

**United Utilities Water**

# **Drainage and Wastewater Management Plan 2023**

## **Technical Appendix 1 - Assurance and Governance**

**Document Reference: TA1**

**May 2023**

## Executive Summary

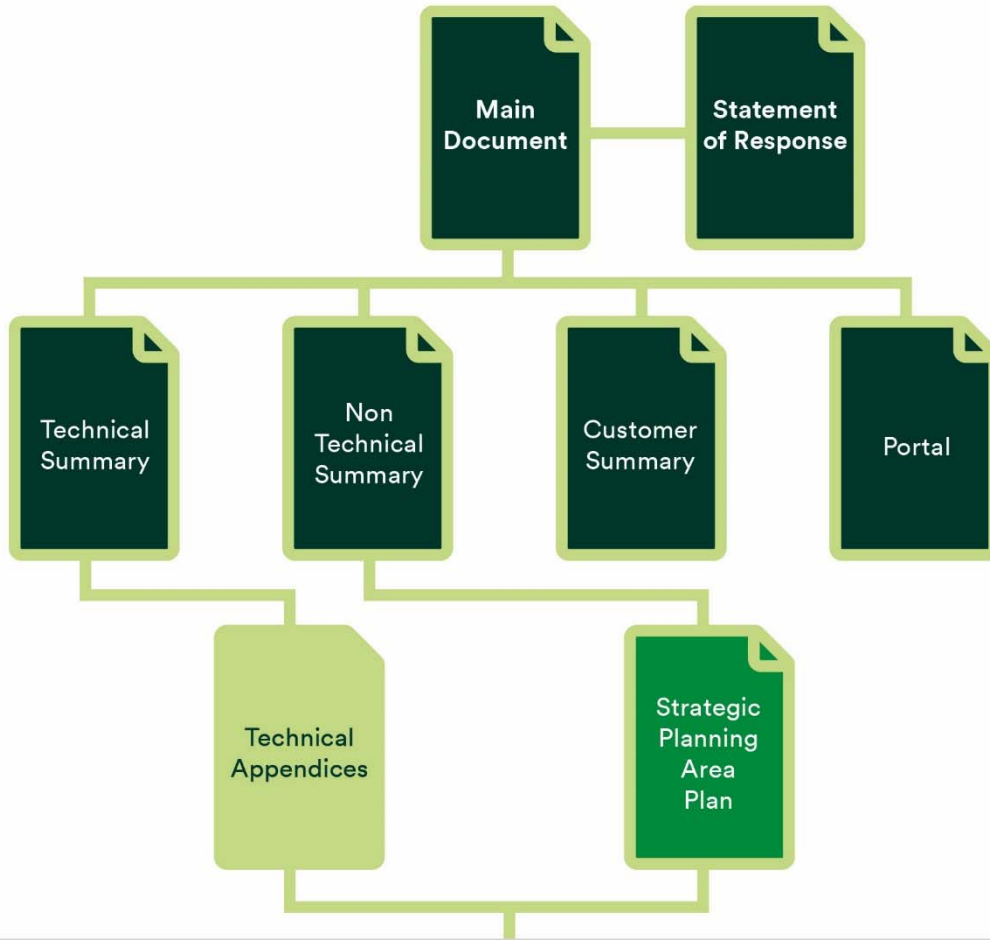
The Drainage and Wastewater Management Plan (DWMP) has been developed in accordance with the published United Utilities Water (Uuw) AMP7 assurance framework. This assurance framework risk assesses all products to determine the level of assurance required. Assurance follows a first, second and third-line process that, where products are identified as critical or high risk, includes targeted independent third-party assurance. The production of the DWMP has therefore been developed in accordance with a number of assurance audits by the Uuw Corporate Audit team and six additional independent assurance audits.

Uuw believes the application of the assurance framework, including the use of both internal and external assurance experts, has culminated in a DWMP which is of high quality and fulfils all the requirements as set out in:

- The DWMP Framework (2018);
- The Defra Guiding Principles (October 2021);
- The Defra letter to CEOs (ref: DWMP\_GP/02/2022, February 2022); and
- The DWMP Water UK Steering Group 10/02/2023.

