Improving Our Rivers: Pollution Challenge

Working with the University community across the north of England to tackle urban diffuse pollution with innovative ideas

Background

The environment and society need clean water. Across the UK, urban diffuse pollution is a significant problem which can have profound detrimental ecological effects, the potential to affect drinking water quality and can ultimately affect human health. Urban diffuse pollution takes many forms and affects both surface water and groundwater. It can originate from a variety of activities and multiple sources which makes it notoriously difficult to tackle. With more than 80 per cent of the UK’s population living in urban environments these rivers are also an important socio-aesthetic resource. Controlling urban diffuse pollution therefore will benefit large numbers of people.

The Urban Diffuse Pollution Challenge is a competition designed to stimulate and support university-led solutions to Urban Diffuse Pollution, or more broadly, non-agricultural diffuse pollution. The Environment Agency is working in partnership with the Chartered Institute of Water and Environmental Management (CIWEM) with the aim to discover students with bright and bold ideas and help transform those ideas into viable solutions which could improve our water environment and all of our lives.

You may choose to start addressing this challenge by first thinking about how you, or perhaps how your building or community, affect the water environment. How could this be improved? Your idea may address the cause of pollution and aim to change behaviours of people and polluters to prevent or reduce pollution. You may choose to tackle the problem in-situ, developing an innovative method of treating or removing pollution. Do you want to tackle a small discreet issue or develop a community wide approach? As part of your thinking you may wish to consider the effects of other influences such current solutions, policy, urban infrastructure, services or waste disposal or current behaviour.

Brief

Suggest a system, service, product, campaign or environment that addresses the causes of, or remedies, the impact of urban diffuse pollution.

The purpose of this competition is to encourage innovative thinking and explore a range of approaches and methods to address urban diffuse pollution. Specifically, we ask you to think how to:

- Achieve a measurable outcome of an improved environment through the reduction of urban diffuse pollution.
- or -
- Significantly improve our current understanding of urban diffuse pollution leading to a clear benefit of new knowledge and an increased capacity to innovate.

Scope

The Environment Agency is looking for innovative solutions that are suitable for use in the UK that could be applied now.

Ideas could cover a range of places, such as households, public places or streets and could be of varying scale, from a single street to an entire city.

We want a range of ideas. Historically, solutions have concentrated on treatment and engineering solutions. We welcome more ideas following this approach, but would also like to encourage other approaches, such as behaviour change through social influencing or a simple but effective communications strategy.

Award

There are two stages to the competition, and two awards.

Stage 1: The competition judging panel will select three winners in each of the following categories; undergraduate, post-graduate and post-doctoral. Each of these winners will receive either one of £150, £300 or £500 prize.

Stage 2: The Environment Agency will select one or more project ideas and will work in partnership with the university and student/s to implement the project idea. The project will be funded by the Environment Agency and delivered in the 2013 - 14 financial year. This is an excellent opportunity to
turn an idea into reality and gain valuable experience in project delivery.

Submission requirements

Entries should comprise of the following:

Stage 1: Three sides of A4 of type written text (Arial, 12pt type) and diagrams. Anything more than three sides will not be considered. The submission must include and use the following headings and sections:

1. Title: to indicate the nature and type of idea.
2. Abstract: no more than 200 words summarizing the concept and benefit of the idea.
3. Innovation: no more than 150 words to help the jury to quickly understand why your idea is innovative and effective.
4. Introduction: describe how you’ve come up with your idea and, how and why it should be implemented.
5. The Idea: this will be the main body of text. Here you will capture the nuts and bolts of your idea and will detail what the idea involves and how it will be implemented.
6. Benefits: describe how your idea will benefit the environment and/or society. Will your idea have a legacy?

You are free to add any other text or sections you wish after the completing sections 1 - 6. We recommend you use the judging criteria as a guide to possible sections or additional text. The abstract and innovation sections will be used in the initial filtering of submissions (see judging criteria for more information).

Although we are not scoring your submission on communication skills you must distill your idea in an understandable way for a non-technical audience. If the judging panel struggle to follow an idea or don’t understand it’s benefit, your idea is unlikely to do well.

Stage 2: If you are selected as a finalist you will be invited to a one-day presentation / prize day where you will be required to:

1. Present your idea as a project proposal with aims, timescales, estimated costs and benefits as part of a presentation and answer questions.
2. Prepare a poster (size and style to be confirmed) to be displayed as part of the presentation / prize day. This will act as a discussion point and help facilitate networking and the sharing and communicating of ideas.

If selected as a finalist and asked to attend the presentation / prize day due to take place on 14 March 2013. The Environment Agency will guide you on what is expected during the presentation / prize day and on what / how to present. The Environment Agency will also offer some support in developing an idea to a project proposal.

Judging Criteria and process

Initial filter:

An initial filter of entries will be undertaken using the abstract and innovation section only. Your submission will be scored on the quality of the idea and degree of innovation. This will be carried out by the judging panel.

Judging:

There are six criteria your entry will be measured against; these are listed below. Each criteria is scored, and weighted differently. The scores are in brackets after the criteria. The scores from each criteria will be added up and entries ranked by the total score.

1. Innovation (35): this competition is looking for innovative and bright ideas to implement. Tell us why your idea is innovative.
2. Environmental benefit (20): tell us how your idea tackles urban diffuse pollution and how, to what extent and what scale this improves the environment.
3. Social benefit (10): how does your idea help improve people’s lives?
4. Clarity of idea (15): does your project idea make sense and do the judges fully understand it?
5. Deliverability (15): is your idea too farfetched to become a reality or is it simple, cost-effective and easily repeated? Tell us how your idea can be realistically delivered.
6. Legacy (5): will your idea and the benefits last or is it an idea that can be easily repeated?

How to enter

Entries should be submitted electronically to the e-mail address below as described in the submission requirements section.

You must also attach coversheet. This will be a single page and is in addition to your three page submission limit. It will include the title of your project idea, your name, e-mail address, university and university address, and what category you come under (at time of submission). This is so the submissions can be kept anonymous and so we can contact you if required. The coversheet template can be found by visiting the web-site.

Send entries to: pollutionchallenge@environment-agency.gov.uk

All entries must be received before midnight 31 December 2012. To help us monitor the level of interest in the pollution challenge we ask if you can e-mail the above address with your intention to submit an entry, and include your name, the category you are in and your university. You do not need to include any information of your project idea. Group entries are allowed. However all entries must be submitted under the name of one student who will act as the main correspondent and group lead.
The terms and conditions of the competition are available at http://www.environment-agency.gov.uk/pollutionchallenge. Upon submission of an application the entrant will be deemed to have read, understood and accepted the rules.