



Love the Lea News

July 2013



In the two years since Love the Lea started what have we learnt?

We know the Lea and the rivers that flow into it are horribly polluted. When I visit rivers in the London Borough of Enfield I find many that, to me, are dead rivers. No fish swam past my feet as I stood on the river bed of the Salmons Brook in Edmonton recently, and instead of healthy water plants lining the banks there is only dank mud and silt, which stinks.

I know that much more has to be done to make the River Lea, and the rivers that flow into it, healthy. There is too little information about what water pollution is and how it happens. I have been heartened to learn just how many people care, and are willing to volunteer to make a difference. We now have a network of water quality testers, reedbed surveyors and people spreading the message that East London has a right to healthy rivers.

If you haven't already signed up to the [Love the Lea Pledge](#), or know someone who might, there's a link at the bottom. By doing this you'll be backing our [3 Big Solutions](#) for the Lea.

Theo Thomas, May 2013.

River Lea water quality test results 1st May 2013

Sadly these University College London lab results were typical for the Lea. Phosphate levels (from sewage and detergents) are double the 'Bad' rating. Anything higher than 1mg of phosphate per litre has a damaging effect on the ecological balance of a river. Most of the sites tested are double this. Not one is below 1mg/l. To be healthy, the Lea needs to have less than 0.5 mg of phosphate per litre.

E-coli is a bacteria in the guts of animals. You'd expect to detect some in any river, from dog mess, foxes etc. But the high levels in the Lea are from human sewage. In this country there is no limit on the amount of sewage bacteria allowed into a river. But the more sewage that ends up in a river, the sicker it is. People also use the Lea for fishing, rowing and kayaking – another reason why bacteria levels need to drop.

Phosphate. mg per litre	
Site	1 st May 2013
Bow Locks	1.8
Olympic Park	2.0
Hackney Wick	2.3
Hackney Marsh	2.5
Clapton	2.0
Stamford Hill	2.1
Tottenham	2.5
Pymmes Brook	2.6
Tottenham Locks	1.4

Saving the Lea Valley's rivers



Our society is very good at damaging rivers. That's why most of them fail the [European Water Framework Directive](#). It's not expected that the Lea will be rated 'Good' until 2027. Deephams Sewage Treatment Works is the Lea's biggest single polluter. It will be upgraded to meet new effluent permits that come into force in 2017.

This alone won't be enough to make the Lea and its tributaries healthy. When you stand at the edge of Markfield Park, you see the pollution ooze into the Lea from the Moselle and Stonebridge Brook. This is a heady mix of toxins from businesses, homes and our roads. The Moselle is contaminated by engine oil and fuel.

Misconnected pipes are another big problem; in many parts of North East London there are separate pipe systems for rain water and waste water. Rain goes down drainpipes and street drains and into rivers. Sewage is meant to go down different pipes to the sewage works. Up to 10% of homes have connected dishwashers, washing machines, showers and toilets to drainpipes that lead to the Lea, Salmons Brook, Pymmes Brook, Turkey Brook, The Ching, Moselle and others. Much more can be done to stop sewage going down drainpipes.

Sadly, very few people are told about the risk of misconnecting their homes to rivers. Much pollution could be prevented if there was greater awareness. Individuals can check to see if their homes water and waste water pipes are misconnected at [Connect Right](#), and make sure that renovations do not cause new misconnections. If you need a plumber to carry out some work where you live, ask them if they know what a misconnection is. To find an approved plumber [click here](#)

Local authorities could also do a lot more – using their websites and newsletters. We have devised a check list for a '[River Friendly Council](#)' – does your local authority take these steps? If not, ask them why.

[Salmons Brook – Healthy River Challenge](#)

London is lagging far behind in using the latest green technologies to protect rivers. In places like Portland, Oregon Sustainable Drainage Systems are common place. It's a simple idea – create what look like sunken gardens – use nature to catch the water that runs off roads and let it trickle through reeds, soil and grasses to clean it. Plants like reeds are very good at removing pollutants from water.

The Salmons Brook in Enfield is not healthy. As well as road run-off, misconnections from homes mean detergents can cover its surface in bubbles.

The [Healthy River Challenge](#) will create 6 small Sustainable Drainage Systems to capture the polluted water so it flows through these green sponges. We want this project to inspire others and show that SuDS are an essential part of making our rivers healthy.

We have early plans for two sites, and have asked people what they think, with much positive feedback. We're in the process of amending the ideas.

Citizen Scientists



We now have more than [40 volunteers](#) who take regular water samples to monitor the health of rivers in East London. Already they are spotting pollution that would otherwise go unseen. Without this information, the Environment Agency wouldn't understand the true scale of the problem. It also means action can be taken sooner to stop it.

These volunteers have already detected the river gets more alkaline as it flows from Lea Bridge Road towards Bromley-by-Bow. Testers in Enfield now regularly spot pollution incidents and are highlighting how much more needs to be done to make the borough's rivers healthy.

Greening the Lea

At the start of the year, volunteers braved the cold to help build 3 metre habitat 'waffles' filled with plants that were then attached to the concrete walls of the tidal Lea in the Spring. These are now starting to flourish, providing a new environment for wildlife.



Above, volunteers brave the January cold to build green wall modules



Above right, modules are installed in March

Right, Modules begin to flourish in May



Is Pymmes Park Lake the most polluted in London?

The lake at Pymmes Park has suffered 4 significant pollution incidents since November. This has seen sewage contaminate the lake and dissolved oxygen levels drop to zero. The rain water from thousands of homes in this part of Enfield goes into street drains that lead to the Lake. Sadly many of these homes have connected waste pipes to drainpipes instead of the sewer. This sees toilet waste, water from washing machines and showers etc enter the Lake.

There is a programme to locate the misconnections and put them right. However most of us don't even know the risk of connecting the wrong pipes. What urgently needs to happen is a council-led awareness campaign, making use of local authority websites and publications to inform people. Until this happens the problem will keep coming back. We need to tackle the causes, not just the symptoms.

What you can do

If you see pollution, call 0800 80 70 60 and tell the Environment Agency where, what and when. Ask to be called back. You can also send us your pictures of river pollution - to theo.thomas@thames21.org.uk

[Pledge to Love the Lea](#) – we need more people to show they care about their river.

Talk to your local councillor and ask them to work towards making the authority a '[River Friendly Council](#)'