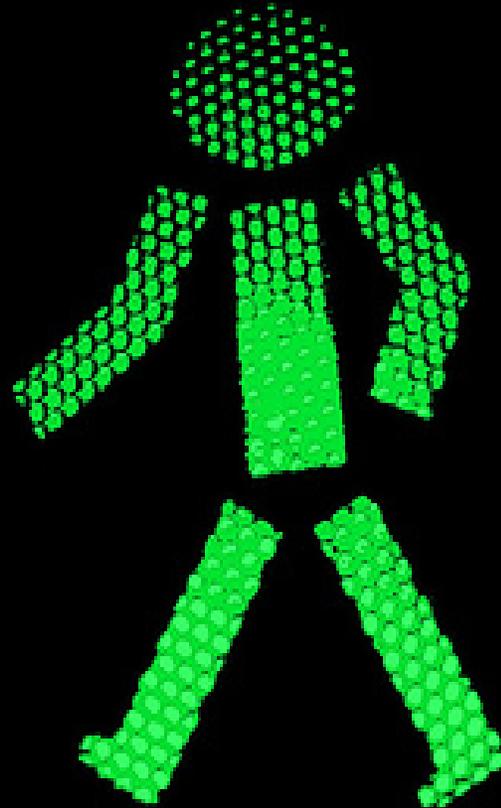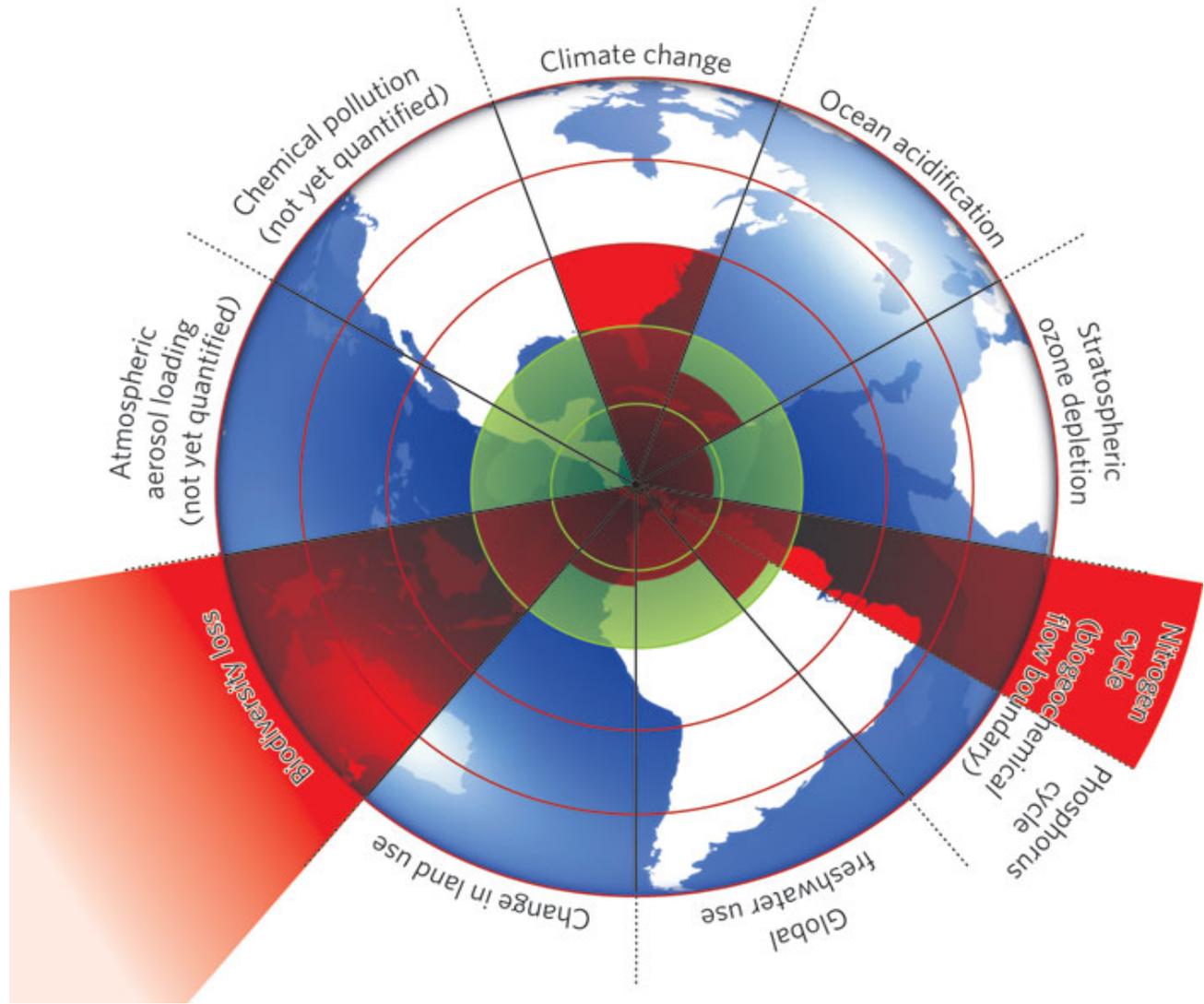# In an ideal world traffic