

# Frog Mortar Creek Swimming Advisory

## Frog Mortar Creek Swimming Advisory

Surface water monitoring occurs six times each year, normally 70 samples are collected, which was increased to 44 samples in the Area of Advisory (see graphic to the right) and in the Area of Advisory (see graphic to the right) are higher than usual, four times higher for trichloroethene and seven times higher for cis-1,2-dichloroethene and vinyl chloride compared to average August and September 2015.

While higher than usual, these levels did not warrant prohibiting swimming in Frog Mortar Creek. Instead, the Maryland Department of the Environment (MDE) continues to suggest that swimming in these waters for no more than 4 hours a day, 70 days a year in the swimming advisory available on its website. MDE posted signs in the waters of Frog Mortar Creek in the area of concern made of the accompanying map providing advice to the public.

**What caused the July 2015 increase?** Lockheed Martin and their consultants suspect that the near-bottom materials in the Potomac estuary may have pushed the contaminants in the creek through the river faster, increasing the amount of contamination discharging to Frog Mortar Creek. In early August, when samples were collected again, concentrations were back to what can be considered normal for the area and remained lower in September. Surface water samples are collected annually in March, June, July, August, September and December.

**What are these contaminants?** Trichloroethene (TCE) is a commonly used solvent used for cleaning parts and machinery. It can break down over time into cis-1,2-dichloroethene and vinyl chloride.

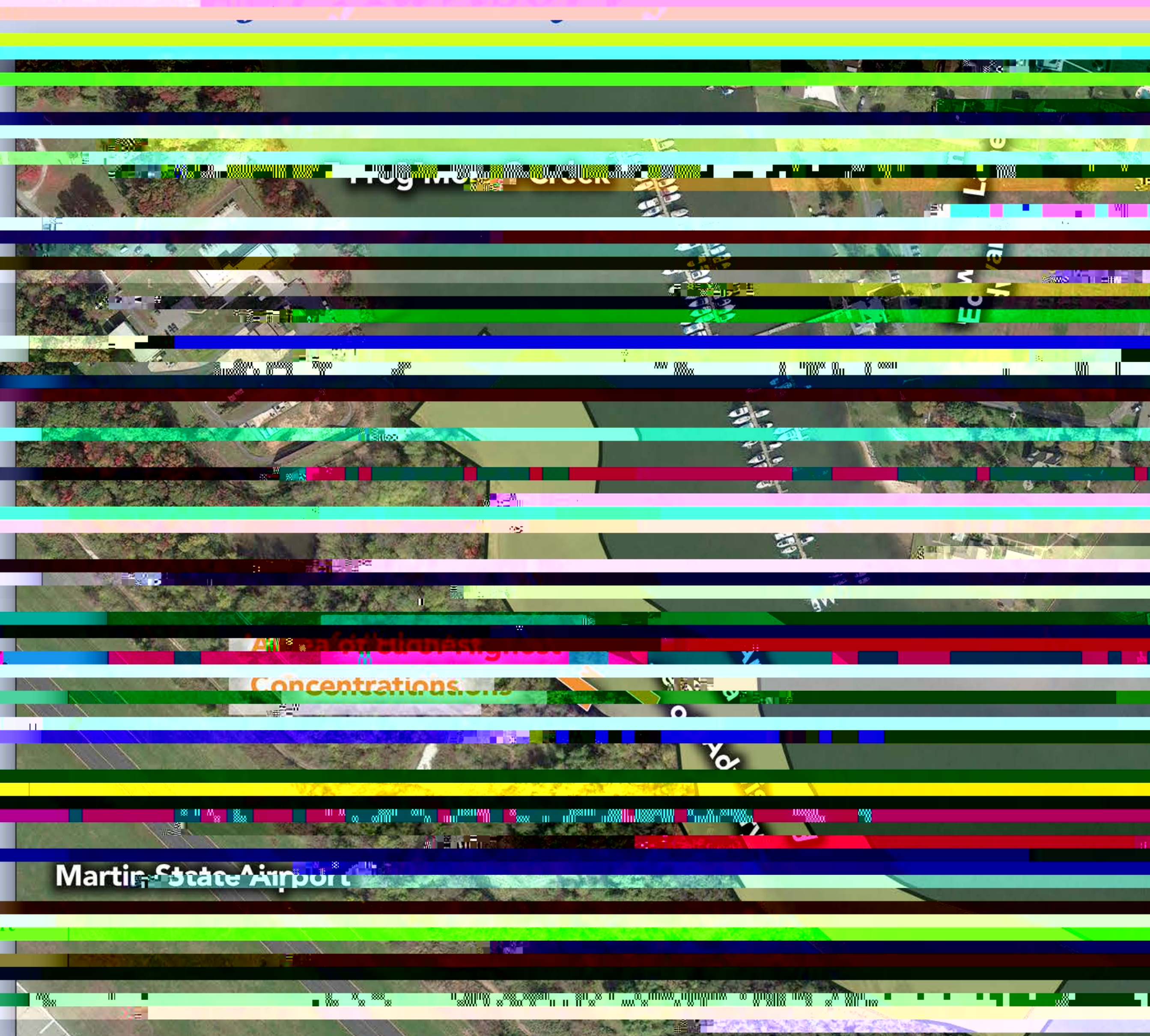
**Where do the contaminants come from?** Solvents and degreasers are known to have been used in factory operations at the former Lockheed Martin company, which has been found in the Dump Road Area of Martin State Airport, in Frog Mortar Creek and in an underground plume of contaminated groundwater originating in the Dump Road Area and moving toward Frog Mortar Creek. The Airport originally belonged to the Glenn L. Martin Company. Lockheed Martin has been investigating the source and extent of the contamination since they were first found in 1991 and has now begun construction of a groundwater treatment system.

