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GE-Pittsfield/Housatonic River Site

Vernal Pool Pilot Study

Pittsfield, MA

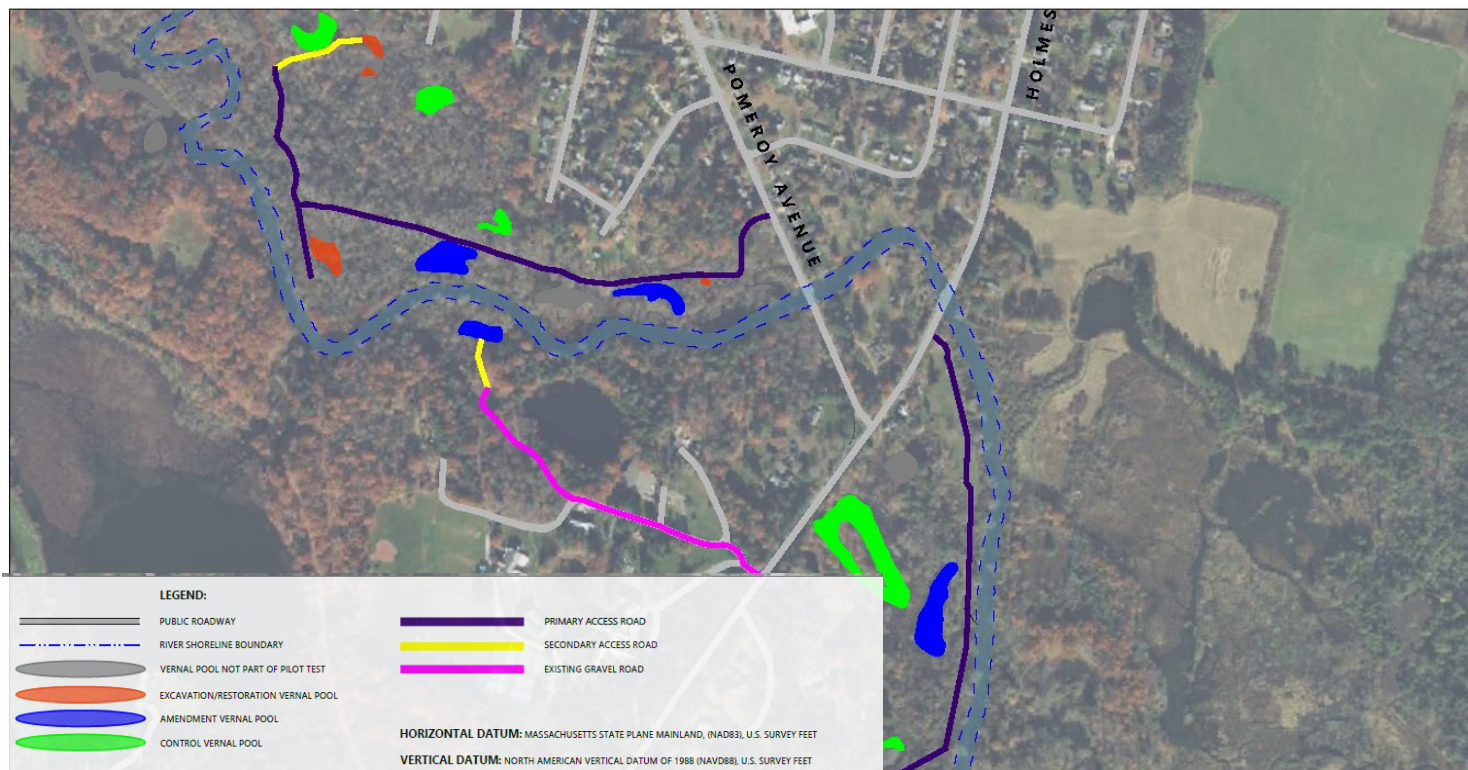


Figure highlights some of the vernal pools receiving activated carbon treatment, excavation, or monitoring as well as roads that will be used for primary and secondary access. Holmes Road runs North to South in the center of the image.

VERNAL POOL PILOT STUDY BACKGROUND

With oversight by the U.S. Environmental Protection Agency (EPA), the General Electric Company (GE) is conducting a pilot study of the cleanup of 10 vernal pools along the Housatonic River, between the confluence of its East and West branches and the City of Pittsfield Wastewater Treatment Plant. The purpose of this Vernal Pool Pilot Study is to assess techniques for the cleanup of these test pools and other impacted vernal pools associated with the Housatonic Rest of River PCB cleanup. Based on the results of the Pilot Study, EPA will determine the preferred method of cleanup and restoration of the remaining vernal pools that were not cleaned up as part of the Pilot Study.

WHAT ARE VERNAL POOLS?

A vernal pool is a small, seasonal wetland that typically fills with water in the spring and dries later in the year. Vernal pools provide unique habitat for specialized plants and animals. Additionally, they provide breeding areas for amphibians (for example, frogs and salamanders) and crustaceans (for example, fairy shrimp). Vernal pools can range in size from as small as a puddle to as large as a shallow lake. The pools included in the Pilot Study range from approximately 0.04 to 1.65 acres, with an average size of 0.38 acres in area.

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HOW MANY VERNAL POOLS ARE THERE ALONG THE HOUSATONIC RIVER?