lights should always be green
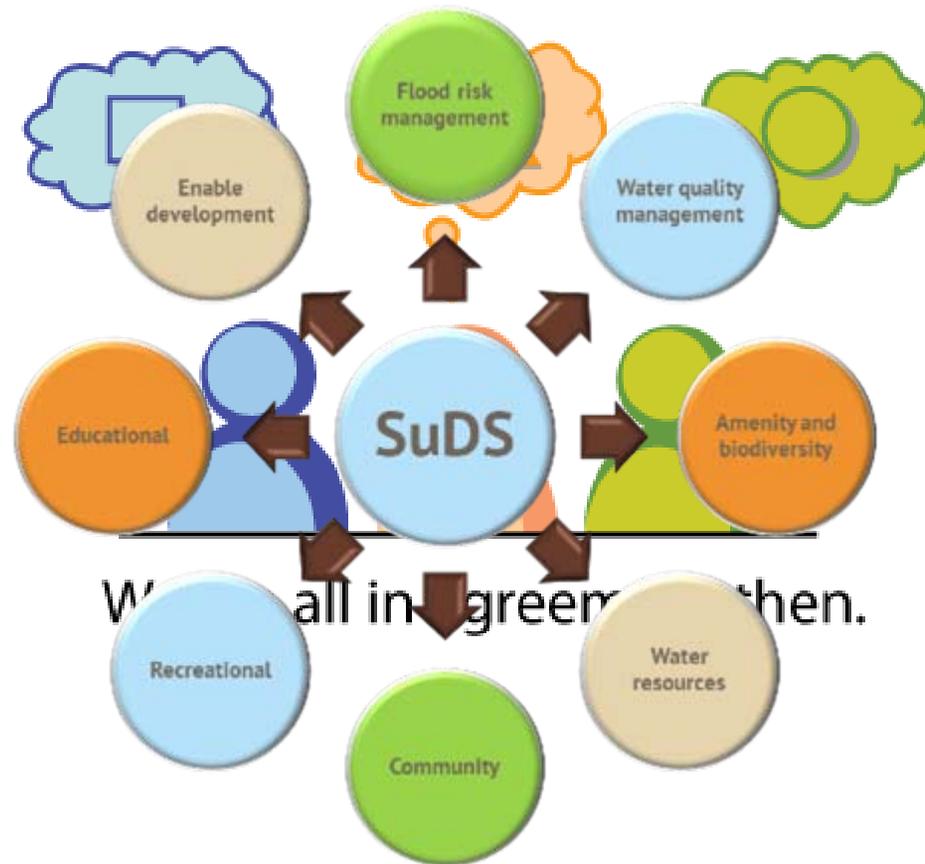
enabling a more sustainable Scotland

