

London 2100 - Engaging stakeholders to improve long term planning

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1 SYNOPSIS

In 2017 Thames Water created the London 2100 team with the aim of developing a long term drainage and wastewater strategy for London. The team published a document, called '*London's wastewater future – London 2100: The case for change*', which characterised the challenges and opportunities of delivering a sustainable wastewater service over the long term (80 years) for Londoners. This led to an options development exercise that was undertaken with a range of key project stakeholders.

This paper shares some of the learning from the London 2100 project with a particular focus on how stakeholder engagement through storytelling and collaborative innovation can enhance the overall strategic planning process. This approach to stakeholder engagement was found to be effective in generating interest about the project and encouraging participation in the option development process.

2 INTRODUCTION

2.1 What is London 2100?

London 2100 arose out of a need to respond to rapid population growth and changing weather patterns, both of which are putting the existing wastewater infrastructure under increasing pressure. As customer expectations and environmental standards continue to increase, it is imperative that we think differently about the future, and look beyond the conventional way of doing things.

London 2100 has a planning horizon that aligns with the Water Resources Management Plan (WRMP): it is 80 years. This is different to how Thames Water has delivered upgrades to the wastewater system in the past. Historically, a ten year planning horizon was considered sufficient in most instances. There was land available on Sewage Treatment Work (STW) sites which made extending process steps a good value option. However, a tipping point is imminent whereby land at large London STWs is becoming constrained and the cost of expanding STWs is becoming prohibitively expensive. Hence the need to plan over longer time periods and to develop whole catchment solutions that provide the best value for customers.

The primary objectives for London 2100 are:

- To communicate and gain internal acceptance of the idea that continuing the existing approach to investment would not be possible.
- To engage with stakeholders and bring them on board with being part of the team to develop solutions.
- To develop a framework to allow 'blue-sky' ideas to be generated which will contribute to the overall solution in London.
- To ensure that the process developed for creating a plan can be rolled out across the whole Thames region.

In 2017 the London 2100 Case for Change document was an important step in the overall London 2100 plan because Thames Water recognised the need to make their stakeholders aware of the situation, and bring them on board.

Following the release of the Case for Change booklet and supporting material, a list of generic options were produced to address the challenges and opportunities highlighted. This process was carried out using the optioneering framework from the well-established WRMP. The generic options were then developed into a large number of unconstrained options; each having the potential to form part of a long term plan for London.

2.2 What part does stakeholder engagement play?

Due to the complex nature of the problem, and its long planning horizon, one of the primary objectives of London 2100 is to engage with a wide range of stakeholders very early in the project life cycle. Successfully engaging stakeholders at an early stage increases the chances that future options will see support and participation, as the reasons for promoting certain options over others will be understood by all involved. It also reduces the level of challenge when consulting on the final plan. In this way, it is hoped that a culture of collaboration and endorsement, rather than present and defend, will develop. Stakeholder engagement is therefore central to the London 2100 planning process and is considered an ongoing activity as the project develops into part of Thames Water's Drainage and Wastewater Management Plan (DWMP).

Thames Water's engagement strategy is based around five stages: 'Captivate, Sustain, Collaboration, Consolidation and Advocacy'. The Case for Change booklet, which forms part of the Captivate stage, was used to the concept of London 2100 to key stakeholders such as government, academia, businesses, financial groups, NGOs, regulators and charities. The booklet was also made available to the public via Thames Water's website.

The booklet was supported by a range of GIS graphics and images that capture some of the key themes of London 2100. These were used in presentations to different stakeholder groups by means of a storytelling approach.

These initial steps were followed up by innovation workshops for key stakeholders. Rather than merely informing stakeholders of the challenges and opportunities, the dual strategy of storytelling followed by collaborative innovation was an effective means of drawing them into the overall London 2100 process. This paper will discuss this twofold strategy in more detail and draw out some of the lessons learned as they apply to London 2100, as well as to DWMPs in general.

3 STAKEHOLDER ENGAGEMENT THROUGH STORYTELLING

Storytelling as a style of engagement is intentionally conversational and open ended. Telling one's story can be the entrance to an engagement space that works on two levels. In the first place, it provides the listener with the information they need to understand the background of a situation as well as what approaches might be taken to solve it. Secondly, its open-ended nature draws the listener in and naturally provides a route to further involvement, if the listener wishes to do so.