There are approximately 100 vernal pools along the Housatonic River from the confluence of the East and West branches to the Woods Pond Dam. Of these, 59 are located in the floodplain of Reach 5A, the five-mile stretch of river and floodplain between the confluence and the Pittsfield-Lenox border.

WHAT IS THE CONTAMINANT OF CONCERN IN THE VERNAL POOLS?

Polychlorinated biphenyls (PCBs) are the contaminant of concern. EPA classifies PCBs as probable human carcinogens. Although PCB concentrations in these areas are generally low, PCBs can bioaccumulate in fish and wildlife presenting a risk to human health as PCBs move through the food chain. EPA has identified the consumption of fish from the Housatonic River as a potential risk to human health.

PCBs take a long time to break down once they are in the environment. Many studies in animals and human populations have been performed and determined that PCBs can cause cancer as well as other types of effects on the immune system, reproductive system, nervous system, and endocrine system.

WHAT WILL HAPPEN DURING THE PILOT STUDY?

Five vernal pools will be remediated by removing the top foot of soil and replacing it with clean fill and native plantings. In the other five pools, activated carbon will be mixed with the soil already in place. The PCBs will bind to the activated carbon added to the soil, reducing their availability to plants and animals in the food web. Seven additional vernal pools have been selected as control pools. The control pools will be monitored to assess potential ecological impacts of the cleanup. No active work will occur in the control pools, and these pools will act as a comparison to assess the effectiveness of the Pilot Study remedies.

Activated carbon is a carbon-rich material that allows contaminants to sorb (stick) to the surface of the carbon granules, after which the contaminants become biologically unavailable.

WHEN WILL THE WORK TAKE PLACE?

Field activities will begin in July 2026 and continue through fall 2026. Work is currently forecast to occur Monday through Friday from 7 a.m. to 6 p.m. Some support activities may occur outside those hours.

WILL AIR MONITORING AND NOISE MONITORING BE CONDUCTED DURING THE STUDY?

Yes. GE will place air monitors in locations approved by EPA to verify that Pilot Study activities are not causing PCBs to travel into the surrounding air. There will be continuous ambient (outdoor) air monitoring for particulates (dust) during all construction activities that may generate dust. Additionally, PCB-specific confirmatory air monitoring will be conducted on a regular basis during construction activities that may result in airborne PCBs. PCB sampling will include both PCB particulate and vapor phases. EPA will be conducting quality assurance/quality control sampling to confirm GE's data is accurate.

GE will also conduct continuous noise monitoring during active construction work to ensure compliance with EPA-approved noise standards. Although not anticipated, if work would be conducted at night, the action limit for work activities is set at a conservative level to avoid quality of life impacts to nearby residents.

IF A PCB AIR EXCEEDANCE WERE TO OCCUR, WOULD I OR MY FAMILY BE AT RISK?

No. EPA has established health-based limits for PCBs in air that are below levels that could pose a risk to human health. If monitoring during the Pilot Study shows that PCB levels reach or exceed these limits, work would stop and additional controls would be put in place before work resumes. These safeguards are to protect nearby residents throughout the Pilot Study. GE will be using mitigation measures, such as spraying clean water on dry material, to suppress dust.

WILL WE SEE WORKERS WEARING PROTECTIVE SUITS?

Workers are required to wear appropriate personal protective equipment (PPE). This typically includes hard hats, safety glasses, boots, gloves, and reflective vests. In some cases, workers who may come into direct contact with PCB-containing soils may also wear lightweight protective coveralls to prevent contaminants from contacting skin and clothing.

WHAT HAPPENS WHEN THE PILOT STUDY CONCLUDES?

The vernal pools in the Pilot Study will be monitored and evaluated for three years to determine the most effective remedial option for ecological protection and restoration. During these three years, no active work will occur within the vernal pools. GE has contracted experts in Vernal Pool hydrology and ecology to monitor, with EPA oversight, the vernal pools over the three years. Based on that assessment, EPA will determine the preferred method for remediation and restoration of the remaining vernal pools. The project will continue preparing for the remediation of Reach 5A floodplains, banks, and sediment, which is expected to begin in early summer 2028. GE will submit a remedial design plan for the remaining vernal pools following the conclusion of the Pilot Study, which EPA will make available for public input.

HOW WILL MATERIALS FROM THE PILOT BE HANDLED AND DISPOSED?

GE's work will be conducted under EPA oversight. PCB-impacted material will be loaded into sealed containers and removed from work areas by certified contractors using approved equipment and approved transportation routes. All soils, debris, and other waste generated as part of the Pilot Study will be disposed at appropriate off-site facilities.

LEARN MORE

The EPA is hosting a community open house for anyone interested in learning more about the Vernal Pool Pilot Study and meeting the technical experts who will be carrying out and overseeing the work. The open house is from 5 to 7 p.m. Tuesday, July 28, at the Berkshire Athenaeum, 1 Wendell Ave, Pittsfield, MA 01201.

CONTACTS

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Scan to visit EPA's GE-Housatonic website at epa.gov/ge-housatonic



GE Contact Information

The GE-Housatonic River Project Team welcomes your interest. For up-to-date project information and quality of life data, please visit GE's website at housatonicriverproject.com. You may also email GE at info@housatonicriverproject.com or call 888-596-3655.