

Yellow Fish



Environment
Agency

guidance manual

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Introduction: Only rain down the drain!

Yellow Fish is an enjoyable, simple and low cost activity with the clear message 'Only rain down the drain!'. It raises awareness of water pollution issues and enables you to improve your local environment. It promotes positive engagement with local communities and provides opportunities to gain media interest.

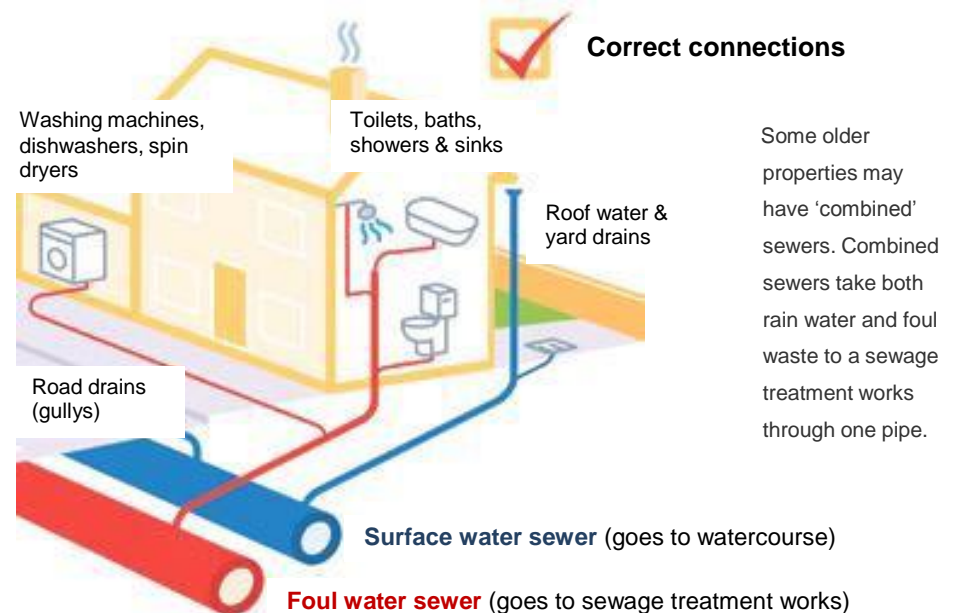
Yellow Fish is a national Environment Agency project that builds on an international approach to protecting the environment. It involves stencilling a Yellow Fish symbol beside drains to remind people that any waste entering them may go directly to the nearest stream, river, lake, canal, beach or bathing water, causing pollution and killing wildlife.

What are the issues?

Road and surface water drains are designed to carry only rainwater, usually to the nearest watercourse. Allowing engine oil, cooking oil, paints, chemical wastes, detergents and even litter to enter these drains causes pollution to enter the

receiving watercourse. These pollutions can range from the creation of an eyesore to the killing of fish and wildlife.

Pollution is also caused by misconnections. Misconnected properties let the foul waste from toilets, washing machines, dishwashers, showers, baths and sinks to enter surface water drains. Instead these wastes must go to a sewage treatment works through the foul sewer.



Different pollutants will affect watercourses in different ways.

Oils and related substances and cooking oils and fats will spread out across the top of a watercourse. This is because they do not mix with water. In small amounts oil forms a thin film which can cause a rainbow effect called iridescence. Larger amounts can create a matt effect on the water surface and pools of oil that may weather and solidify. Substances such as chemicals, wash waters and misconnection wastes do mix with water. They often appear as 'grey water', which will spread through a whole watercourse. Grey water can also cause sewage fungus to grow at outfalls and in the watercourse. Fats and oils mixed with detergents will also mix with water. The effects of these substances can prevent air dissolving in and cause the removal of oxygen from water, causing living things to 'suffocate'. They can also be directly toxic to animals, fish and plants. The effects can be both short term and long term.

Pollution incidents should be reported to the Environment Agency on the Incident Hotline,

0800 80 70 60, which is free of charge to call and open 24 hours a day, 7 days a week.

Activity guidance

Getting involved with Yellow Fish is very simple. It involves marking drains with the Yellow Fish symbol and raising awareness locally. Alternatively, it still works as an information only project. The first step is to identify where you want to carry out your project. You then need to obtain permission from the landowner to mark the drains. Pavements and road drains are usually the responsibility of the highways department of your Local Authority. Private roads or premises will require permission from the landowner. Schools should only require the consent of the Head Teacher to mark the premises.

We recommend that drains are marked on the kerbstone or pavement. This prevents the need to work in the road and reduces the risk of injury significantly. The stencil we provide is an ideal shape to fit on kerbstones. For the benefit of health and safety to all, we recommend that you only mark kerbstones and follow the enclosed risk assessment sheet.