Figure 1 below demonstrates the suite of products included within the DWMP submission, which have been subject to the Uuw AMP7 assurance framework.

Figure 1 Documents included within U UW DWMP



<b>TA1</b> Assurance and Governance	Alt Crossens
<b>TA2</b> Stakeholder Engagement	Derwent
<b>TA3</b> Demand Forecasting	Douglas
<b>TA4</b> Risk Based Catchment Screening	Eden Esk
<b>TA5</b> Assessing Future Risk	Irwell
<b>TA6</b> Resilience	Kent Leven
<b>TA7</b> Options Development and Appraisal	Lune
<b>TA8</b> Programme Optimisation	Mersey Estuary
<b>TA9</b> Customer Engagement	Ribble
	South West Lakes
	Upper Mersey
	Waver Wampool
	Weaver Gowy
	Wyre
Environmental Assessments	

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## Glossary

For the glossary, refer to document C003.

# 1. Introduction

## 1.1 Background

1.1.1 United Utilities Water (UW) Drainage and Wastewater Management Plan (DWMP) has been developed in alignment and compliance with: the DWMP Framework (Water UK, 2018), the Draft Guiding Principles for DWMPs (Defra, 2022), the Defra letter to CEOs 'Expectations for assurance of cycle 1 draft and final drainage and wastewater management plans (DWMPs) 18/02/22 ref: DWMP\_GP/02/2022', and the expectations from the DWMP Water UK Steering Group 10/02/2023. These requirement documents contain specific assurance requirements for the DWMP, which are summarised below:

Guiding Principles for DWMPs, Draft, October 2021

- "...companies will need to ensure that information is presented and maintained in such a manner as to enable effective audit and assurance." (Appendix F, page 3);
- "We also expect company Boards to:
  - Ensure that the DWMP is given sufficient resource for its development;
  - Give a clear signal on their expectations for the plans to their DWMP and Regulation teams;
  - Take an active interest in their development, challenging what is being done and considering how the plans can improve company operations and accountability; and
  - Be exemplars for encouraging multi-sector engagement on the plans and promoting them in the company and beyond."

Defra letter to CEOs 'Expectations for assurance of cycle 1 draft and final drainage and wastewater management plans (DWMPs) 18/02/22 ref: DWMP\_GP/02/2022'

- "We expect each company to provide an assurance statement from its Board to Defra, Ofwat and the Environment Agency to accompany its draft DWMP in summer 2022 and final DWMP in spring 2023, stating that it is satisfied that:
  - The guiding principles and the DWMP technical framework are being followed and applied;
  - The planning objectives are being met (both common and bespoke);
  - There are clear links and processes in place to ensure the appropriate DWMP interventions, including partnership and co-funded schemes, will be put forward for investment in PR24 business plans;
  - Measures are in place to achieve objectives set in the Government's Storm Overflows Discharge Reduction Plan (SODRP); and
  - It is a best value plan for customers and the environment for managing and developing drainage and wastewater services and is based on robust evidence and costing processes".

DWMP Water UK Steering Group 10/02/2023

1.1.2 It is expected that the DWMPs must:

- "be a high quality evidence base for the management of all current and future drainage and wastewater management risks, including how solutions can address multiple risks and provide multiple benefits for the environment and society;
- Provide customers, regulators, and other stakeholders with confidence that companies understand the root causes of risks and have clear, ambitious plans to deliver the required improvements to services and the environment;
- Set out how the Government's SODRP targets, milestones and expectations will be met;

