

Broads Forum
28 July 2016
Agenda Item No 7



Broads Authority Forum

Water Recycling in the Broads

July 2016

Maria Woods and Claire Piper

LOVE EVERY DROP. PUT WATER AT THE HEART
OF A WHOLE NEW WAY OF LIVING.

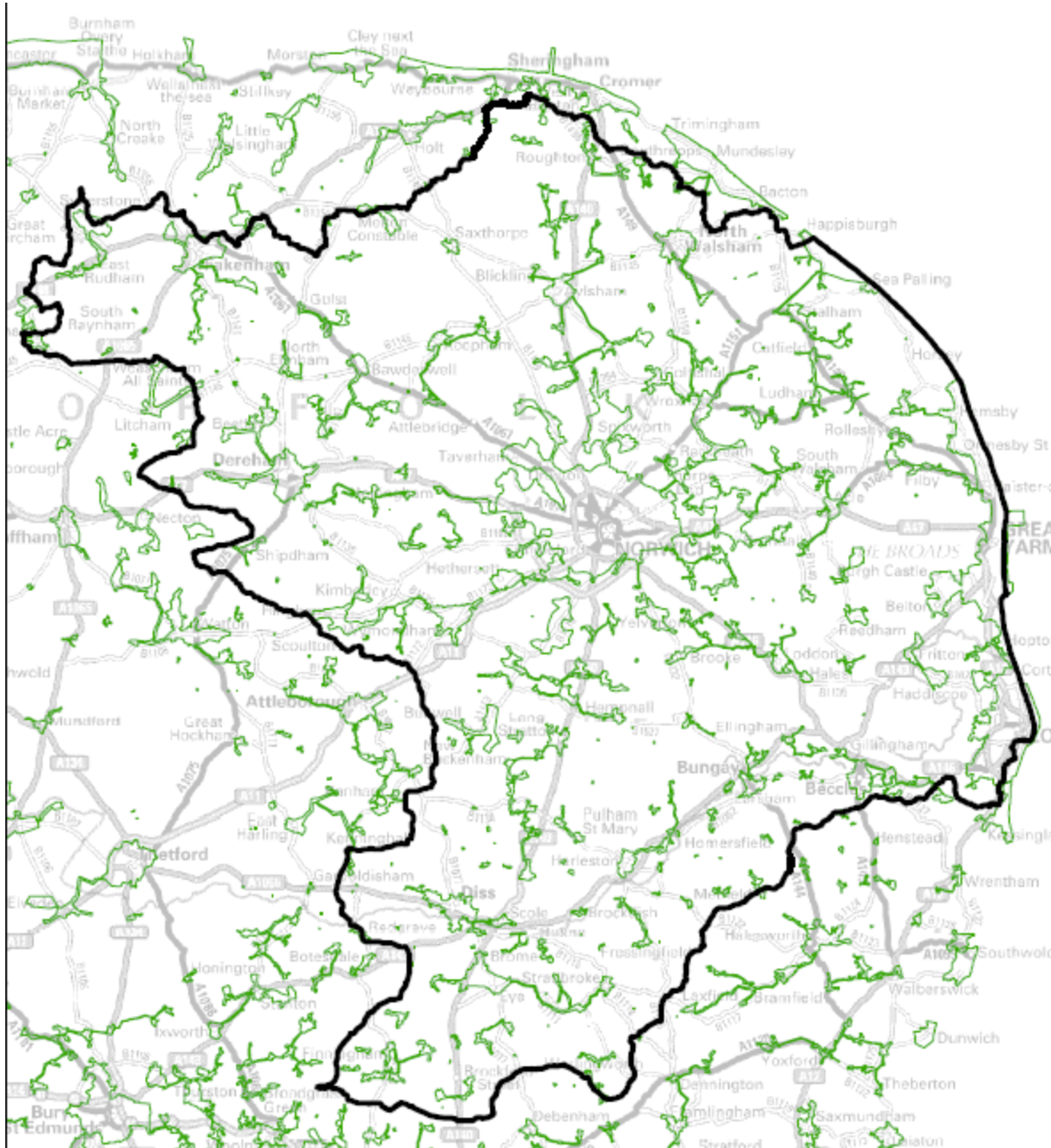
Agenda

- Some questions for you..
- The Broads Area and Anglian Water
- Environmental Discharge Permits and Compliance
- The Business Context and future investment
- First time sewerage schemes
- Any questions?