The material you use to mark your Yellow Fish will depend on your needs. Temporary symbols can be made using chalk or non-toxic poster paint. More permanent symbols can be made using permanent acrylic paint, applied with a brush or sponge, or permanent line marking spray paint. The material you use will depend on the age of participants, the personal protective equipment available and the permanency required.

There are a number of ways to raise awareness about your project. You could drop information leaflets to local properties on the roads you have marked. Alternatively, school and community newsletters are ideal for reaching a wider local audience. Posters are also a great way to communicate your project. You may want to get a local newspaper or local radio or television station involved.

Very importantly, don't forget to complete the feedback form and send it back to us. We want to recognise your support and to do so we will add your project to our Yellow Fish map. This map will show the project location, who carried out the project and when it was undertaken.



Learning outcomes

Yellow Fish teaches about local environments, the role of drains and the effect of pollution on watercourses. It has cross-curricular appeal and can be applied at all Key Stages. The scope of delivery depends entirely on the demands of the institution, being equally suited as the foundation of a whole Key Stage scheme of work or as a stand alone activity. The nature of the activities undertaken also makes Yellow Fish fantastic for developing Personal Learning and Thinking Skills and citizenship awareness. As a project Yellow Fish also suits extra-curricular interest groups such as Eco Schools.

Yellow Fish facts

- Most road drains and surface drains are designed to carry only rain water. Pouring pollutants down these drains is like pouring them straight into the river.
- One litre of oil can pollute one million litres of drinking water.
- The oil from one car engine can pollute an area the size of two football pitches.
- Oils do not mix with water and can spread out across water in a layer one molecule thick.
- Oil is toxic to aquatic life and prevents oxygen being absorbed on the surface.
- Oil can be recycled at your local civic amenity site.
- Cooking oils and fats should not be disposed of down drains even when mixed with detergents.
- Cooking oils and fats can be used to produce biodiesel or used for biofuel.
- Cooking oils and fats may be disposed of at dedicated collection points or could be collected by local schemes for recycling.
- Sewage, grey water and cooking oils and fats can cause oxygen levels to decrease due to high Biochemical (Biological) Oxygen Demand (BOD).
- Ammonia contained in sewage is directly toxic to fish and aquatic life.
- Phosphate in sewage and grey water can cause increased plant growth and eutrophication.
- The high nutrient levels in sewage and grey water can cause 'sewage fungus' to grow on the bottom of rivers and brooks.
- Pollution entering rivers inland can cause pollution on beaches and in bathing waters.
- Soils and sands entering drains can cause sediment pollutions in rivers, affecting fish spawning areas.
- Misconnected premises can lead to river banks being covered with used toilet tissue and sanitary products.
- Yellow Fish can help you to make improvements to your local watercourse and environment and prevent them deteriorating.

Contact details

Please contact Yellow Fish as follows...

by email:

yellow.fish@environment-agency.gov.uk

by post:

**Yellow Fish
Environment Agency
National Customer
Contact Centre
PO Box 544
Rotherham
S60 1BY**

For more information visit:

www.gov.uk and search for Yellow Fish

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Glossary

Algal bloom – an uncontrolled increase in the growth of bacteria or algae often caused by eutrophication.

Ammonia – a toxic compound that dissolves in water to form the ammonium ion. It is an animal/human waste product and used in fertilisers.

Bathing water – parts of the sea or inland waters that have been designated as waters for people to swim in.

Biodiesel – a type of biofuel made from used cooking oils that are treated with chemicals to remove glycerol. Normally used in vehicles.

Biofuel – a fuel that is made from virgin plant material or recycled from waste plant material.

Biochemical Oxygen Demand – the amount of oxygen required by aerobic microbes to break down the organic material in a sample of water. The break down of organic material removes oxygen from the water.

Break – a permanent obstruction, such as a beach or headland, that causes a wave to form and break. Often populated by surfers.

Combined sewer / drain – a combined foul and surface sewer. Designed to transport toilet waste, waste effluent and rain water to sewage treatment works.

Diffuse pollution – pollution that does not have a single entry point into a watercourse. It also covers pollution that originates within surface sewers, having a single discharge point (the outfall) and a diffused source or sources within the sewer catchment (diffused point source pollution).

Effluent – treated or untreated waste water, such as foul sewage or grey water. Also covers waste water from industrial processes.

Eutrophication – the process responding to excessive levels of nutrients, such as nitrates and phosphates from fertilisers or sewage. This is most often observed as algal blooms in warm weather.

Foul sewer / drain – drains and pipes designed to transport toilet waste and waste effluent to sewage treatment works.

Grey water – waste water from sources such as washing machines, sinks and dishwashers.

Iridescence – rainbow effect caused by thin layers of oil on water.

Misconnection – a connection to a sewer that results in wrong disposal taking place, such as a toilet to surface sewer.