- Provide a clear line of sight from modelling and identifying risks/gaps, to optioneering, proposing solutions and presenting the preferred investment plan;
- Focus on what will deliver best value (not just the least-cost) over the long term, and should provide an appropriate, robust evidence base for PR24;
- Demonstrate the role that asset maintenance/optimisation plays in reducing risks, for example improving network monitoring and addressing blockages/collapses/infiltration etc. DWMPs should not exclusively be an enhancement plan, but detail continual performance improvements from base expenditure;
- Demonstrate how companies are working alongside other Risk Management Authorities (RMAs), and contributing to flood risk resilience, including ensuring assets and networks are resilient to flooding, re: pressures of climate change, population growth and urban creep;
- Demonstrate how customers' and stakeholders' views have shaped the final plan (e.g. aligning priorities, proposing partnership programmes etc), and include, where possible, the impact plans will have on customer bills;
- Published completed tables alongside final DWMPs and should reflect needs and objectives identified through the DWMP process (including any SODRP and associated Water Industry National Environment Programme (WINEP) or National Environment Programme (NEP) requirements). If data are revised between final DWMPs and business plans, they must be resubmitted and republished with business plans;
- Demonstrate how net zero has influenced decision-making, including how nature-based solutions have been incorporated to maximise benefits;
- DWMPs and data tables should receive full Board assurance, demonstrating that Guiding Principles and the Technical Framework have been followed; and
- Final DWMPs must clearly articulate how all feedback from the draft consultation has been addressed (Statement of Response, SoR), and fully explain where there are deviations from expected outputs/deliverables."

## 1.2 Approach to development and assurance of the DWMP

- 1.2.1 The scope, delivery and risk management of the programme of work required to deliver the DWMP has been undertaken by a dedicated central technical programme team, managed through the DWMP Technical Review Group, and the DWMP Steering Group, which ultimately reports to the Our Future Plan (OFP) Strategy Board (which has a remit to provide strategic direction, guidance and decisions) and the OFP Programme Board (which has a remit to ensure effective programme control.) Both of these groups are chaired by the U UW Chief Executive Officer, and the submissions are ultimately approved by the U UW Board (see section 2, Figure 2).
- 1.2.2 In addition to the formal internal programme governance structure, U UW has sought to ensure the robustness of the DWMP via the use of both internal (U UW Corporate Audit) and external assurance expertise. U UW has embedded a check, review and approve process and has targeted additional assurance, with independent third parties, in areas considered high risk. High-risk areas are defined by application of the U UW AMP7 assurance framework which is used consistently across all regulatory submissions. This process assesses each product against impact (financial, reputational and performance) and probability (reporting rules, complexity, internal interactions, external interaction and external regulatory requirements).
- 1.2.3 The assessment then reviews the programme's existing controls (general control activities, experience of the team, and whether there have been any historical errors) to derive the level of risk per product.

Where the net risk<sup>1</sup> is considered high or critical, the need for further third-party assurance is identified. This methodology allows UUW to consistently determine the need for, and therefore the use of, independent third parties to support the submission.

- 1.2.4 UUW has worked with the customers and stakeholders of the North West to incorporate their views and priorities, and to ensure that the plan reflects these views. This has been achieved via:
- Undertaking a programme of engagement with customers at various stages throughout the development of the DWMP;
  - Using customer input to support the prioritisation of option types;
  - Using customer prioritisation of services to support scenarios for programme optimisation;
  - Directly engaging with the YourVoice Environment Sub Group: the UUW independent customer and stakeholder challenge panel; and
  - Setting up 'Strategic Planning Groups' to engage with stakeholders and offer opportunities to comment on the UUW DWMP and the approaches developed.
- 1.2.5 Independent assurance has been undertaken on products considered high risk, prior to the DWMP submission. Specifically:
- The Baseline Risk and Vulnerability Assessment stage of the DWMP process;
  - The Options Development stage of the DWMP process;
  - On the requirements listed in the Defra Guiding Principles;
  - The development of the UUW DWMP programme (optimisation, WwTW and storm overflow programmes);
  - The DWMP data table submission requirements; and
  - Final aggregate assurance.
- 1.2.6 The UUW approach to assurance has included an independent provider to undertake aggregate assurance. This assurance broadly has two parallel streams of activity; firstly, compiling all assurance activity to validate that all corrective actions have been undertaken; and secondly, to test compliance with programme governance. Such assurance has been undertaken across the DWMP programme to assist UUW in documenting the Board Assurance Statement (BAS). Through the development of the DWMP, UUW has engaged with the Board to demonstrate that it represents a best value long-term plan to mitigate the identified future risks and uncertainties, which is reflected within the BAS.
- 1.2.7 Finally, the DWMP has been subject to an audit review by the UUW Corporate Audit team prior to publication. The Corporate Audit team tested the adequacy and effectiveness of the DWMP programme governance and management, and the associated assurance approach, which thereby ensure the quality of the DWMP outputs.
- 1.2.8 This Technical Appendix sets out:
- the overarching governance process implemented by UUW, to support development of the final DWMP, including Board engagement; and
  - evidence of compliance by UUW to the DWMP Framework, Guiding Principles, Defra Board Assurance letter to CEOs and the DWMP Water UK Steering Group.
- 1.2.9 All requirements have been managed within the DWMP Requirements Traceability Matrix (RTM) to ensure compliance.