Please say if you don't understand acronyms etc

The Broads Area and Anglian Water

Maria Woods
Environmental Permit Scientist



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Environmental Discharge Permits and Compliance

Maria Woods
Environmental Permit Scientist

Environmental Discharge Permits



- We cannot make a legal discharge without one regardless of quality
- States what you can discharge, where and how much
- Standards are set to maintain and meet water quality standards resulting from directives
- Standards vary according to sensitivity of receiving water course, one of most important is available dilution / flow
- Has numeric conditions and lots of other conditions e.g. reporting & management condition
- The EA set water quality targets and regulate our compliance.

Treatment Capacities and standards



- See information table in pack
- Most common standards are for TSS, BOD, Ammonia
- Descriptive limits
- Urban Waste Water Treatment Directive
- Also of great importance to the Broads is phosphorous
- Dry weather flow & full flow to treatment – broadly determines capacity of WRC
- Information includes receiving watercourse

Treatment Capacities and standards



Example:

Asset Short Name	Asset Name	Receiving Watercourse	Main Watercourse	DWF mcd	FFT mcd	Solids mg/l	BOD mg/l	Ammonia mg/l	Descriptive consent	UWWTD limits?	P removal now or by end AMP6?
ACLEST	ACLE DAMGATE LANE STW NEW	R.BURE T		900	ALL	60	35A	14	No	Yes	
ALBUST	ALBURGH-CHURCH ROAD STW	R.WAVENEY NT		35					Yes		
ALDBST	ALDBOROUGH-THWAITE HILL FM STW	Scarrow Beck	River Bure	291	<755	80	40A	10	No		yes

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Compliance with permits



- Descriptive permits (<250 population served)

EA WRC site visits

- Sites with numeric standards

Operator Self Monitoring - AWS samples WRCs and reports results and reports these to EA

EA audit our processes and procedures against conditions in permit (e.g. timely and accurate reporting of results)

Backed up by: EA WRC site visits

Compliance with permits 2015



WWTW numeric compliance combined total	No of Failures % Compliance	7 99.0%
Sanitary Numeric Limits all	No of Failures % Compliance	2 99.7%
Nutrient numeric limits all	No of Failures % Compliance	0 100.0%
Non Sanitary Numeric Limits all (mostly metals)	No of Failures % Compliance	3 97.9
UWWTD Numeric Compliance all	No of Failures % Compliance	3 99.0%
UWWTD Nutrients Numeric Limits all	No of Failures % Compliance	0 100.0%
UV Dose Total	No of Failures % Compliance	0 100.0%
Descriptive permits		
WWTW (Descriptive) Compliance with Descriptive Conditions	No of Failures % Compliance	1 99.8%

- In 2016 (to end June 2016) Anglian Water have 1 non compliant works (Barton on Humber)

What happens if we don't comply?



- Detection of breach of permit requirement/regulatory non-compliance is immediately reported.
- Appropriate action taken to minimise the impact on the environment and customers
- Cause of non-compliance is investigated with EA. Management system assessed if this is suspected as the route cause.
- Anglian Water can be prosecuted by the EA, imposing unlimited fines.
- Negative media and stakeholder attention

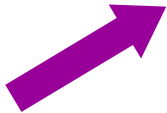
Business Context and Future investments

Claire Piper
Assistant Process Manger

Business context – our stakeholders



Government



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Colonial First State



CPP INVESTMENT BOARD



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Owners (Osprey)