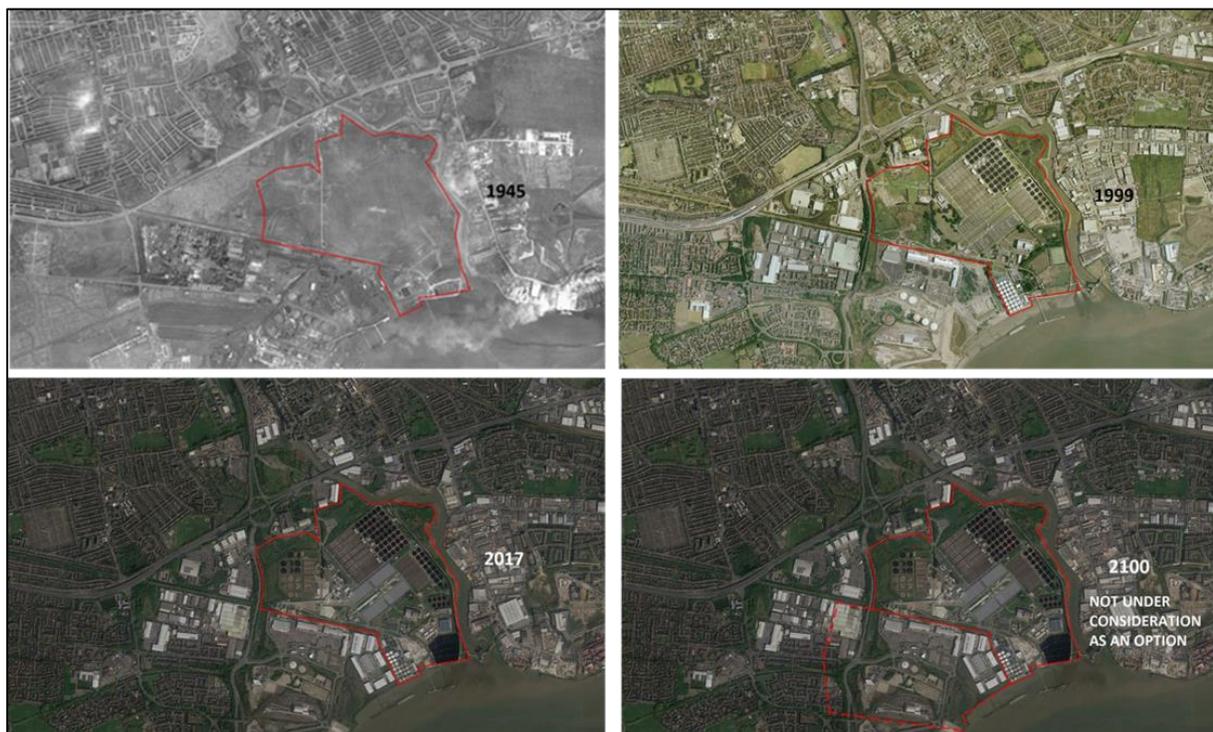


Figure 1: Beckton STW over time. Red line is current site boundary.

For example, satellite imagery was used to sequentially build a picture to communicate the lack of available land for STW expansion (see Figure 1). The fourth image in the sequence deliberately notes that the expansion of the works to the red dotted line is not under consideration as an option. No conclusions on the preferred option are drawn, merely the scale of solution required if upgrades were to continue to be planned and developed as they have in the past. The need to avoid this clearly undesirable outcome implicitly invites the viewer into the process, to help solve the conundrum.

The open ended nature of the communication is illustrated by the concluding image in the London 2100 Case for Change story, which brings together many of the challenges presented (see Figure 2). At this stage the stakeholder receiving the presentation will understand the data behind the image and the image thus serves as a basis for future conversation. As with the graphics in Figure 1, no preferred solution is proposed. However, by looking at the image one can see what options may be more suitable than others, and this stimulates conversation.

