

United Utilities

Stephen Howell

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Flooding Programme



Causes of flooding: Hydraulic & FOC



Regulatory Responsibility



Project Scoping / Costing



AMP 6 – Risk Based Approach



Partnership Working

Hydraulic Flooding & FOC



Hydraulic flooding is flooding that is caused by hydraulic incapacity of the sewer network

Flooding Other Causes (FOC) - blockages, collapses etc

Internal flooding – inside the customers property or an integral garage

External flooding on customer property – garden, garage, garden shed

External flooding on open space – highway, car park, field

Basically - as soon as water comes out of the manhole and spills onto the road this is classed as external flooding



Regulatory Responsibility AMP 5

We keep a record properties that have experienced internal & external flooding on DG5 registers. Properties are given a risk level based on how many times they have flooded.

Investment targets to address flooding are set at the beginning of each AMP and monitored by OFWAT through annual reports. The targets for AMP 5 (2010-15) are: -

- Net Reduction of 125 properties on the internal flooding register*
- 633 capital removals from the internal flooding register.*



Regulatory Responsibility



Regulatory Responsibility AMP 6

Over AMP6 we have set targets to reduce internal flooding by just over 40% and external flooding by around 15% (largely as a result of work on internal flooding) and repeat flooding by around 45%.

We are developing a risk based approach to tackling these problems, taking into account the historical information we have (actual incident data) and modelling the impact of future growth in these areas. We will then develop costs for integrated solutions in the highest priority areas and invest in the solutions that provide the maximum benefit for our customers.

(This is still subject to obtaining approval of our Business Plan by Ofwat later this year).



Project Scoping



Scoping Properties into Projects

Every 3 months we review the flooding registers

Potential projects are scoped, a solution for each scope is identified and high level costs are estimated

The costs are run through a CBA model to give each project a CBA score - Projects are then prioritised.

Properties that are on the internal register but are unlikely to receive a capital scheme may be offered mitigation.



AMP 6 – Risk Based Approach

Risk Based Approach

Solutions will be more holistic taking into account mitigation, conventional solutions, SUDS and partnership working

SMP will be used to identify areas at risk – we will be moving towards a risk based approach

Targeted on a reduction in number of incidents not a net reduction on the flooding register

Maintain levels of service



AMP 6 SMP Process

- Predictive, risk-based tool developed to enable proactive network management
- Tool used for our Business Plan submission to Ofwat determine flood risk at three time periods (2012, 2020 and 2036), based on running hydraulic models which reflect future climate change, proposed housing developments, creep, etc.
- Workshops held to validate predictions, establish causes and consider integrated solutions
- Programme balances cost against measures of success. We are taking a risk based approach taking account of historical and the potential future impact of new build.



Partnership Working

- Share potential projects with other stakeholders
- Hold a series of meetings with LLFAs
- Overlay SMP with external data (e.g. Fluvial flooding) to see areas of common concern
- Benefits - Efficient working with partners: Sharing cost: Improved knowledge of the catchment: Improved reputation.
- Liaison with Sefton MBC maintained via:
 - MSFW
 - Local Plan liaison meetings
 - Reactive incident response (e.g. Fouracres)
 - SMP meetings
 - Planning Liaison
 - Merseyside Strategic Flood and Coastal Risk Management Partnership



*THANK
YOU*

Questions



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