Personal protective equipment – equipment designed to prevent injury.

Phosphate – a chemical required for plant growth often found in fertilisers and sewage.

Pollutant – a contaminating substance or object that causes pollution.

Pollution – the introduction of pollutants into the natural environment that have a negative impact.

Sewage – contaminated toilet water containing human waste.

Sewage fungus – bacteria that grow in response to increased nutrient levels from sources such as sewage, often forming 'hairy' mats on the bottom of watercourses.

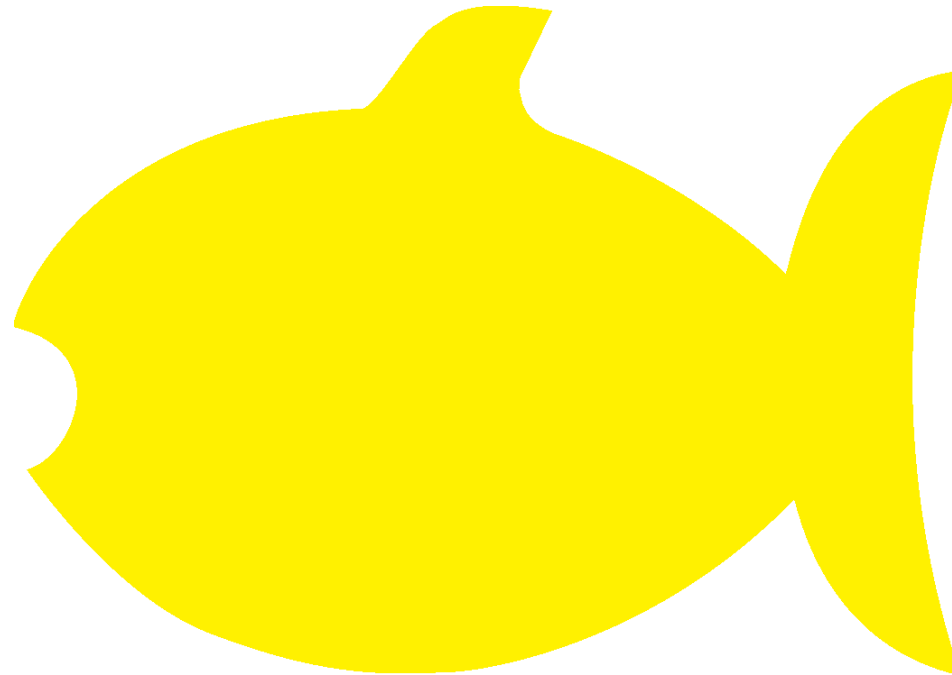
Sewage treatment works – a place that removes physical, chemical and biological contaminants from water before returning it to a river.

Surface sewer / drain – drains and pipes designed to transport water caused by rainfall to watercourses.

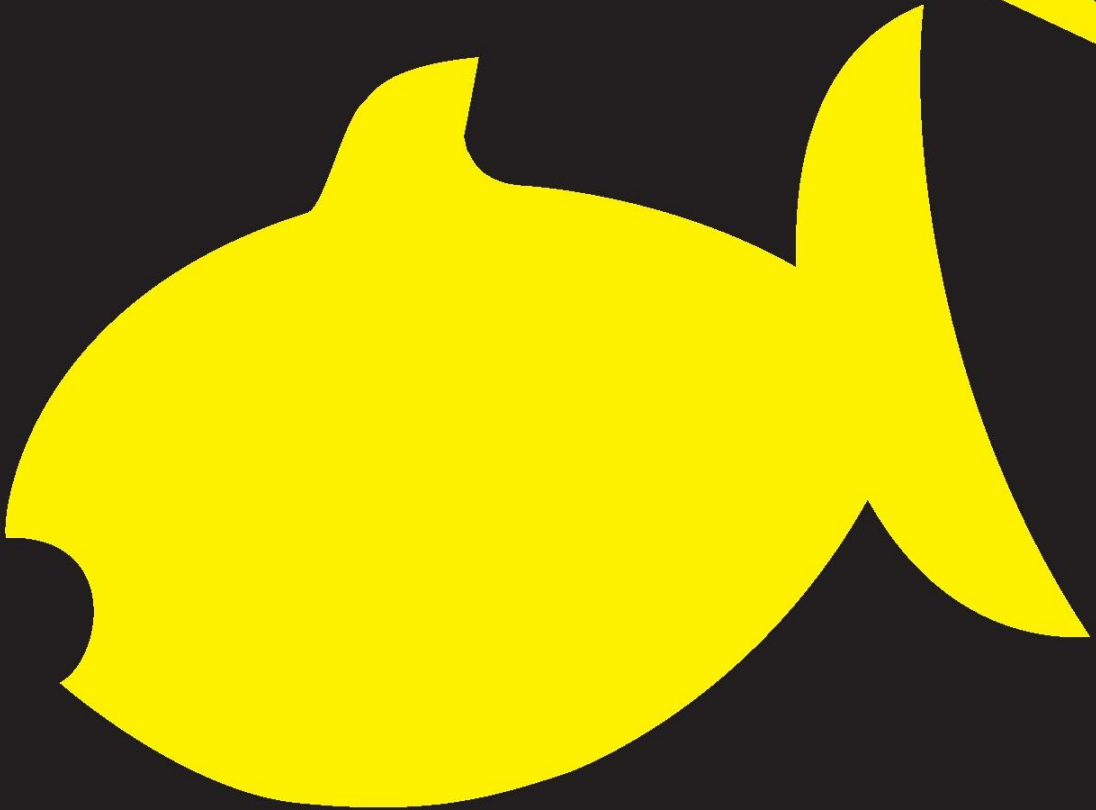
Watercourse – any flowing body of water, such as a brook, river, pond or lake. It also covers canals and even dry ditches that carry rain water to a flowing body of water.