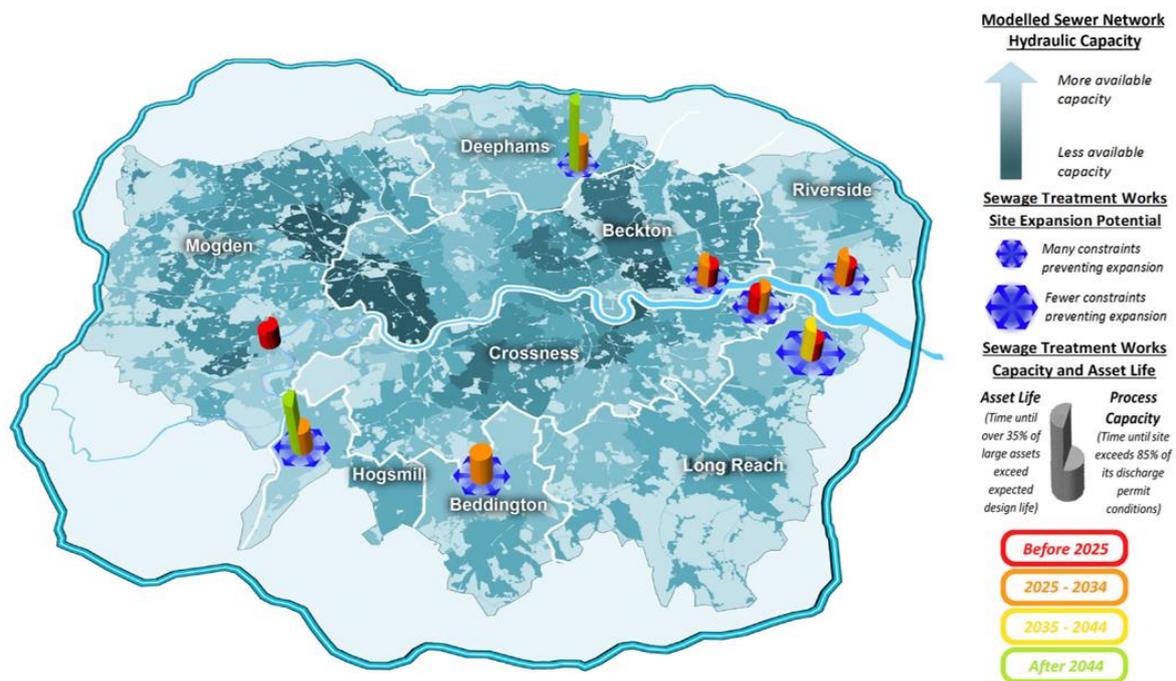


Figure 2: Final GIS image highlighting the major challenges facing London's sewerage network.

One of the main benefits of using storytelling to present the case for change was that the aspirations of the project have been understood by our stakeholders and sufficient interest and empathy was generated so that there was good participation at the next stages of the project. As a result, it is hoped that stakeholders feel more like participants in the project rather than audience members or consultees.

As the style of engagement seeks to be conversational and intuitive, a range of non-technical stakeholders were able to understand and engage with the challenge. However, this does not come without risk, as the message given can be oversimplified if care is not taken. This risk can be mitigated by ensuring that stories are evidence-based and that the reader can access the supporting information if they wish. For example, the London 2100 story was supported by eleven technical papers describing in detail how different driving factors are expected to affect the wastewater service of the future. These papers, covering topics such as population growth, legislation, customer behaviour and political uncertainty, were themselves supported by data from various models and quantitative assessments.

The London 2100 story, and its underlying evidence base, was crucial in helping stakeholders see why the project was happening and why their participation in it was important. The Case for Change booklet, which was designed to be read over a 30 minute lunch break, used storytelling to generate interest and, most importantly, to build trust.

4.2 Sharing good practice from around the world

Sharing good practice from other geographies has always been a useful means of generating solutions to problems. By including stakeholders in this process and placing the exercise near the beginning of the event, the activity helped to put the workshop participants in a good frame of mind to develop innovative ideas of their own. The good practice examples were presented by international experts with personal experience of the contexts they were presenting. The presentations were given in a round-robin style where four or five delegates would gather around the presenter and a banner to hear a three-minute outline of the case study (see Figure 4). This was followed by a short period for questions and group discussion.

In addition to creating a can-do attitude at the start of the workshop, the exercise was designed to be a means of prompting thoughts and ideas. The case studies themselves were carefully chosen to relate to a range of different challenge areas such as surface water management, intensive wastewater treatment processes, and active sewer network management. Prompt cards were handed to each delegate to trigger thoughts and questions about how the novel approach in each specific example might be adapted to London. The groups for this exercise were selected to provide a mix of expertise and backgrounds to maximise the number of viewpoints and create dynamic discussions.



Figure 4: Round-robin presentations and discussions sharing good practice from around the world

4.3 Sharing good practice from other sectors

Innovative approaches from outside the water sector were also shared and discussed throughout the workshop. This was achieved in two ways:

A series of 30-second videos were shown at intervals throughout the day. These diverse, and sometimes humorous, clips were presented in an informal style and without necessarily having any direct relation to wastewater and drainage in London. They were used partly as a break between activities and partly to encourage creative thinking.

The second way that good practice from other sectors was shared was as a focussed exercise. In this exercise a series of case studies were carefully chosen to demonstrate different approaches to changing customer behaviour. Workshop delegates viewed each of these videos in groups and discussed potential opportunities for using similar strategies or approaches to address the drainage and wastewater challenge.

This approach proved particularly beneficial when discussing behavioural and partnership options because it encouraged the participants to think outside their normal technical framework and appreciate the potential for realising significant benefits simply by influencing customer behaviour.

4.4 Validation of existing options

An important part of the engagement process was to collate expert opinion on a pre-prepared list of options; identified prior to the event by the London 2100 core team. To maximise the potential of this exercise the delegates were split into groups according to their technical and professional backgrounds. Once again, prompt cards were used to bring focus to the exercise and to ensure feedback in the right areas. In addition, a core team member with expertise in the relevant area of discussion was included in each group.

