

# River Darwen Litter Trap

Witton Country Park, Blackburn with Darwen, Lancashire

**Date:** 2007 to 2010

## **Background:**

The River Darwen is unusual in that whilst its upper reaches are in the urban areas of Blackburn and Darwen, it later flows through greenbelt land to reach its confluence with the Ribble at Walton-le-Dale. Rubbish dropped in the river in Blackburn and Darwen is washed downstream where it accumulates on the banks, causing an eyesore and infuriating local residents.



Regular clean-ups events were held by the downstream community and they, along with the local landowner, mooted the idea of installing a trap to catch the litter. Action Darwen Valley proposed to install it at Witton Country Park at the confluence of the rivers Darwen and Blakewater. The site was chosen for both ease of access and prominence.

## **The project:**

The objectives of the project were:

- To design, install, manage and maintain a litter trap on the River Darwen.
- To prevent litter dropped in Blackburn and Darwen being washed downstream into the lower reaches of the River Darwen and on into the River Ribble or the Irish Sea.
- To help discourage littering by locating the trap in a prominent position at Witton Country Park and securing media coverage to highlight the reasons for its presence.
- Continued support for community action downstream of the trap.
- To pioneer the use of litter traps. The River Darwen Litter Trap (RDLT) was the first of its kind installed in the UK.

## Project Timeline:

**Pre-2004** – downstream community suggested installation of a litter trap.

**2004** – The Environment Agency commissioned consultants Black and Veatch to conduct a feasibility study.

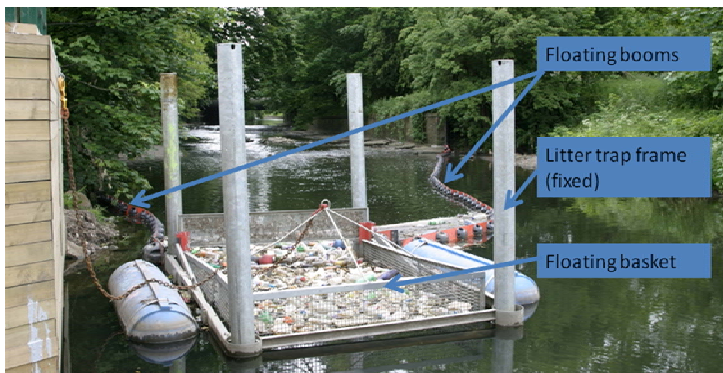
**2006** – Action Darwen Valley secured funding for the project.

**2006** – Aquatic scientists APEM Ltd conducted detailed design work on the trap. The trap itself was imported from America and installed on the river by marine engineers OPEC.

**2007** - Litter trap installed and fully operational.

**May 2007** – Community launch with junk music and puppet making activities.

**June 2007** – Official opening by Rt. Hon. Jack Straw MP.



**The litter trap**

## Management and maintenance:

The Healthy Waterways Trust (the charitable arm of the Mersey Basin Campaign) owns and is liable for the litter trap. It is managed on their behalf by Action Darwen Valley (local arm of Mersey Basin Campaign).

Litter trap emptying and maintenance is a relatively specialised task, requiring a suitable machine to lift the cage clear of the water. It has been difficult to engage a reliable contractor to do this. A skip has been installed by the side of the trap to store the collected waste. This is emptied by Blackburn with Darwen Borough Council. One key issue for the future is to ensure better monitoring of maintenance and emptying.

## Results:

The trap has removed an estimated **40m<sup>3</sup>** of litter from the river in its first two years of operation, including 43 tyres on one occasion. This has comprised mainly of domestic waste, toys, fast food packaging and syringes. Tyres,

wheels, pallets and packaging have also been found. Vegetation is also trapped, with branches sometimes blocking the entrance to the trap.

Community groups feel the trap has been successful in reducing the litter downstream and would definitely like to see it continued. However, they are disappointed that it is not as effective in high flows when a large amount of material can be washed down.

**Hillary Salkeld – BTCV** “Definitely beneficial when it’s working - you notice the difference and realise how good it is. It would certainly be bad for the area if it were not to continue after 2010 – lots of things end up in the River Darwen that shouldn’t be there and the Trap definitely helps stop a lot of this ending up downstream”.

**Carol Price – Resident of Houghton Bottoms.** “The litter trap has made a difference but it has been a bit disappointing – you can tell when it’s not working properly. The time when you need it most is when the river has very high water but this is when the litter trap tends not to work. Really want to see it continue.”

**Margaret Keighley – Parks Manager BwDBC** (active with Pleasington Scout group). “Haven’t done any clean ups since the trap was installed – last one was just before/just after it was installed. Area that we used to do litter picks doesn’t really need doing anymore. The area is not exactly pristine now but much better than it was before the litter trap was installed.”

