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SUDS & the Big Society

Brian J. D'Arcy

b.darcy@btinternet.com

Aims of The Big Society Concept

Conservative Policy Forum

<http://www.fanpix.net/picture-gallery/david-cameron-picture-13975549.htm>

Community empowerment

- Giving local councils & neighbourhoods more decision making power to shape their area

Opening up public services

- Enable charities etc to compete to offer high quality services

Social action

- Encouraging & enabling people to play a more active part in society

<http://www.conservativepolicyforum.com/>



*Mmm... Sustainable Drainage ...
....Minimise demands upon the
public purse... shrink the size of
public (taxpayer funded) sector.*

The public, and drivers for SUDS Technology

Activity by the general public in urban areas: *the polluter pays principle?*

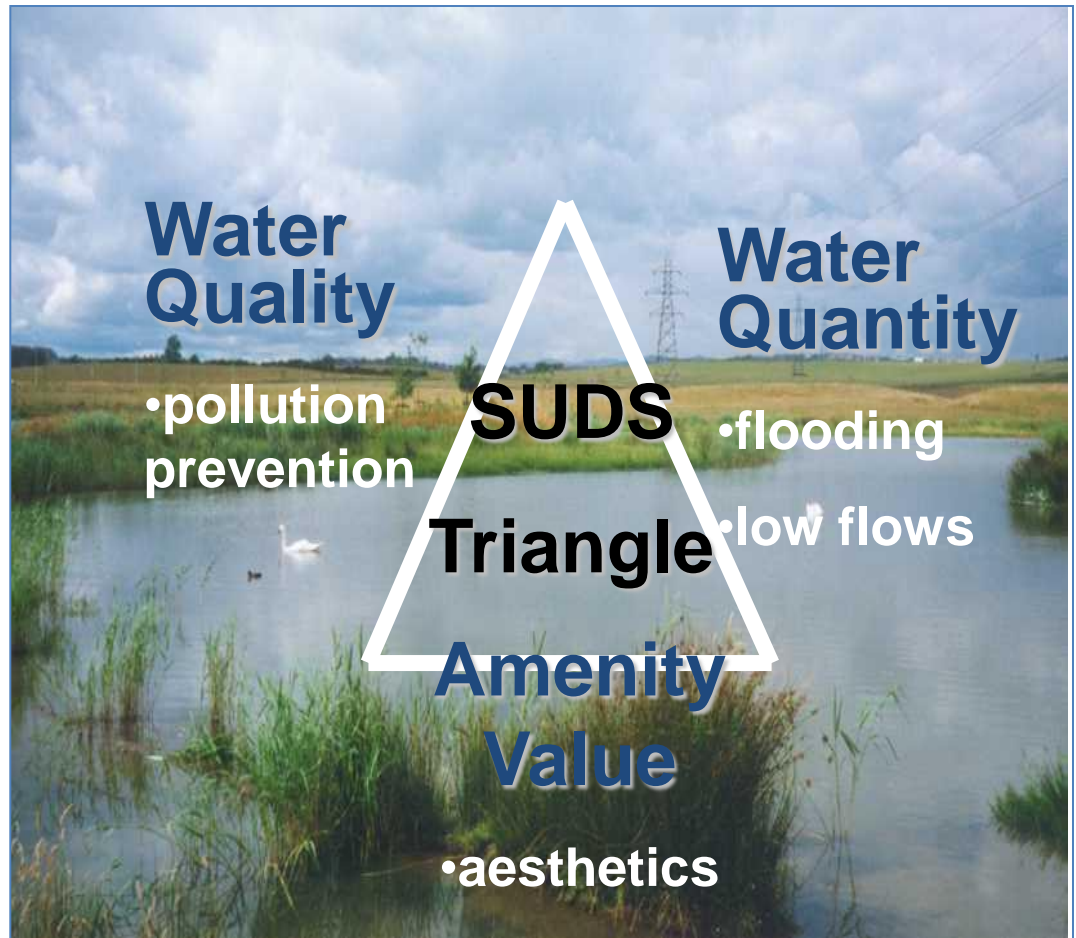
- Vehicles & driving
- Car washing
- Disinfection /washing of bins, yards, etc
- Garden/household pesticides
- DIY drainage: foul into surface water sewers
- Making gardens impervious

Infrastructure including drainage systems: pathways for pollution & flood risk factors

- separate sewers, combined sewers
- impervious surfaces

The purpose of SUDS

- Replicate natural pre-development hydrology, including unpolluted water quality
- SUDS techniques therefore encompass flow attenuation, and **also** a treatment function
- Amenity: the technology should aspire to be attractive since it is a component of the landscape and local environment.



What functions could be given to voluntary sector?

- Litter picking
- Wildlife surveys/observation
- Habitat enhancement & protection
- Education
- Chase up pollution incidents, wrong connections



Zero tolerance for pollution in SUDS ponds...price of public involvement?

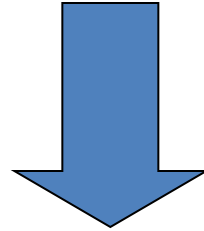
- The public are unlikely to understand the pollution control function of SUDS.
- An influx of turbid water, or a visible oil film are likely to generate complaints
- ***Pre-treatment*** a prerequisite for any public engagement



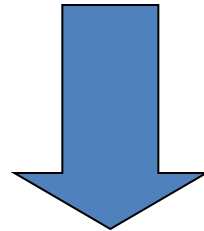
Black-bellied swans(after oil spill) below an industrial estate

SUDS Treatment Train

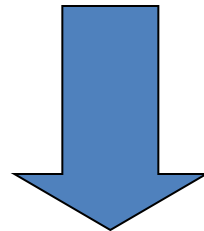
Housekeeping



Source Control



Site Control



Regional
Control



Retrofit vortex solids
separators u/s ponds prior to
public remits?

Source control innovation...

Keep the source control housing
SUDS within the plot

It's turf at the top... Or gravel or
permeable blocks over stone filters

Making the individual
responsible for his plot's
runoff: **House plot SUDS**

- Design so that if fail then a nuisance at the house plot, not downstream (keep out of public domain)
- Attenuate roof and driveway runoff to green field flow rates
- Attenuate pollutants within curtilage



Tweaking the Regulatory regime

to allow more *Big Society* innovation

End of pipe SUDS

- Except for source control, u/s treatment train measures to remain remit of public body
- legal capital & revenue issue for public bodies to put in pre-treatment
- Major but infrequent de-silting operations on wetlands to remain with public body
- Liability for public civil actions to remain with utility/LA

Houseplot SUDS

- Building regs. – clear blockages to innovation
- Need Govt. Planning guidance: “House plot SUDS”
- water charges to align with concept
- GBR to prevent by-passing of a house plot SUDS system by a closed pipe

Need guidance for business parks that encompasses the plot by plot scale SUDS concept too.

Are main barriers institutional more than statutory?

Conclusions: b.darcy@btinternet.com

End of pipe SUDS

- Treatment train essential to avoid public complaints
- Retrofit technology for delivering pre-treatment prior to lakes / ponds / wetlands for public amenity uses
- Liability for public civil actions to remain with utility/LA
- Major but infrequent de-silting operations on wetlands to remain with public body

Houseplot SUDS

- Attenuate flows within the curtilage to green field rate
- Provide treatment for driveway runoff
- Source control options to involve gravel filter on SW drainage to pre-empt wrong connections
- Design techniques so that fail within the plot, & not evident d/s at discharge from network
- Building regs & water charges to align with concept