4.5 Putting form before function

In this exercise, each group of delegates were given different scenarios to consider. The scenarios included such imaginary situations as “imagine that the majority of Londoners live in high-rise apartment blocks”. Through these intentionally provocative scenarios, workshop delegates were encouraged put ‘form’ before ‘function’ by envisioning what a wastewater and drainage system might look like in such a future world, before considering how it might actually work.

This exercise helps to break thinking fixedness by stepping outside the constraints and parameters of the current situation. The ensuing conversations result in creative ideas but, equally importantly, help those involved to better understand the constraints presently faced by the industry.

5 REFLECTIONS AND APPLICATIONS TO THE DWMP

5.1 Lessons learned from stakeholder engagement on London 2100

Provided it is well-articulated, concise and evidence-based, storytelling can be a powerful means of engaging stakeholders and of bringing them up to speed for future discussions around options and solutions. In addition to being used at a wide range of general stakeholder presentations, this approach was found to be effective as a preface to more focussed discussions and innovation exercises as it provided a common frame of reference for the ensuing activities.

One lesson learned was the importance of carefully explaining the processes involved in developing the overall strategy, as well as, where necessary, the reasons behind them. In ensuring that the background (history, challenge, opportunities) was properly explained, it was easy to overlook the explanation of the optioneering process itself. Some participants were confused by the many different assessments and screening stages, and how each related to the others. This resulted in a lower level of engagement than might otherwise have occurred.

When engaging stakeholders using an innovation exercise, it is worth remembering that the ideas that come out of the exercise are not the only, or even the most important, outcome. If managed well, the exercise should result in an improved understanding of the system, as well as some enthusiasm for solving the problem. This increases the chances that those involved will become engaged advocates as the plan continues to develop.

Notwithstanding the above point, a key part of the process was ensuring that the ideas arising out of the innovation activities were carefully tracked and referenced in the resulting reports and option lists. Although the outcome of this remains to be seen, it is hoped that adopting a transparent approach to options generation will give stakeholders confidence in the process and will reassure them that their time and energy has been well spent.

An effective workshop takes a considerable amount of time and effort to prepare, with numerous materials needing to be produced. It was found that engaging a non-technical facilitator was a valuable

factor in delivering a successful workshop. It meant that core team members could maximise the opportunity for networking and being fully engaged with the innovation processes.

The workshops benefitted from giving careful thought to the way that delegate groups were selected. For certain exercises, putting delegates in mixed-background groups helped to promote outside-the-box thinking and discussions that were conducive to generating ideas. For other exercises, such as validation of existing options, grouping delegates according to technical background allowed for more focussed feedback and suggestions to be given.

5.2 Stakeholder engagement and the DWMP framework

London 2100 started before the DWMP framework was published in 2018, although it did seek to align with the emerging themes documents. In addition, the feedback from London 2100 colleagues sitting on the steering group for the 21st Century Drainage project were incorporated throughout the options development process. London 2100 will feed into Thames Water's DWMP as it takes shape, and will be well placed to provide a basis for options development within other Thames Water DWMP planning areas. A focus on stakeholder engagement will remain a central element of the ongoing plan, as will storytelling and collaborative innovation with stakeholders.

The details, however, will need to evolve. One reason is that, as the plan develops, the focus of engagement will move from Level 1 to Levels 2 and 3. Thus far in the process, stakeholder engagement has been mostly at Level 1 (GLA, TFL etc.). Though there was occasional engagement at Level 2 (LLFA) with minimal change to the narrative and approach, engaging at Level 3 ('friends of river', local charities etc.) will require a more tailored, geographically specific approach. This will also be the case when speaking to customers. Collaborative innovation will continue to play an important part in the process. However, at Level 3, and as the specificity and detail of the options increases, an increased level of technical guidance may be necessary to ensure that stakeholder engagement in options development continues to be meaningful.

It is considered important that a range of stakeholders are involved in forming the criteria by which options are screened. For all the above reasons, it is anticipated that the format of stakeholder workshops will evolve from those used in the early stages of London 2100.

The need to continually relate the detailed options considered at Level 3 to the big picture means that storytelling is likely to become increasingly important in the overall stakeholder engagement process. Storytelling will also play a key role in justifying the content of the various options lists, particularly for those stakeholders who do not have the time or inclination to engage with the detailed screening process.

6 CONCLUSIONS

This paper has summarised the London 2100 project and provided an outline of the stakeholder engagement strategy, emphasising the storytelling and collaborative innovation elements. The positive effects of a carefully structured narrative, supported by suitable maps, images and graphics, have been demonstrated. The conversational, open-ended nature of such a storytelling approach effectively draws stakeholders into the process. The benefits of this can be further increased by openly engaging stakeholders in generating ideas for future options. Innovation workshops were found to be an effective means of achieving this. As a result of the approach taken, a number of valuable insights have been obtained which will be useful in further stages of London 2100 and in the DWMP in general.