**What are the potential health impacts of these chemicals?** Studies have shown that prolonged exposure to these chemicals can increase your risk of cancer. People can be exposed to these chemicals while swimming by accidentally swallowing water or by skin contact.

**Is there a ban on swimming in this area?** No. According to the Department of the Environment the contaminants in this area are not high enough to pose an acute (short-term) health risk.

**Where were the concentrations found?** Higher than normal concentrations were found in the area marked in orange on the map, which is within the swimming advisory area. Samples taken throughout the summer on the east side of the creek near Edwards Lane were below levels of concern.

## Area of Advisory



## What's being done about this problem?

Lockheed Martin is currently in the planning and permitting, construction and installation of a groundwater treatment system that will capture and treat the contaminated groundwater before it reaches Frog Mortar Creek. A series of wells will be drilled within the Dump Road Area parallel to Frog Mortar Creek that will intercept and extract the groundwater and send it to a plant for treatment. The groundwater treatment plant will be located between Frog Mortar Creek and Taxiway.

concentrations in July 2015 were higher than monthly averages, which are more typical.

Trichloroethene was found at concentrations of 1.1 parts per billion.

cis-1,2-dichloroethene 300 parts per billion and typically averages 1 part per billion.

vinyl chloride 1 part per billion.

at concentrations below the screening level.

months, including the month of July.

For further information about the health risks associated with swimming in Frog Mortar Creek you are encouraged to read the Frog Mortar Creek Water Contact Advisory found on the MDE website.

<http://www.mde.gov/errp/superfund/pages/frogmortar>

For further information about Lockheed Martin's remediation project at Martin State Airport you are encouraged to visit the Lockheed Martin website [www.lockheedmartin.com/newsroom](http://www.lockheedmartin.com/newsroom).

For more information contact Lockheed Martin's Communications for Lockheed Martin at 800-449-4444 or by email at [gary.cambridge@lmco.com](mailto:gary.cambridge@lmco.com) if you have questions or concerns.