Employees



The champion for water and sewerage customers, England and Wales

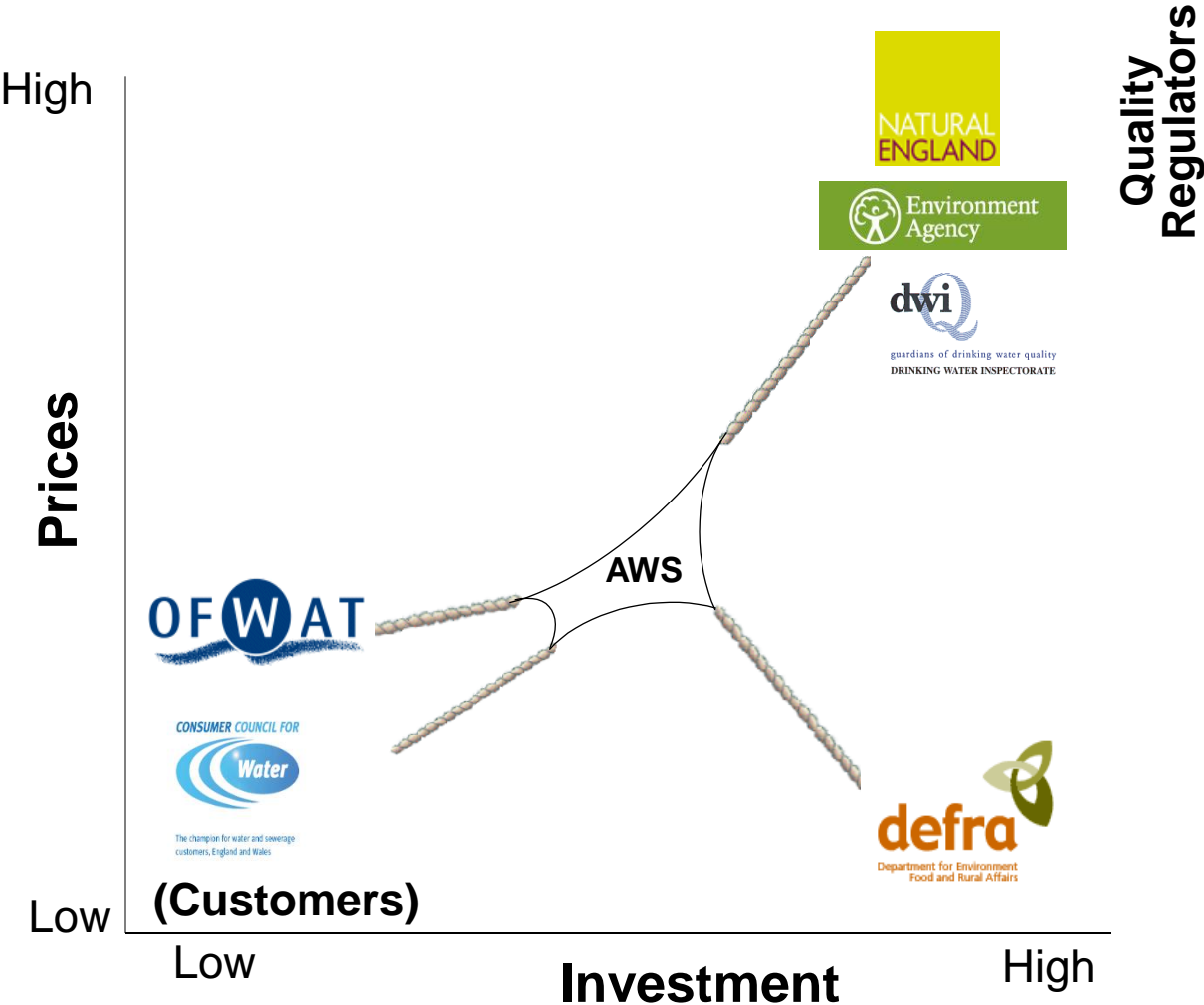


Regulators

Customers



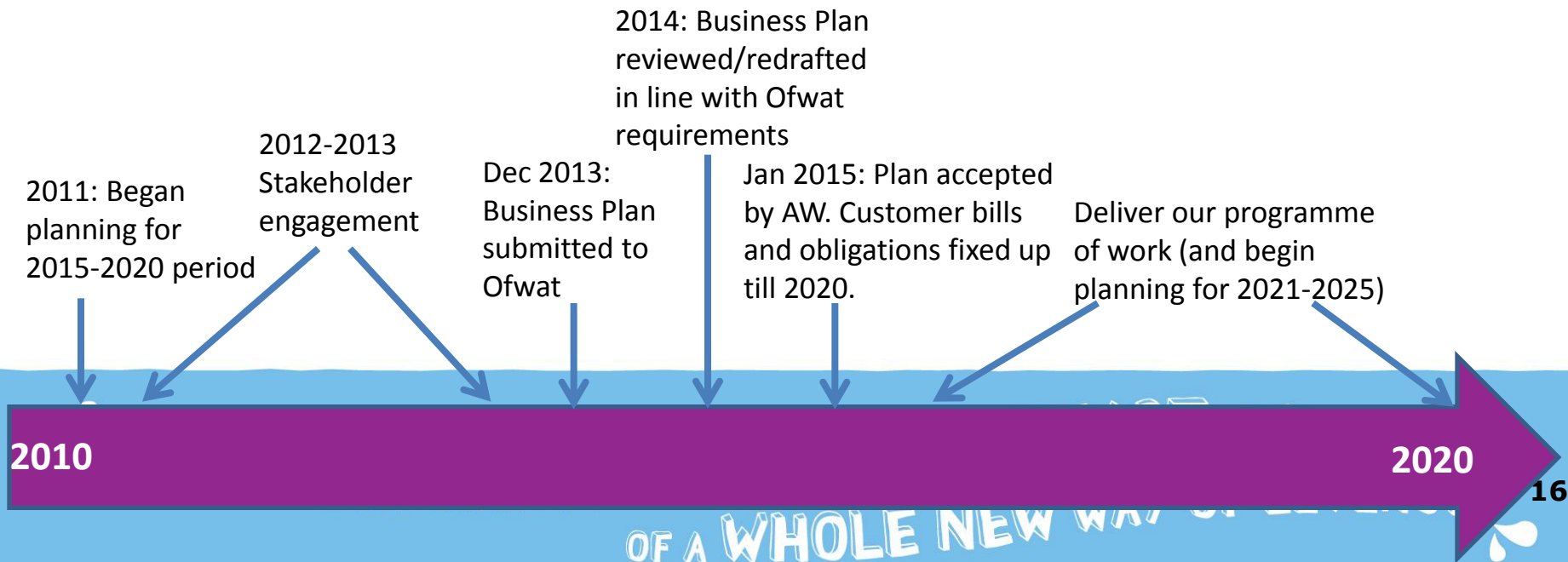
Business context - Balancing stakeholders needs



Our Business Planning process



- We provide customers with stability of bills by planning in 5yr cycles.
- Must predict supply demand, quality, security and maintenance requirements so that we make provisions for them in our business plan.



Future Investment



Main drivers with respect to tighter environmental standards for discharges

- Quality - Directives / Regulations / EQS as discussed previously
- Growth – increase in Dry weather flows
Standards tighten as we put more flow into the environment
- Combination of the two – WFD No Deterioration

Growth takes up dry weather flow capacity

See last 2 columns of table in information pack for details of AMP6 schemes

Example schemes



- **Wymondham (No det)**
 - Current permit is TSS BOD 12mg/l, NH₃ of 4mg/l and P of 1mg/l.
 - Predicted (within permit) growth in the catchment means March 18 permit will be NH₃ of 1mg/l and P of 0.8mg/l.
- **Ditchingham (GES NH₃)**
 - Current permit is TSS 35mg/l, BOD 20mg/l, P 1mg/l
 - To improve 15km of watercourse (Broome Beck and R. Waveney) new limits of 8.7mg/l NH₃ in March 18.
- **Pulham St Mary (GES P)**
 - Current permit is TSS 30mg/l BOD 15mg/l, NH₃ of 5mg/l
 - To improve 9.5km of watercourse (Starston Beck to R. Waveney) new limit of 2mg/l P in March 20