Yellow Fish template

1. Print out the template on A4 paper to make sure it is the correct size.
2. Carefully cut out the yellow fish.
3. The template can then be used or transferred to another material (e.g. card, cardboard, lino, plastic).



CAUTION CAUTION CAUTION



Yellow Fish

fish

**ONLY RAIN
DOWN
THE DRAIN!**

yellow.fish@environment-agency.gov.uk
www.environment-agency.gov.uk/yellowfish



Typical Risk Assessment for Activity

Activity	Hazard	Risk Rating	What/who at risk	Control	Training	Emergency	Remaining risk	Frequency of control/review
Taking volunteers out of school	Illness/non-attendance	Medium	Activity and volunteers	Central contact no. prior to activity	N/a	Abandon activity	None	Each session
Taking volunteers out of school	Poor volunteer behaviour	Low-medium	Activity and volunteers	Return offender to school	Rules of conduct and sanctions if breached	Phone school	None	Each session
Road crossing	Vehicle collision	Medium - high	Volunteers	High viz clothing + cross road with adult	Rules of conduct and sanctions if breached	999 and first aid	None	At all times
Delivering flyers	Trip/fall/dogs, other injury etc.	Medium - high	Volunteers	Adult supervision	Rules of conduct and sanctions if breached	999 and first aid	None	At all times
Painting	Over-spray onto road	Low	Highway, street furniture	Use spray box and dust-sheet	Adult to demonstrate technique first time	Wipe up	None	During spraying
Painting	Over-spray onto cars Setting off alarms	Low	Cars, criminal damage, Insurance claims	Use spray box and dust-sheet Don't spray where doubtful Don't touch cars	Adult to demonstrate technique first time Assess actual risk	Wipe off	None	During spraying
Painting	Over-spray onto public	Low	Public	Use spray box at all times	Adult to demonstrate technique first time	Swap name and address, compensation	None	During spraying
Painting	Over spray onto clothes, hands shoes	Medium	Volunteers	Wear old clothes	Adult to demonstrate technique first time	Change gloves, wipe off	None	During spraying
Painting	Paint inhaled, ingested or in eyes	Medium	Volunteers	Goggles and mask when spraying	Adult to demonstrate technique first time	Assess and take to hospital if severe	Abandon activity	During spraying
Painting	Public tread in wet paint and tread into house.	Medium	Shoe and property damage	Wet paint labels, put paper to cover fish	Adult to demonstrate technique first time	Swap name and address, compensation	None	After spraying, until paint dry
Painting	Inclement weather	High	Activity and volunteers	Stop spraying and return to school or vehicle	Explain procedure before-hand	Assess and abandon session if necessary	Slipping	At all times

Yellow Fish Feedback Form

*Name of Group(s):
*Date of painting session:
*Location of drains marked (road names and postcodes):
Contact details for project group:
Permission for project granted by:

* These fields must be completed for us to add the details of your project to our Yellow Fish Map

Additional feedback:

How we will use your information

We, the Environment Agency, will process the information you provide so that we can:

- Publish, on our website, the location of your Yellow Fish scheme, the date it was carried out and the name of your organisation.

We may also process or release the information to:

- contact you about your participation in the Yellow Fish scheme.
- offer you documents or services relating to environmental matters;
- consult the public, public organisations and other organisations (for example, local authorities, the emergency services, the Department for Environment, Food and Rural Affairs) on environmental issues;
- carry out research and development work on environmental issues;
- assess whether customers are satisfied with our service, and to improve our service; and
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows).

We may pass the information on to our agents or representatives to do these things for us.

Please return the form to:

Yellow Fish, Environment Agency, National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY or by email: yellow.fish@environment-agency.gov.uk