“Mashapaug Pond is Sick”: Polluting the Ecosystem

By [Frannie Brittingham](http://rhodetour.org/items/browse?search=&advanced%5B0%5D%5Belement_id%5D=39&advanced%5B0%5D%5Btype%5D=is+exactly&advanced%5B0%5D%5Bterms%5D=Frannie%20Brittingham)

Mashapaug Pond is at the center of a complex freshwater ecosystem. Underneath the pond’s calm green surface is a strange world of toxic carp, three-eyed frogs, and rusting refuse. Many people think of cities and the wilderness as completely separate spaces, but Mashapaug Pond is the perfect example of urban wilderness. At the pond, the natural ecosystem, or community of living things, overlaps with the human-built city.

Mashapaug Pond has suffered from a long history of pollution. During Providence’s industrial heyday in the nineteenth and early twentieth centuries, people were largely unaware of the consequences of releasing industrial chemicals and other pollutants into the soil and water. At Mashapaug Pond, the Gorham Manufacturing Company – a major employer – [was also responsible for a significant amount of pollution.](http://www.rhodetour.org/items/show/19#.U2UXJ8dX7Oc)Neighborhood resident Ed Hooks recalled: “You didn’t have too many ecologists back then. You didn’t have too many people that were concerned about that type of thing. So, when it comes to Gorham, people just saw Gorham as probably a place for employment more than anything else. If they’re dumping stuff in there, so what. They’ll give me a paycheck today.” Millions of dollars have now been spent to remediate Gorham’s pollution.

The major source of pond pollution today comes from stormwater runoff.  In urban areas, paved roads, parking lots, and driveways creates impermeable surfaces that water cannot pass through. When it rains, the water isn’t filtered through plants and soil but flows directly into Mashapaug Pond, carrying with it car oil, animal feces, garbage, road salts, and other contaminants.

Mashapaug Pond’s unusually green water is also a clear sign of the pond’s sickness. Storm water runoff causes algal blooms in urban, fresh water ponds by picking up pet waste and fertilizers from lawns and landscaping and carrying them into storm drains that empty in urban ponds, promoting excessive growth of cyanobacteria. This bloom gives the pond its green tint. Cyanobacteria can create toxic conditions for humans, animals, and plants. Signs posted by the Rhode Island Department of Health warn humans of these toxins, but it is impossible to protect plants and animals from the poisonous environment.

Residents have worried about the impact of human activity on Mashapaug Pond for a long time. Local lore alludes to three-eyed frogs, two-headed fish, and other sea monsters that swim in the toxic, green water. In 1905, city park commissioners warned the Rhode Island General Assembly: “it is essential to the health of the neighborhood that they be not polluted by dumping or the crowding of buildings on [Mashapaug’s] shores.” One hundred years later, it is quite clear that the report was ignored. The pond is ringed by large shopping plazas, [the Huntington Expressway Industrial Park,](http://www.rhodetour.org/items/show/20#.U2UXYcdX7Oc) and multiple highways. All of these things disrupt the ability of storm water to soak into the ground and continue to contaminate Mashapaug Pond at a detriment to the plants, animals, and humans that share its ecosystem.

Today, groups like the Environmental Justice League of Rhode Island and [the Urban Pond Procession,](http://www.rhodetour.org/items/show/14#.U2UXfsdX7Oc) as well as [many teachers, students,](http://www.rhodetour.org/items/show/15#.U2UXl8dX7Oc) and residents, are taking action to make sure that conditions at the Pond do not get worse.  Hopefully one day the signs warning that “Mashapaug Pond is Sick” will be unnecessary.

**Discussion Questions**How might you be contributing to the pollution of the urban watershed?

What are some steps that might reduce the amount of impermeable surfaces in cities?

How have people’s views on pollution changed in the last century?