



ENVIRONMENTAL FACT SHEET

CITY OF NEW BEDFORD'S ENVIRONMENTAL INVESTIGATION OF A WETLAND ADJACENT TO THE KEITH MIDDLE SCHOOL

CITY OF NEW BEDFORD/TRC, JUNE 2010

This fact sheet describes what has been done to determine that it is safe for people to use or work at the campus of Keith Middle School and use their private property that is close to the wetland while investigations are occurring. The fact sheet also discusses the issues currently being studied at the northern wetland, a description of investigation findings, and the next steps to address the findings. Terms in bold are defined in the Glossary of Terms at the end of the Fact Sheet.

It is safe for people to use the campus at Keith Middle School and to work in their yards.

The City hired a contractor to remove **polychlorinated biphenyl (PCB)** impacted sediment (soil that is under the water) from the wetland adjacent to the Keith Middle School in 2006. As part of the *Long-Term Maintenance and Monitoring Implementation Plan* that was developed for the Keith Middle School property in October 2006, the City is required to collect sediment samples for **PCB** analysis from randomly-selected locations along the bottom of the **cap** slope once a year. In May 2008, one of these sediment samples had **PCB** levels that were higher than the U.S. Environmental Protection Agency (EPA) action level and higher than a level requiring the City to notify the Massachusetts Department of Environmental Protection (MassDEP). The City installed a locked, chain-link perimeter fence as shown in Figure 1 to prevent human contact with the wetland while the City's environmental consultant, TRC Environmental Corporation (TRC), conducts further environmental assessment at the wetland. The fence reminds people to keep away from the wetland until work is completed. Meanwhile, it is safe for maintenance staff and other officials to work on the land area (to mow grass, etc.) inside the fence as needed, and it is safe for maintenance staff and residents to use the property that is next to the fence.

Studies Being Conducted

On behalf of the City, TRC developed an **Immediate Response Action** Plan that discussed how additional samples will be collected to evaluate the wetland sediments. TRC collected additional sediment samples over several sampling events in 2008 and 2009.

TRC also started an ecological screening in March 2009 to learn whether **PCBs** and metals that have been detected in the wetland are impacting **organisms** using the wetland or plants growing in the wetland. TRC collected water, sediment, and surface soil samples as part of this screening. The results of this screening will be presented in a report.

Description of Investigation Findings

Samples collected to date indicate that PCB concentrations greater than 1 mg/kg are present in sediment in the northern wetland (the wetland area north of the land bridge as shown in Figure 1). Samples collected from sediment in the southern wetland indicate that PCB concentrations are below 1 mg/kg.