Spaceout by Hugo-photography

SEPA is evolving in an increasingly complex world

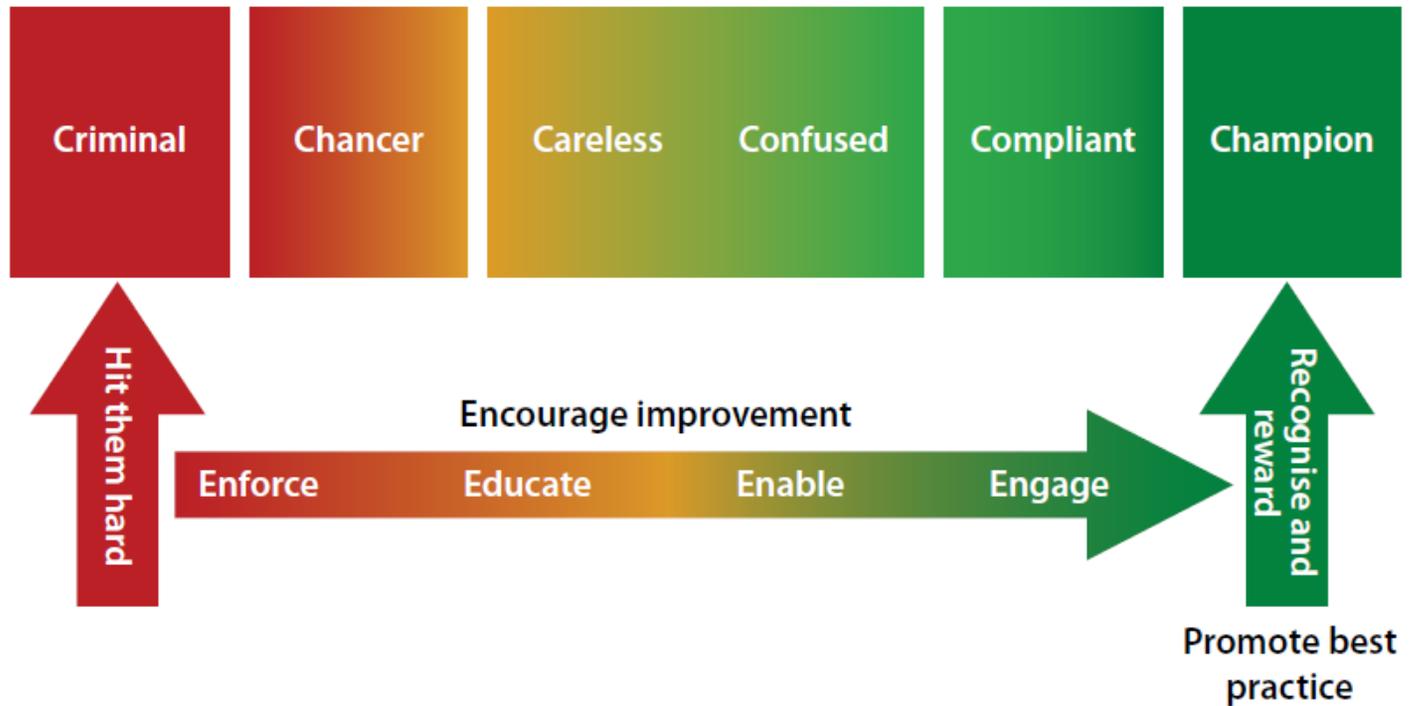# We want to deliver multiple benefits for sustainable development

How are we going to do this?

- Better environmental regulation

- A new funding model

- A new approach based on ecosystem services

- Citizen science

Better Regulation: a new integrated regulatory model which rewards best practice.