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<sup>1</sup> Net risk is the residual risk post the application of controls.

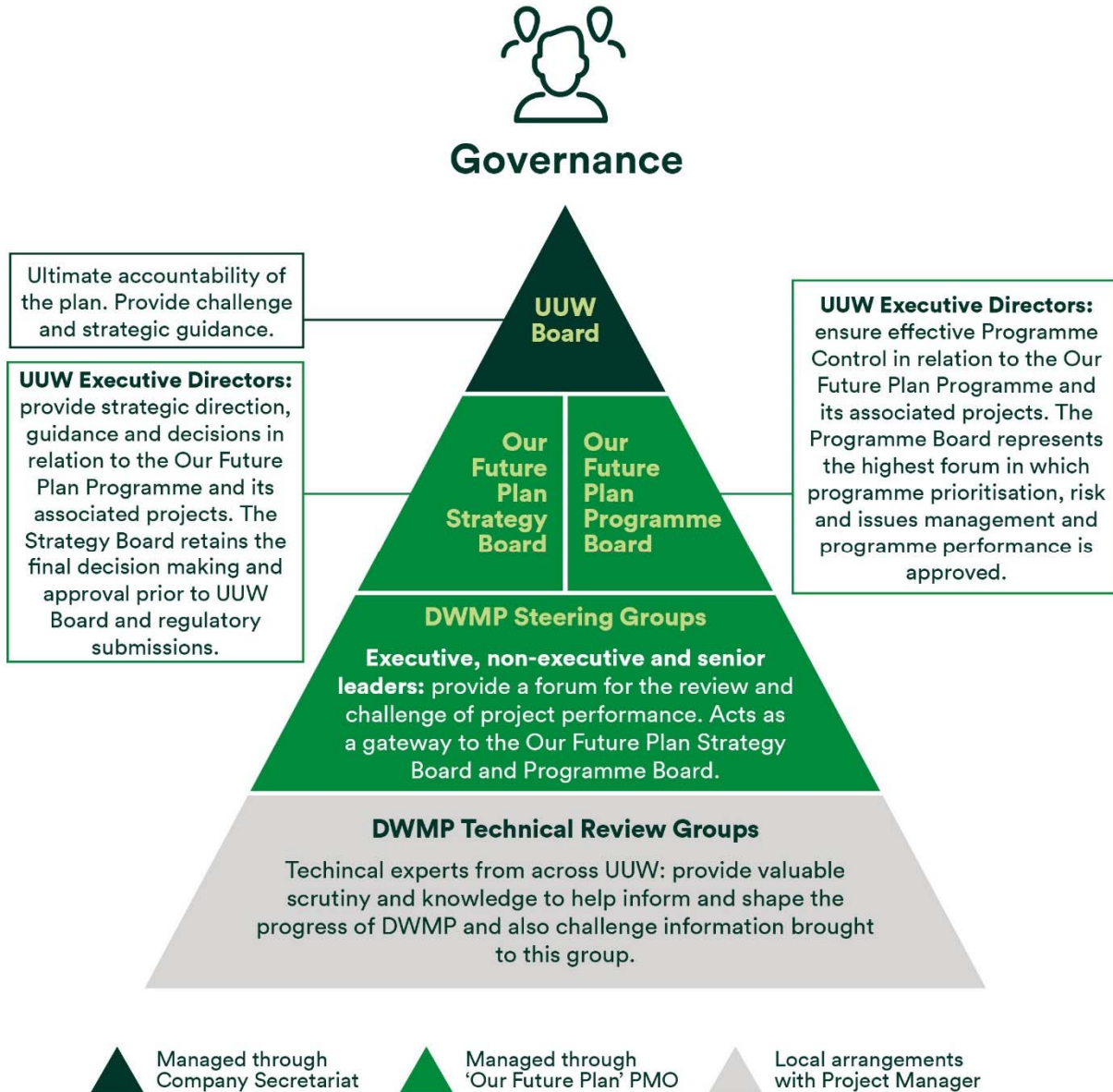


## 2. Governance

### 2.1 DWMP programme governance

2.1.1 To deliver a successful DWMP, U UW recognises the importance of input, challenge and strategic direction from across the business. U UW has therefore implemented a tiered approach to governance. These governance groups have provided, and continue to provide, scrutiny, steer and technical input into the development of the DWMP and ensure alignment with wider business activities. Figure 2 below defines the different tiers of governance for the DWMP.

Figure 2 DWMP governance structure





## 2.1.2 UUW Board

2.1.2.1 The UUW Board is a key element of the DWMP assurance process. The DWMP team has kept the Board up to date on developments and taken its advice, challenge and strategic guidance to assist with the development of the plan. This has included a deep dive session to ensure a comprehensive understanding of the planning process, and ultimately to the sign-off of the BAS (see section 2.2). The Board has provided input into the plan based on both its broader strategic view of UUW as a whole as well as the external environment.

2.1.2.2 As well as specific engagement, the UUW Board is kept fully engaged via the commonality of the UUW Chief Executive Officer (CEO), who attends both the Board meetings and the OFP Strategy Board and Programme Board meetings.

## 2.1.3 OFP Strategy Board and Programme Board

2.1.3.1 The Our Future Plan programme aims to bring together all of UUW's key regulatory submissions to ensure consistency of both decision-making and strategic direction. Submissions managed under the programme include Price Review 24 (PR24), DWMP, Water Resource Management Plan (WRMP), Drinking Water Inspectorate (DWI) and the Water Industry National Environment Programme (WINEP).

2.1.3.2 The OFP structure is split into the Strategy Board and the Programme Board, both of which are composed of UUW executive directors and are chaired by the CEO.