First time sewerage schemes (s101a)

Claire Piper
Assistant Process Manger

First Time Sewerage Schemes (s101a)



- Anyone can apply to Anglian Water – as an individual or group
- Driver can be amenity or environmental impact
- AWS determine outcome based on Guidance Notes issued by Defra which includes environmental and amenity benefits and cost.
- If the application is refused it can be referred to the Environment Agency

Note: Section 98 of the Water Industry Act 1991 says any owner, occupier or local authority can demand the installation of a public sewer as long as they meet the cost of it

Connection costs – see handout in pack

S101a Costs

love 

OUR OFFER TO YOU

Sign up to our connection offer and we'll waive all charges we would normally make for new connections.

CONNECT TO THE NEW SEWER AS PART OF THE SCHEME AND YOU'LL GET...

✓ **FREE LATERAL DRAIN**

from the edge of your property boundary to the new sewer.

✓ **NO FEE**

on our usual one-off infrastructure charge.

Connect within **3 months** and get

✓ **FIRST 12 MONTHS SEWERAGE CHARGES FOR FREE.***

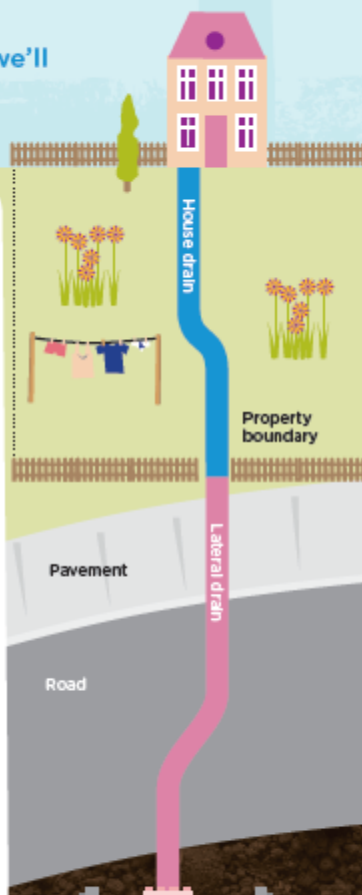
OR

Connect within **6 months** and get

✓ **FIRST 6 MONTHS SEWERAGE CHARGES FOR FREE.**

*This means you can get a maximum of one year's sewerage service for free just for connecting quickly once we have notified you that the sewer is available.

Note: Qualification of this extended period will be dependent on receipt of a Certificate of Completion - issued by the Building Control section of your local council.



IF I TAKE UP THIS OFFER, WHAT WILL I PAY FOR?

You'll be responsible for paying and arranging the following:

- 1** The cost of separating your surface water from your foul water (if necessary).
- 2** The costs of laying your house drain from your property to the boundary of your land. For this work, you would normally employ a local builder.
- 3** Making an application to the building control section of your local council for a Building Control Inspection. They will normally charge a fee.

WHAT HAPPENS IF I DON'T TAKE UP THIS OFFER?

CONNECTING YOUR PROPERTY TO THE NEW SEWER AFTER THE CONNECTION OFFER EXPIRES

If you apply for a sewer connection after the date given in the Invitation to Connect letter, we will incur additional costs for designing and retro fitting your lateral drain. So we won't be able to waive any charges and in addition to the costs of providing your own house drain to your boundary and the Building Control Inspection fee (as mentioned) you will also become responsible for:

- The one-off fixed infrastructure charge** payment to Anglian Water.
- The cost of laying the public lateral drain**, which is normally in the road, between the sewer and the boundary of your property. This can cost several thousand pounds.
- Sewerage service charges** would start immediately upon your connection to the public sewer.