What's in the consultation?
Simpler regulation

Developing a new integrated regulatory model
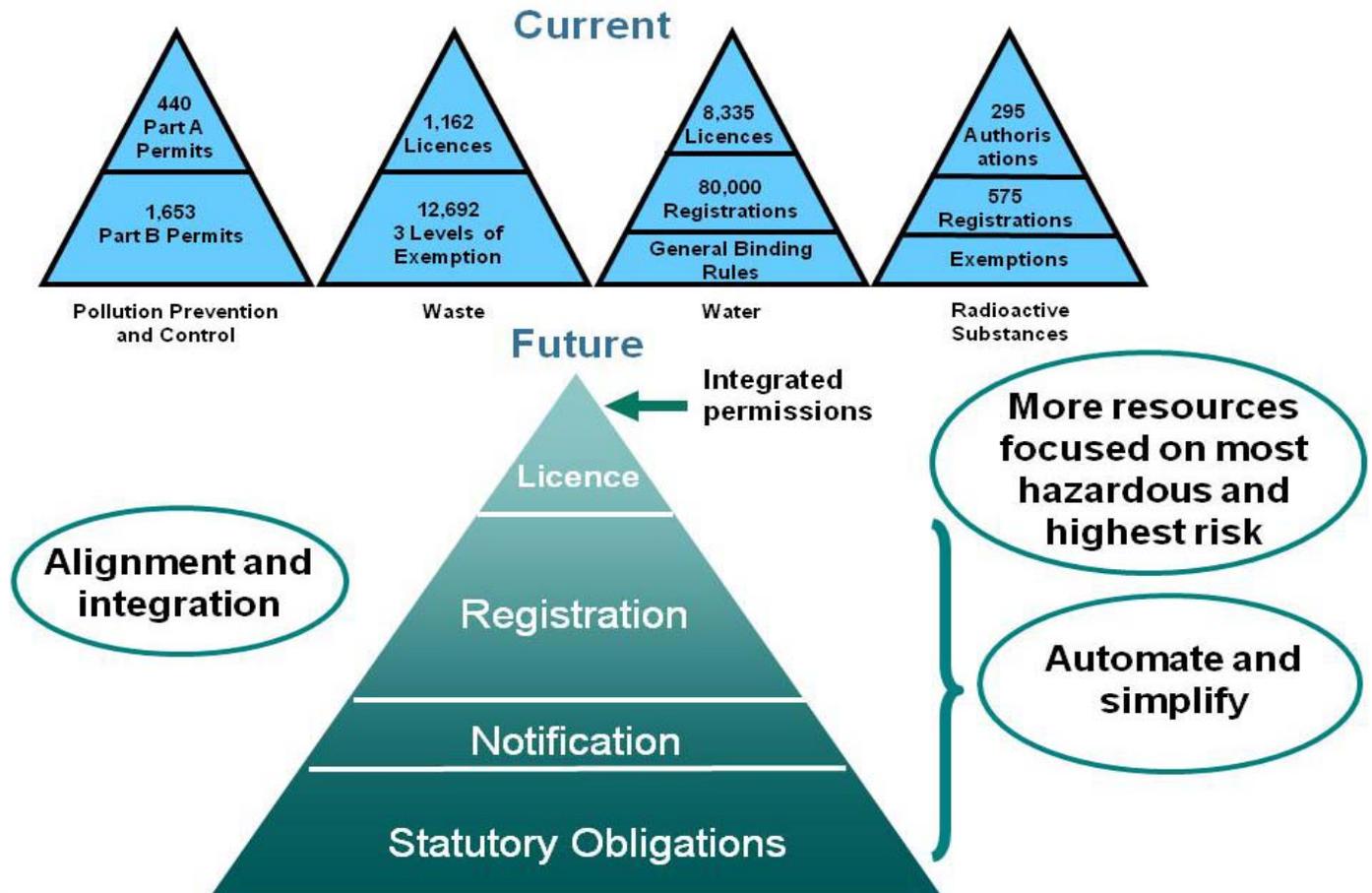
SEPA is developing a new funding model, based on the polluter pays principle.

Core funding elements

Grant in Aid

Flexible, risk based charging

Option 1

Grant in Aid

Flexible, risk based charging

Option 2

Grant in Aid

Flexible, risk based charging

Plus

Use of environment resources charge

Other funding mechanisms that could be used in conjunction with options

Incentivisation through charges

Direct charging for poor performance

Value added services

Major project agreements

Voluntary agreements

65% of consultees support a move to a risk-based approach to charging.

Pie chart:
- 65% Yes Merged
- 22% No
- 4% No Decision
- 9% No Comment

Legend: Yes Merged, No, No Decision, No Comment
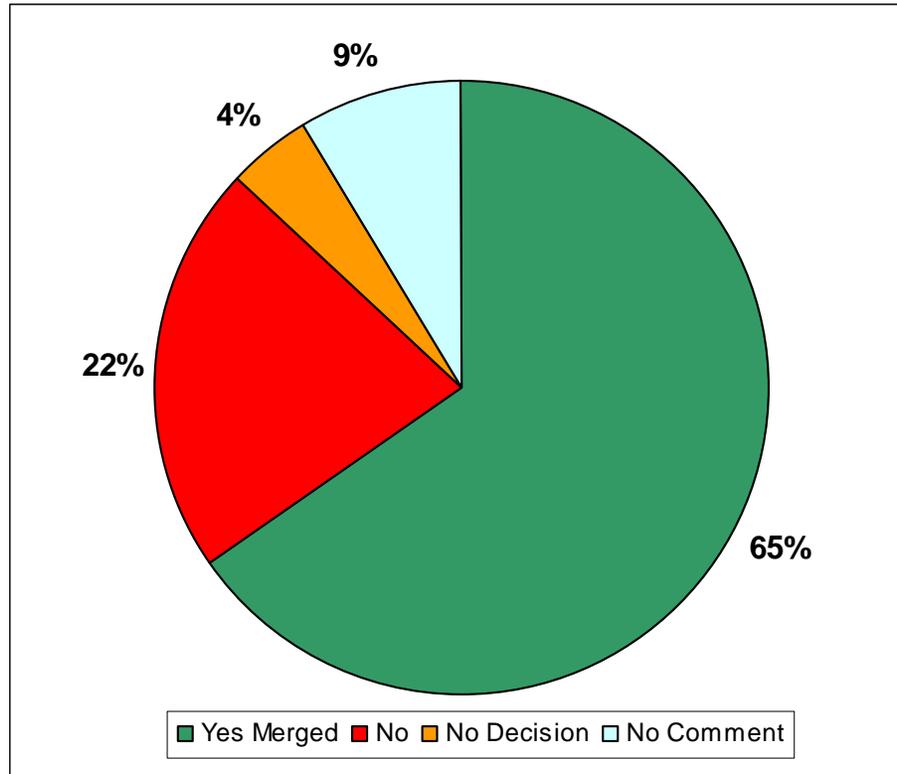
Ecosystem services in Scotland
worth c.£23billion/year
(£9,400/household/year)