2.1.3.3 The purpose of the OFP Strategy Board is to provide strategic direction, guidance and decisions in relation to the Our Future Plan programme and its associated projects. The Strategy Board retains the final decision-making and approval prior to UUW Board and regulatory submissions. The OFP Strategy Board:

- Provides strategic direction of Our Future Plan;
- Sets the areas of focus/deep dives;
- Provides a forum for strategic discussion and guidance;
- Approves key decisions; and
- Provides approval to engage the UUW Board.

2.1.3.4 The purpose of the OFP Programme Board is to ensure effective programme control in relation to the Our Future Plan programme and its associated projects. The Programme Board represents the highest forum in which programme prioritisation, risk and issues management and programme performance is managed and approved. The OFP Programme Board provides:

- The baseline programme for Our Future Plan;
- A forum for the review and challenge of programme performance;
- The approval for key changes to the delivery plan;
- An escalation and resolution point for project risks, issues and milestone performance; and
- Prioritisation of activity in the event of project constraints.

## 2.1.4 DWMP Steering Group (SG)

- 2.1.4.1 The purpose of the DWMP SG is to provide a focused forum in which the project performance and technical content is reviewed at a greater level of detail. It provides the forum for the executive sponsor to govern the content of delivery and shape the development of the project as a whole.
- 2.1.4.2 The group consists of senior leaders and operational directors that are empowered to make informed decisions about the proposals that are brought forward from the DWMP Technical Review Group (TRG). They influence the strategic direction of the plan, review and sign-off the content prior to submission to the OFP Strategy and Programme Board.
- 2.1.4.3 The key roles and responsibilities of the DWMP SG are to:
- Act as a gateway to the Our Future Plan Strategy and Programme Boards;
  - Provide a forum for the review and challenge of project performance;
  - Challenge/ratify any technical decisions made by sub-groups;
  - Identify mitigations to project risks and issues, review of dependencies and assumptions; and
  - Ensure alignment between top-down and bottom-up.

