

The Contribution of Sustainable Drainage Plans to DCWW Outcome Delivery

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1 Introduction

Dŵr Cymru Welsh Water's (DCWW's) Sustainable Drainage Plans (SDPs) optimise their contribution to outcome delivery through a flexible and pro-active approach to developing catchment level plans. This paper demonstrates how SDPs are delivering concepts from guidance documents such as the Drainage Strategy Framework and the Wastewater Supply/Demand Framework in an established 'Business as Usual' practice to contribute to delivery of DCWW outcomes.

The paper looks at the principles followed in the Sustainable Drainage Plans, how these have evolved and, through examples, how they are contributing to achieving outcomes to help DCWW maximise cost benefit in their catchment plans. The constant strive to meet customer led targets ensures evolution of the SDP process and continual opportunities for improvement, identified through new guidance and feedback from the business.

The flexible approach of the SDPs to deliver 'Business as Usual' 'Customer Led' Sustainable Drainage Plans, following industry leading guidance, already provides the basis of a framework for delivering 21st Century Drainage.

In 2013 Clear Environmental (now RPS) and DCWW presented examples of how DCWWs approach to SDPs aligned to the six key principles in the Drainage Strategy Framework.

- Partnership,
- Uncertainty,
- Risk based,
- Whole life costs and benefits,
- Live process
- Innovative and sustainable solutions.

These principles have driven the evolution of the SDPs into AMP6 to embed them into the DCWW business.

Another relevant guidance document that has influenced the SDP journey is the Wastewater Supply/Demand Framework update which was published in 2014 to help understand the implications of the Drainage Strategy Framework on Water Companies. Whilst some of the principles we follow today were identified in the first Supply/Demand Framework document, some of the new themes identified in the new Framework are:

- *Investment is agreed with customer representatives and key stakeholders;*
- *Clearer identification of trigger(s) for interventions in advance giving clarity for stakeholders and accountability to customers and regulators;*
- *The focus is on company-specific outcomes and performance measures, rather than industry-wide levels of service*
- *Development of company plans is seen as a 'business as usual' process which can also be used to inform price review submissions.*

The next section of this paper describes how, using these themes, the SDPs are focussed on delivering outcome based plans from the commencement of the SDP.

2 SDPs – A 21st Century Approach to Drainage Planning

The SDPs follow the approach set out in Figure 1 below which ensures the SDPs are totally integrated into DCWW business systems with live outputs available to all internal stakeholders through DCWW internal systems.