Environmental protection
costs c.£350m/year
(£150/household/year)

Cost : Benefit for environmental protection of
1:66

…more than value for money!

Environment	Businesses
Clean air	covered
Clean water	by
Land and soil	environmental
Stable climate	regulation
Nutrient recycling etc	

Benefitting from clean, safe, sustainable environment →

Benefitting from level playing field →

← Impacting via resource flows

← Impacting via pollution

Environmental protection, secures benefits, controls impacts
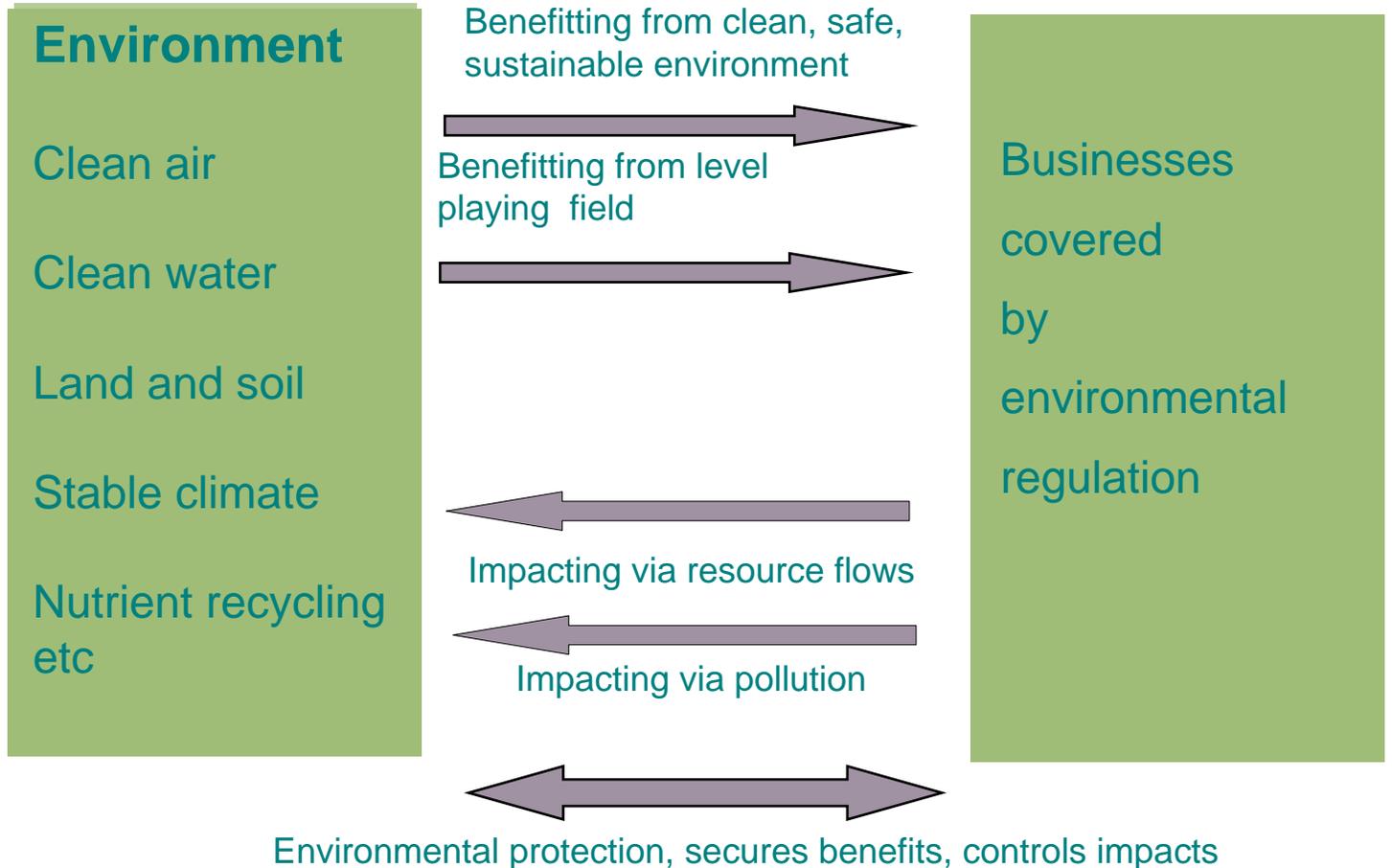
Engaging citizens in their environment through citizen science