## 2.1.5 DWMP Technical Review Group (TRG)

- 2.1.5.1 The DWMP TRG is a technical group composed of key subject matter experts from across U UW. It has been established to ensure that all key data and assumptions used within the process can be appropriately challenged, validated and agreed.
- 2.1.5.2 The DWMP TRG has been set up for the purpose of informing processes and challenging information presented in order to make decisions throughout the delivery of the DWMP. The group consists of technical experts that provide valuable scrutiny, knowledge and challenge to inform and shape the progression of the DWMP.
- 2.1.5.3 The key accountabilities of the TRG are to:
- Act as a gateway to the DWMP Steering Group;
  - Relay information/knowledge to the DWMP team regarding regulatory changes and/or decisions that may impact on the delivery of the plan;
  - Provide technical input and use networks across the industry to share best practice and innovation;
  - Make decisions on, and challenge proposals, that are brought to the group;
  - Provide assurance to the DWMP Steering Group that the right level of scrutiny has been provided by the right people; and
  - Hold technical leads accountable for delivery to key milestones.

## 2.1.6 Working groups and other liaison

- 2.1.6.1 Supporting the TRG are a number of working groups which have been set up to provide much of the detailed analysis and modelling to inform and build the DWMP. Examples of the subject areas covered by these groups are:
- DWMP portal development;
  - Flooding;
  - Pollution;
  - Permit compliance;
  - Environmental improvement; and
  - The six capitals.

## 2.2 UUW Board engagement

- 2.2.1 The Board has been engaged during the development of the UUW DWMP to ensure that the plan represents a best value approach to mitigating long-term risks and building resilience for drainage and wastewater. Table 1 provides an overview of the UUW Board engagement activities.
- 2.2.2 A Board Assurance Statement has been created to support the publication of the DWMP. This is part of UUW’s regulatory submission and is additionally available on the UUW corporate website.

**Table 1 UUW Board engagement**

<b>Board agenda item</b>	<b>Meeting purpose</b>	<b>Date</b>
DWMP deep dive	Provide information to the Board to allow challenge and strategic guidance.	March 2022
Water Industry National Environment Programme (WINEP) Board strategy day	To provide information to the Board to allow challenge and strategic guidance on WINEP and sewer overflows.	April 2022
Draft DWMP Board Assurance Statement warm-up	Walk through of the Board Assurance Statement for challenge and guidance.	May 2022
Draft DWMP Board Assurance Statement sign-off	Endorsement of the Board Assurance Statement prior to DWMP regulatory submission.	June 2022
WINEP Board	Provide updates on elements such as the stages of the WINEP development, regulatory requirements, submission programme and an overview of the storm overflows optimisation.	October 2022
WINEP Phase One submission and Board Assurance Statement	To provide an update on the forecast AMP8 WINEP in terms of costs, benefits and the process undertaken. Endorsement of the Board Assurance Statement to accompany the Phase One WINEP submission in November 2022.	November 2022
WINEP Phase Two submission and Board Assurance Statement	To provide an update on the proposed AMP8 WINEP, in particular storm overflows and the Advanced WINEP. Endorsement of the Board Assurance Statement to accompany the Phase Two WINEP submission in January 2023.	January 2023
Board Assurance Statement sign-off	Endorsement of the Board Assurance Statement prior to DWMP regulatory submission.	May 2023

## 3. Risk assurance

### 3.1 Introduction

- 3.1.1 The DWMP is included in the U UW Final Assurance Plan, which is publicly available on our website: [www.unitedutilities.com/corporate/about-us/performance/Assuring-our-performance-2020-25/](http://www.unitedutilities.com/corporate/about-us/performance/Assuring-our-performance-2020-25/)
- 3.1.2 The DWMP has been given targeted status within the Final Assurance Plan due to the complexity and maturity of the process. This status recognises the importance of the outputs of DWMP in shaping the future strategy of U UW regarding managing the wastewater asset base, which will have significant impact upon future performance and expenditure levels, and therefore directly impact customer bills.
- 3.1.3 The DWMP targeted status within the Final Assurance Plan is continuously reviewed until the risk reduces. The Final Assurance Plan is publicly available via the U UW website (link in paragraph 3.1.1).
- 3.1.4 There are a number of completed, ongoing and planned activities to help to mitigate any identified risks.

