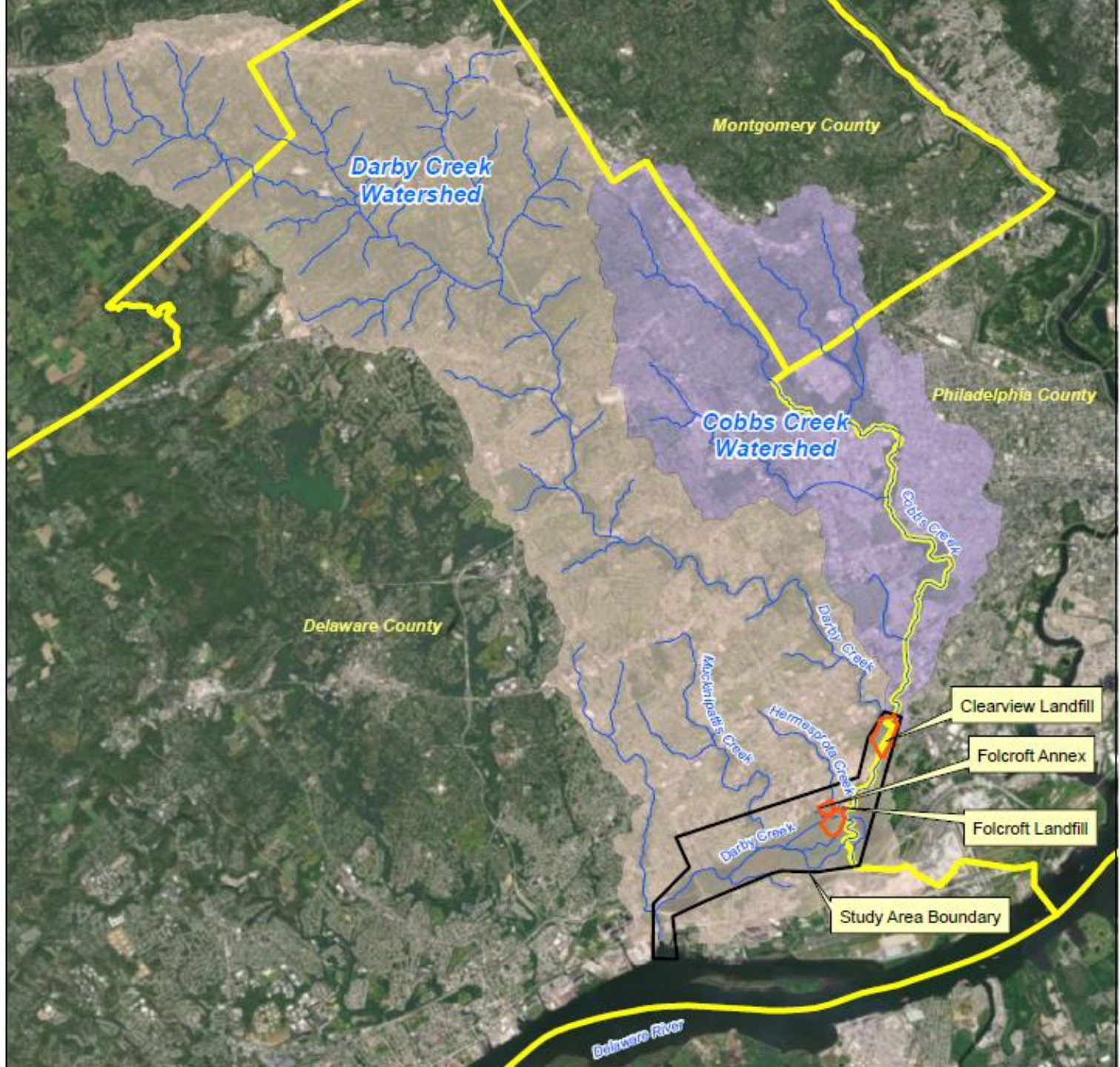
- The Aquatic Baseline Risk Assessment for the Lower Darby Creek Area (LDCA) Superfund Site looked at many potential sources of contaminants, including the Norwood landfill.
- EPA considered data for contaminants in soil, sediment, fish and turtle tissue groundwater and surface water.
- While there were limited human health risks from sediment in certain areas, the biggest potential health risks, by far, were from the consumption of fish and turtle tissue by anglers and hunters.
- Ecological risks were observed for many different types of plants and animals throughout the aquatic areas.



# LDCA Aquatic Risk Assessment and Norwood Landfill

- Norwood Landfill is one of several potential sources of the following contaminants that may be transported into aquatic areas of LDCA:
  - Polycyclic Aromatic Hydrocarbons (PAHs) (i.e., benzo(a)pyrene)
  - Breakdown products related to historic use of DDT (i.e., Dichlorodiphenyldichloroethylene (DDE))
  - Chromium







# LDCA OU4 Aquatic Feasibility Study

- EPA has designated the aquatic environments around LDCA as Operable Unit 4 (OU4) and is starting the process to evaluate options to address potential human and ecological health risks in a Feasibility Study (FS).
- EPA will be collecting additional samples to:
  - Better understand various potential sources of contaminants (both upstream and downstream)
  - Focus on those areas that present greatest potential for actual human or ecological exposure and health impacts
  - Model impacts from large storms and flooding that can cause contaminants to be transported and accumulate
  - Identify any early, interim or long-term Superfund response activities that can meaningfully reduce the chance of exposure to LDCA contaminants in OU4





# Supplemental Materials

- The following background materials are available on **epa.gov/Norwood**:
  - A “catch-up” video
  - Fact sheet
- Approx. one week after tonight’s meeting, the following will also be available on **epa.gov/Norwood**:
  - These PPT slides
  - Recording of tonight’s meeting
  - FAQs compiled from questions received tonight

# Closing Remarks and Contact information

[www.epa.gov/norwood](http://www.epa.gov/norwood)

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