S101a in the Broads area



- The EA are producing a map showing communities with no sewage provision – this has not yet been shared.
- S101a schemes AMP5:

Scheme Name	Obligation date	Status
East Ruston	Mar-15	Complete
Stratton Strawless	Mar-13	Complete
Neatishead	Mar-15	Complete

- S101a schemes AMP6:

Output year	Scheme Name	Obligation date	Connectable properties	Status
Year 3	Repps and Bastwick	31-Mar-20	65	Planned
Year 3	Worstead	31-Mar-20	14	Planned

s101a



Q & A guide, connection offer and application form in pack

Also check out our website:

Q &A:

[http://www.anglianwater.co.uk/assets/media/your_guide_to_first_time_sewage_v4\(1\).pdf](http://www.anglianwater.co.uk/assets/media/your_guide_to_first_time_sewage_v4(1).pdf)

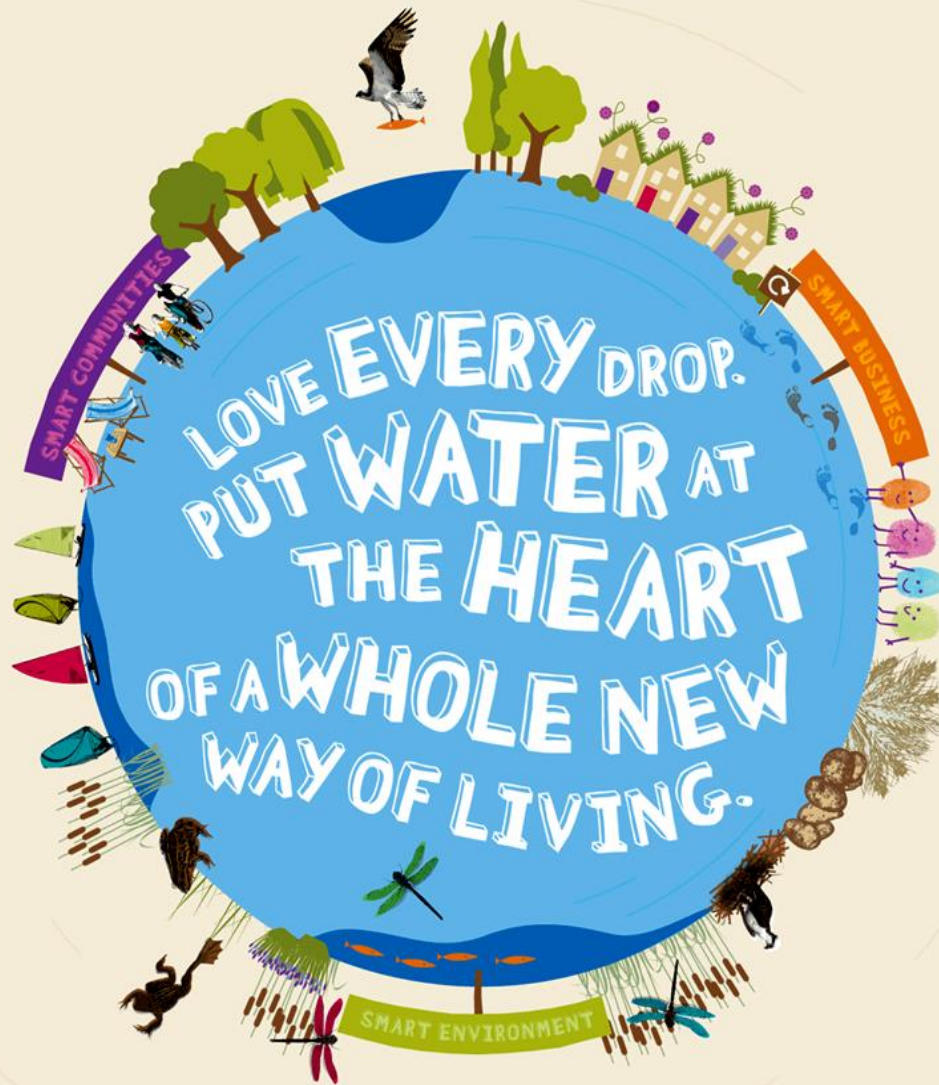
Application form:

http://www.anglianwater.co.uk/assets/media/s101a_application_form_v3.pdf

Thanks for listening

Any questions?

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