### 3.2 Programme

- 3.2.1 A dedicated team has been established within the Environmental Planning and Innovation Directorate of U UW to deliver the DWMP. The team is accountable for:
- Ensuring work is delivered against all the requirements of the DWMP framework, Defra Guiding Principles, Defra CEO Board Assurance letter and the DWMP Water UK Steering Group;
  - The management of additional expert engineering resources via the U UW integrated supply chain. The integrated supply chain ensures built-in assurance processes which are embedded within the U UW procurement framework. These resources have specifically supported the BRAVA, options development and optimisation phases of the programme under the management, guidance and assurance framework of the U UW programme team; and
  - The overall programme management of the work required to develop the plan and to ensure that, for example: risks and issues are identified, managed and mitigated, dependencies identified, and tracked through to delivery, is undertaken under the OFP framework managed from within the Strategy, Policy and Regulation Directorate.

### 3.3 Data

- 3.3.1 Data utilised within the DWMP has undergone comprehensive validation and checks:
- Data sources have been established, reviewed and validated using established U UW data governance processes. These processes ensure that the data used to support the decision-making process is reliable, accurate and complete with supporting data being risk assessed and signed-off at the appropriate level;
  - Checkpoint and verification processes have been established between the DWMP team and operational teams to review the results following each development stage;
  - Where the data utilised within the DWMP process is used for regulatory reporting, the data has been validated and assured using the same principles as are used for regulatory reporting; and
  - Additional assurance of the data used within the process has been provided by adding the data to the data set covered by our established three lines of assurance regulatory reporting process.

### 3.4 Methodologies

- 3.4.1 All methodologies utilised within the DWMP have been developed using industry best practice. For example:

- Subject matter experts have completed the development of the underpinning methodologies to help identify risks and support the decision-making process; and
- Assessment methodologies have been established, which include risk-based catchment screening, baseline risk and vulnerability and options development. The relative importance of the risk-based catchment screening methodologies has necessitated director-level sign-off, which has been aligned to our regulatory reporting approach. Furthermore, independent third-party assurance has been applied to a number of methodologies due to their core importance to the overall DWMP outputs. These methodologies are:
  - the baseline risk and vulnerability assessment (section 4.2);
  - the options development approach (section 4.2); and
  - the development of the U UW DWMP programme (optimisation, WwTW and storm overflow programmes (section 4.2).

## 3.5 Stakeholders and customers

3.5.1 A full description of the DWMP stakeholder and customer engagement can be found in Technical Appendix 2 – Stakeholder Engagement (TA2) and Technical Appendix 9 – Customer Engagement (TA9).

### 3.5.2 Stakeholder engagement

3.5.2.1 Over the development of the DWMP we have undertaken the following stakeholder engagement which is also summarised in Figure 3:

- Stakeholder research sessions have been held to develop the strategic direction of the DWMP, with these sessions being organised, developed and facilitated by an independent third-party organisation. U UW has considered the outputs of these sessions and, in the light of the feedback received, updated the DWMP long-term goals to align with the ambitions of key stakeholders within the North West.
- A second and third wave of stakeholder engagement workshops were undertaken to share modelled risk results and to identify opportunities for partnership working and collaboration. The workshops were completed by spring 2021.
- A fourth and fifth wave of stakeholder engagement workshops were undertaken to develop potential partnership opportunities, and to share and seek endorsement of, or challenge to, the approach U UW has undertaken to developing options. The workshops were complete by autumn 2021.
- Following draft DWMP publication in June 2022, there was a consultation period from June to September 2022 whereby customers, stakeholders and regulators were able to provide feedback on the draft DWMP. The feedback provided was then shared as part of our initial Statement of Response which was published in December 2022 which can be found along with the other DWMP documents on the U UW website.
- The final wave of engagement took place in winter 2022 with the purpose to provide updates on what changes can be expected within the final DWMP submission, following the feedback from the consultation period. There was also opportunity to provide feedback on cycle one of the DWMP and any lessons learnt which will be considered during cycle two and beyond of the DWMP.

