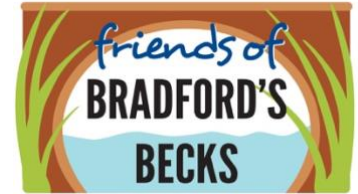


Proposal for a game: How **NOT** to cause pollution of Bradford's Becks



Concept

We want a fun interactive display or game for audiences aged 10+ to use in science fairs, schools and outdoor events. The underlying intention is to show people how choices they make about disposing of waste can pollute our waterways. Did we say there must be fun in it?

The background

There are two different sewer systems in different parts of cities:

- **Combined sewers.** The older system (up to 1960ish) has combined sewers that take both foul water (toilets, sinks, factories, etc) and rainwater from roads, roofs and other hard surfaces. This system has Combined Sewer Overflows (CSOs) which discharge excess sewage into watercourses when there's too much for the sewer system to cope with. These too frequent discharges from CSOs have been a big news item in the last few years.
- **Separated sewers.** The newer system has separate pipes for foul sewage and rainwater. Foul sewers go to the sewage treatment works and should have no overflows. Surface water drains discharge into nearby watercourses.

The pollution problems that occur

Combined sewers: Blockages

- Nappies, wet wipes, sanitary towels, tampons, earbuds and general waste can all create blockages if put down the toilet. These blockages cause the sewer to overflow into a watercourse or the street. All of these should go in appropriate bins.
- Oils put down the sink can congeal in the sewer, often catching wet wipes and other debris and building up to a "fatberg", which blocks the sewer and causes overflows.

Separate sewers:

- Solids and oils and grease can create blockages as described above.
- Misconnections, when dirty water goes into the rainwater drain in error. Most householders and many builders do not realise there are two sewer systems, and it can be difficult to tell which is which. The most common misconnections occur when:
 - A house extension is built, perhaps with a new bathroom or kitchen which are connected to the rainwater drain. This results in the pollution going straight to the river.
 - An appliance, eg a washing machine, is moved to a garage. This is connected to the nearest drain, which turns out to be the rainwater drain.
- Mis-use of the drains. Rainwater gullies on houses and gullies in the street are intended to take rainwater. However, people often think they are a place to dispose of waste liquids. Putting waste chemicals, engine oil, contents of mop buckets or car wash water down the gullies causes pollution as these lead directly to the watercourse.
- Dog waste. Dog poo on the street gets washed into the surface water drain.

What do we want?

We want a fun interactive display or game to use in science fairs, schools and outdoor events. It should send out the messages about what people should do, such as:

- BIN it, don't flush it
- Check that your appliances are not misconnected
- Only rain down the drain

How these messages are conveyed is part of the design process.

Physically, it could be a big board with Velcro stick-ons or holes to post things. It could have model or real toilets and drains and toy poo and other pollutants. However, water would be a problem for indoor use, and full-scale objects would be hard to transport. Perhaps there are two versions, indoor and outdoor (not compulsory). It needs to be portable, preferably by one person, in a suitable container, and easy to store. Sustainability (re-use of materials, recyclability, durability) is important. Spare parts should be provided if they are bespoke and easily lost or broken. Completion by 31st January 2024. A budget of up to £3500 is available; value for money is a criterion.

How to make a proposal

Send a written (max 1000 words plus 1-page pictures), graphical (max 4 pages) or video concept (max 3 minutes), and costing to BradfordsBecks@gmail.com by 11pm Friday 17th November.

Please provide links to three examples of previous work. These will be reviewed by a small group of FOBB members including the Chair (Barney Lerner) and Irene Lofthouse (aka [Miss Connection](#), an education volunteer who has been facilitating school workshops on pollution). Interviews with shortlisted applicants will be in the week commencing 27th Nov via Teams.

The criteria for judging proposals are:

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|--------------------------------|-----|
| • Is it fun? | 30% |
| • Will it convey the messages? | 30% |
| • Is it practical? | 20% |
| • How sustainable is it? | 10% |
| • Value for money. | 10% |

Terms and conditions

- The decision of the judging panel will be final, and we are unable to guarantee feedback to unsuccessful applicants.
- Ownership of unsuccessful submitted designs remains with the proposer.
- There will be more detailed terms and conditions in the contract about ownership, payments schedules, publicity, non-completion, responsibilities.