Citizen Science 'involving people in collecting observations / measurements about the natural environment'

SEWeb
- **Support** Guidance and training to support effective public monitoring
- **Prioritise** areas where CS projects could be encouraged/ stimulated
- **Gateway** 'to projects and a platform for data input, display and use'
- **Work in partnership** Establish partnership to engage the public in CS

The Conservation Volunteers (TCV)
- **Scotland Counts** 'on the ground delivery of citizen science'
- **Natural Talent** 'growing taxonomic skills'
- **Natural Communities** 'community engagement aspects of which can be delivered through CS'

SEPA
- Develop CS strategy for SEPA
- **R&D programme** - Support Senior scientist
- **CS projects** - Air pollution - Young people - Riverfly
- **Funding Process** Scope out how initiatives can be financially supported

Partnerships & Projects … and many more
- **SNIFFER** Create CS mapping
- **ECT** partnership
- Citi-sense FP7
- Dot.rural
- OPAL EU expansion
- Env recording by charities
- UK EOF CS project

Other Government agencies
- **Education Scotland** Developing how the CfE can be delivered through CS
- **SNH** paper to see how CS activity fits with broader agendas of SNH.
- **CAMERAS** Develop CS through the Scottish monitoring strategy
- **Forestry Commission** Runs forest schools initiative
- **Met Office** Weather on the Web initiative

Here's what I find so powerful and exciting about citizen science: you can make observations at unlimited locations that would not otherwise be practicable, while at the same time building public support for the environment, and educating and encouraging thousands of new students toward a rewarding career in the environmental sciences.

Jerald L. Schnoor

Connections to Public Health

White Cart Water flood prevention scheme

upstream storage areas that hold back the flood water mean lower walls downstream in Glasgow
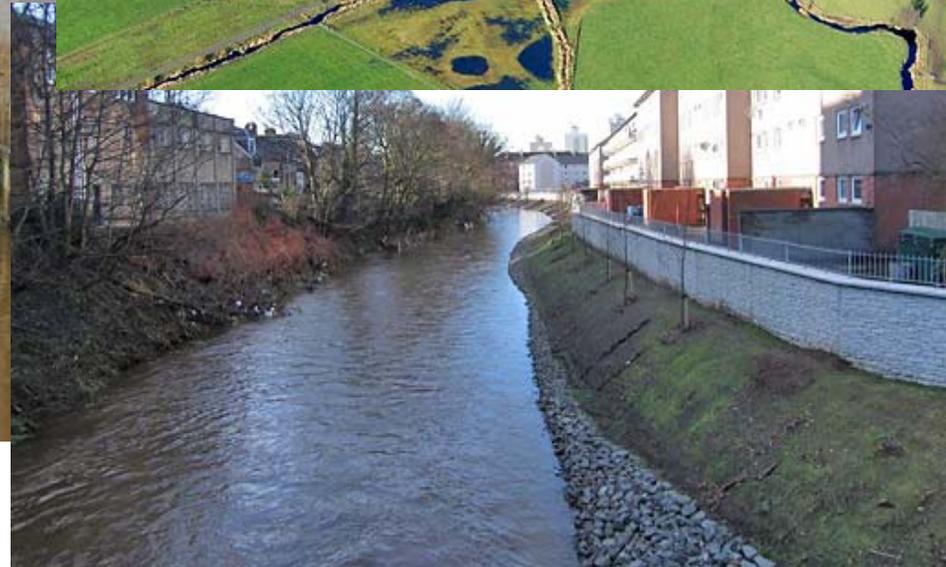
Public or citizen action

Positive action by the public to protect and improve the environment'.

The LIFE Project seeks to test the premise that *public engagement in monitoring or action can influence environmental attitudes and behaviours.*