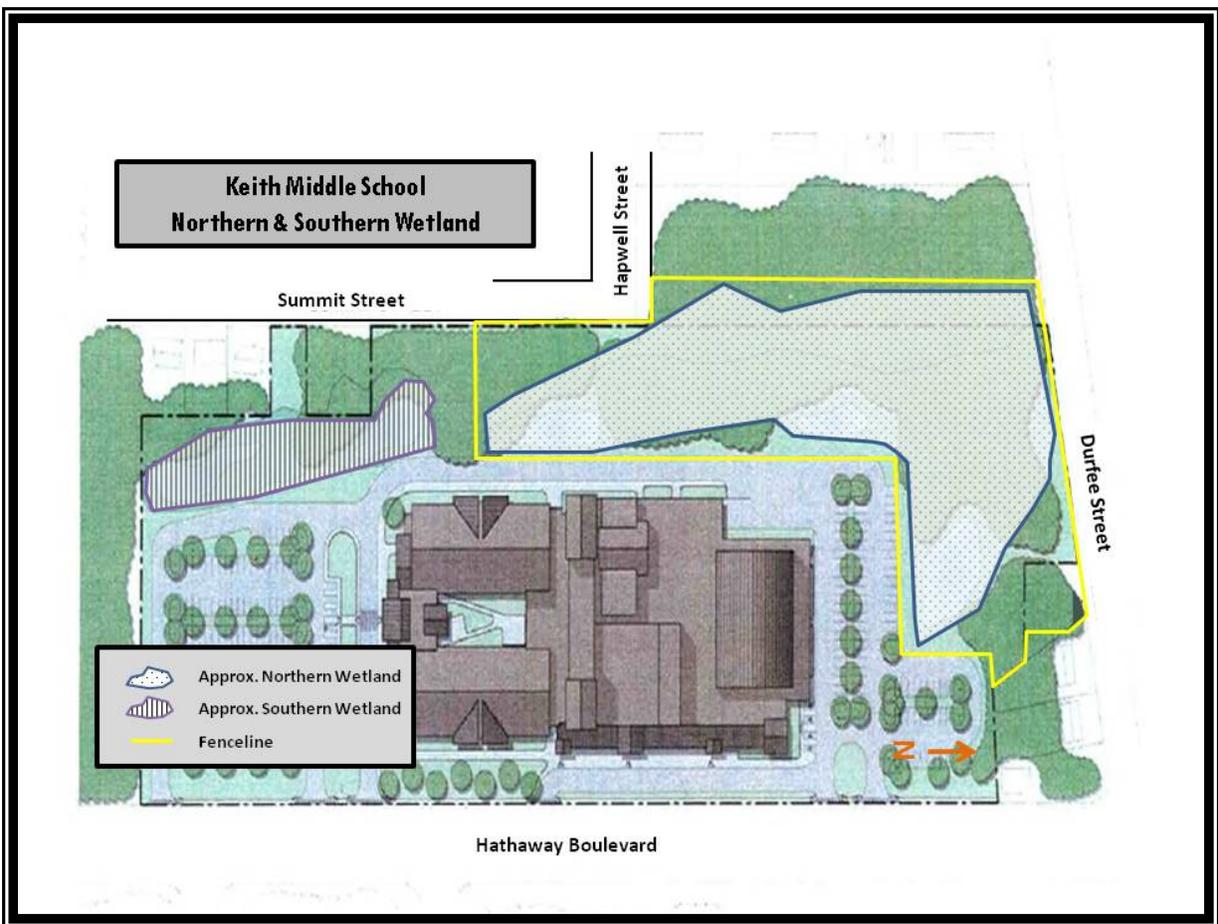
The Next Steps

TRC will continue its investigation of the wetland to protect human health and the environment. The City will continue to post all wetland investigation reports and chemical concentration data at its website.

For More Information

Data related to the study underway at the wetlands are posted at the City’s website <http://www.newbedford-ma.gov/McCoy/sitemap/sitemap.html>; filed under the “Wetlands Remediation” heading. Details about TRC’s investigation of the wetland are provided in the August 2008 *Immediate Response Action Plan* for RTN 4-21300 and IRA Plan status reports dated October 2008, April 2009, September 2009, and March 2010. The other sampling and inspections that are part of the *Long-Term Maintenance and Monitoring Implementation Plan* at Keith Middle School are the subjects of a separate fact sheet also posted at the City’s website. If you have additional questions, please contact Cheryl Henlin, City of New Bedford Environmental Stewardship Department, at (508) 991-6188 or email cheryl.henlin@newbedford-ma.gov.

Figure 1



GLOSSARY OF TERMS

Cap – The three feet of clean backfill in landscaped areas and the two feet of clean backfill in paved areas, as well as the fabric underneath these soil layers, that was brought to the site when the school was being built in 2006. This fabric and the soil on top of it keep people from coming into contact with soil impacted by PCBs, heavy metals, and polycyclic aromatic hydrocarbons. The cap is inspected three times a year by a qualified engineer, and is maintained according to the EPA-approved Long-Term Monitoring and Maintenance Implementation Plan.

Polychlorinated biphenyls (PCBs) - Mixtures of up to 209 individual chlorinated compounds. There are no known natural sources of PCBs. Some PCBs can exist as vapor in air to a limited extent. PCBs have no known smell or taste. PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they do not burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977. Products made before 1977 that may contain PCBs include: certain building materials, such as caulking, paint, adhesive and fluorescent lighting fixtures; electrical devices containing PCB capacitors and transformers; and hydraulic oils.

Organism - An individual form of life that is capable of growing, processing nutrients, and usually reproducing such as animals (fish, birds) and the microscopic forms of life that live in the water.

Immediate Response Action – An assessment and/or remedial action that is started as soon as possible after an issue has been identified to address time-critical site conditions.