### **Community Involvement:**

Input from the local community has been pivotal in the litter trap project to date. Overwhelming support from local people played a big part in the successful bids for funding. The work carried out by volunteers throughout the catchment in helping to implement the litter trap project has been greatly valued by Action Darwen Valley.



Ever since installation work commenced on site in November 2006, the litter trap has drawn a great deal of interest. Many visitors to the park regularly visit the trap to see what has been collected.

The litter trap itself is only one half of the project – equally important are the messages the project has spread about preventing littering and fly-tipping. Action Darwen Valley co-ordinated related work including volunteer litter clean ups, as well as working to secure publicity for the project.

**Media coverage secured:**

The launches and items found in the litter trap have sparked interest in the local media, with regular coverage being secured:

News articles in: Lancashire Evening Telegraph (2x), The Citizen (front page), Bury Times, Chorley Guardian

Online news articles: [www.edie.net](http://www.edie.net), [www.web4water.com](http://www.web4water.com)

Feature articles: Environment Forum Newsletter “Essence”, ONE+magazine, The Shuttle, Source NW magazine

Radio: 107 The Bee Radio, BBC Radio Lancashire

Mersey Basin Campaign Blog: RDLT feature regularly updated showing photos of the trap and giving data on the type of litter collected.

**Project value and funding sources:**

The design and construction of the litter trap, its operation and maintenance for 3 years, and associated community activity and communication cost **£162,000**.

Funder/contributor	Grant	Value in kind	TOTAL
Peter Moores Foundation	£50,000		
Biffaward	£43,771		
Environment Agency	£15,000		
Healthy Waterways Trust	£5,000		
Blackburn with Darwen BC	£2,694		
<b>TOTAL</b>	<b>£116,465</b>	<b>c£45,000</b>	<b>£161,500</b>

**Who was involved:**

Mersey Basin Campaign via Action Darwen Valley (MBC).  
 Aquatic Litter Action Group  
 Environment Agency.

Blackburn with Darwen Borough Council (Direct Services and Countryside Services).

Healthy Waterways Trust.

United Utilities.

Friends of Hoghton Bottoms

City Skips and recycling

Sainsbury's (Bamber Bridge)

De Hoghton Estate

British Trust for Conservation Volunteers, Green Gym

Groundwork Pennine Lancashire

### **Future care:**

At the time of writing, the Mersey Basin Campaign is looking for a future custodian of the litter trap, following its closure in March 2010. The following annual operating costs have been identified.

	<b>Cost</b>	<b>Annual Cost</b>
<b>Litter Trap emptying</b>		
Contractor's fees	£5,400 pa	£5,400
<b>Repairs/replacements</b>		
Boom	£7,500 every c5 years	£1,500
Cage/metal frame	£1,500 pa	£1,500
<b>TOTAL</b>		£8,400

Some additional items are currently provided free of charge or by the Healthy Waterways Trust. Depending on the option chosen for future management, additional funding may be need to cover:

- **Insurance** of the litter trap
- **Litter disposal** (skip emptying (currently provided by BwD BC), cost of skip (currently provided by Alan Bretherton)).

### **Lessons Learned:**

#### **Successes:**

- 40m<sup>3</sup> of litter removed in two years and a reduction in clean-ups needed downstream.
- Community launch event May 13<sup>th</sup> 2007 (part of BwDBC's annual Country Fair), members of the public enjoyed "junk music" and children were encouraged to use old plastic bottles and cds to make junk puppets.

- Media launch event June 8<sup>th</sup> 2007, at which local MP the Rt. Hon. Jack Straw MP officially opened the trap.
- Widespread media coverage.
- Increased community awareness of problems created by dropping litter.

**Problems:**

- Contractor issues - First contractor broke the trap. Second contractor was good until the Action Darwen Valley co-ordinator left, whereupon the frequency with which the trap was emptied was considerably reduced.
- Boom strength and resilience - boom broke twice. First due to the plastic fixings and second due to a rip in the material. These have both been replaced with metal fixings.
- The boom cannot work effectively in high flow.
- Litter basket started to buckle under the weight of the litter, but modifications were made and prevented any further breakages.
- Chains and bolts from the trap have been stolen on a number of occasions – making emptying the trap more difficult for the contractor.
- Environment Agency insisted that when the trap was installed, the river bed underneath had to be excavated so that the trap did not become a barrier to fish movement (despite the trap taking up a quarter of the river width). Large items such as tree branches now get caught in the excavated area and can stop the litter trap from rising and falling freely, which makes emptying more difficult. Contractor is from time to time supposed to clean underneath the basket (deep clean). Overall, excavation was probably unnecessary but filling it in again would be costly.