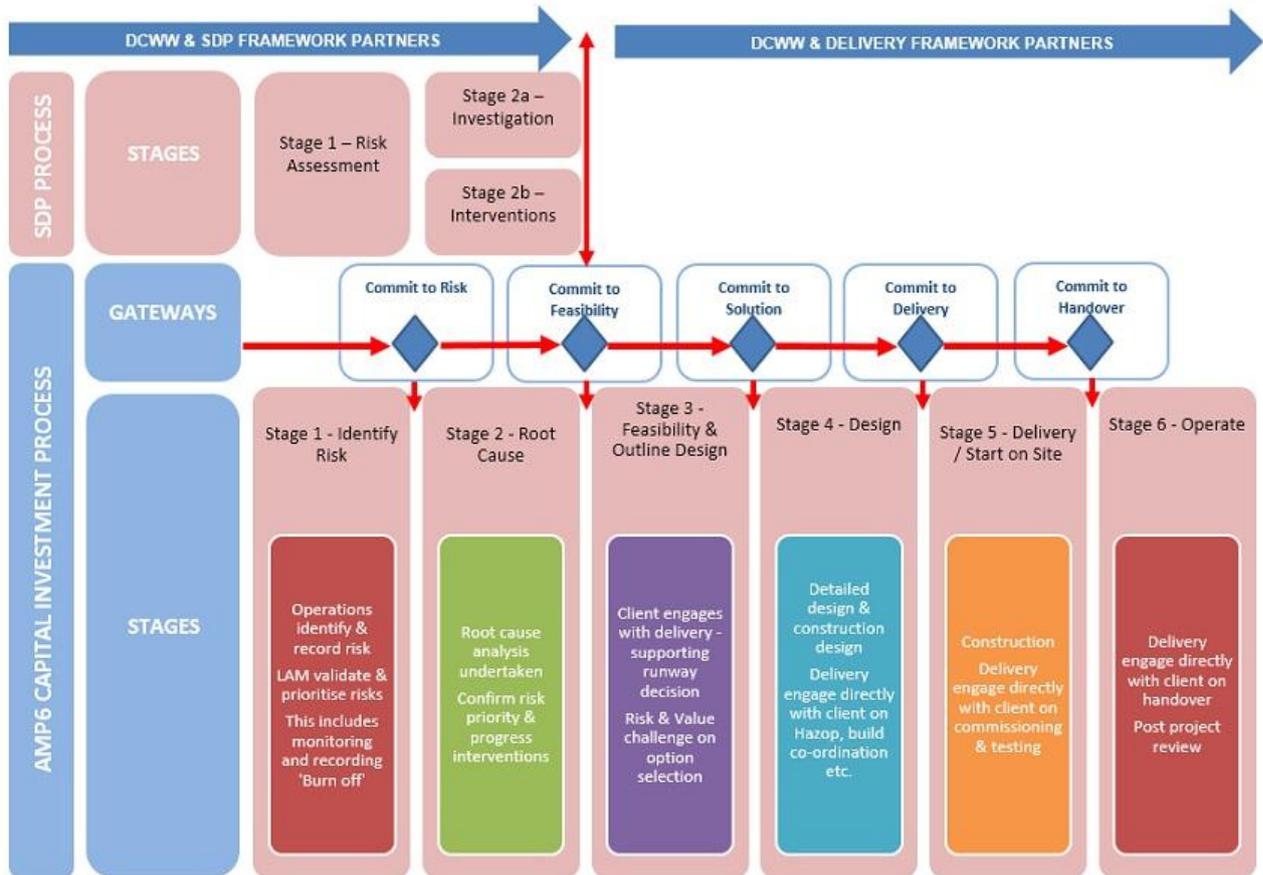


Figure 1 – SDP Process Overview

2.1 Agree Investment with Key Stakeholders.

The stakeholder engagement plan is critical to the successful delivery of outcome focussed SDPs. The SDPs need to understand and take account of how outcomes are being delivered by the business across the company by regular communication with sector leads or catchment leads, which (across all the SDPs) comprises over 200 individual contributors from DCWW into the SDP process either at company-wide level or at catchment level. This communication process is facilitated by workshops and co-location in DCWW offices.

The key contributors are consulted throughout every stage of the SDP process to ensure alignment with business objectives and other ongoing projects within DCWW. This consultation process ensures viability of interventions and an overall catchment plan that takes account of all other planned works in the catchment and therefore holistically working towards achieving DCWW specific outcomes.

2.2 Clear Identification of Triggers for Interventions

Early focus on understanding the catchment strategy and contingent interventions focusses the SDP on delivery of the right outcomes for DCWW from the outset of the SDP.

The first stage of the SDP is focussed on understanding the context of the SDP catchment within the wider business before any investment in updating catchment specific planning tools or undertaking surveys. The SDPs utilise Investment Manager, a tool used by DCWW to enable a company-wide approach to risk analysis and investment planning, to ensure the catchment risks are assessed in the context of their contribution to operational area targets and company-wide targets.

The catchment risk plan, which is the output from Stage 1 breaks the catchment down into risk areas, and assesses current risks levels in each area, confidence in asset performance in those areas, likelihood and impact of future changes on performance and then combines those to create an initial investment plan for the catchment detailing where investment is required to improve confidence in the plan.

The next stage of investing in surveys and planning tools to improve confidence in understanding asset performance is used to define the catchment plan which details a programme of investment in the catchment which optimises cost benefit and reduces risk to an acceptable level taking account of all known or expected future developments and therefore providing visibility of intervention for DCWW in advance.

2.3 Company Specific Outcome and Performance Measures

In most cases short term outcomes for the catchment are driven by immediate needs, generally identified by Catchment Managers where they know an asset is failing or through surveys. These assets often do not meet short term targets such as a CSO that is known to spill regularly and therefore will not meet WFD targets or a frequent flooder that the catchment manager may receive a call about every time it rains. Often the risk is reduced at these assets by a temporary fix in the short term and perhaps a long term intervention planned as part of the SDP. Understanding and responding to immediate issues (e.g. identification of pollution issue in Cynon) has increased the visibility of SDPs in DCWW and also gained the confidence of local catchment managers in supporting the SDP process.

The Welsh Water Business Plan for AMP6 identifies the eight Outcomes that Welsh Water committed to Ofwat:

- 1.0 Safe Drinking Water
- 2.0 Protecting our Environment
- 3.0 Responding to Climate Change
- 4.0 Excellent customer Service
- 5.0 Affordable Prices
- 6.0 Asset Stewardship
- 7.0 Developing our people
- 8.0 Business Efficiency

The successful delivery of each of these outcomes are defined through measures of success such as reduction in the number of properties that suffer sewer flooding and preventing the number of pollution incidents that occur by the end of AMP6. The SDPs contribute directly to helping



DCWW achieve some of these measures of success by improving the performance of the system. Specific project related examples are summarised in Section 3 detailing catchment specific examples of contributing directly to outcome delivery.

The long-term objectives are laid out in 'Our Sustainable Future' which is DCWW's 25 year plan are very similar to the outcomes identified in the AMP6 Business Plan. Therefore by focussing on the short term measures of success laid out in the business plan, we will also achieve the longer term successful outcomes for the business

2.4 'Business as Usual'

The final major change in the approach of the SDPs is embedding the outputs in visible DCWW systems, giving ownership to the business and directing them towards achieving the right outcomes for the customers.

The 'business as usual' approach has benefitted from the huge push in stakeholder interaction, 'What is an SDP' guidebooks released to the business, posters and presentations at roadshows, live outputs available on InfoZone and regular news articles in the DCWW newsletter 'Dwr Weekly'.

The SDP process and the benefits of SDPs are much more widely known across DCWW in AMP6 and that itself brings more interest and interaction with stakeholders to increase the quality of deliverables from the SDPs and embed 21st century drainage thinking into the business.

3 Delivering 'Outcome Focussed' Sustainable Drainage Plans

The presentation will focus on specific examples from projects which demonstrate how they contribute to achieving specific measures of success and in turn outcomes for the business including:

- Outcome 2: Protecting the Environment:
- Outcome 3: Responding to Climate Change
- Outcome 4: Best in Class Customer Service
- Outcome 6: Asset Stewardship

Examples used in the presentation are summarised below:

Example 1 – Cardigan: Breach of WwTW storm consent. Contributed towards MoS B2 – Treating used water, MoS E1 – Affordable bills, MoS F3 – Asset Resilience (climate change impact on tide levels), MoS H1 – Operating Efficiency.

Example 2 – Hereford: Phosphorus in River Wye. Contributed towards MoS B2 – (Long-term) permit compliance, MoS D3 – (Long-term) sewer flooding, MoS D5 – 'Customers must trust that we can be relied upon to do the right thing on their behalf.

Example 3 – Cynon: CSO investigation. Contributed towards MoS B3 – Preventing pollution.

Example 4 – Morfa Nefyn CSOs investigation. Contributed towards MoS B3 – Preventing pollution.

Example 5 – Leominster Surface Water Removal Opportunities. Contributed towards MoS C1 – Adapting to climate change

Example 6 – Haverfordwest flooding investigation. Contributed towards MoS B2- Treating used water permit compliance, MoS B3 – Preventing pollution MoS C1 – Adapting to climate change and MoS D3 – Properties flooded in the year

Example 7 – Five Fords asset serviceability. Contributed towards MoS F1 – Asset Serviceability