Figure 3 Stakeholder engagement

## A framework for engagement in the North West



### 3.5.3 Customer engagement

3.5.3.1 Over the development of the DWMP, UUW has undertaken the following customer engagement, which is also summarised in Figure 4:

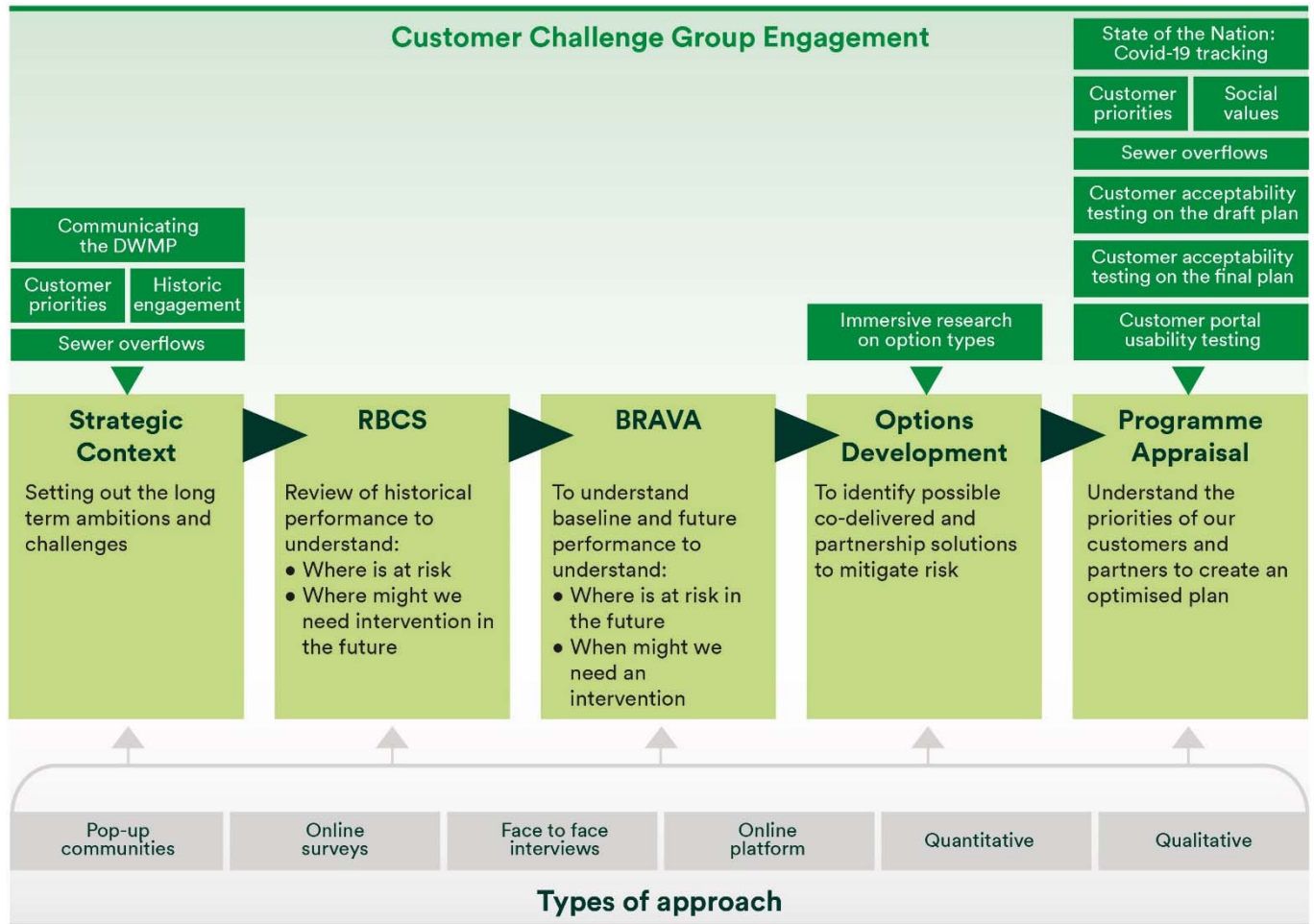
- Initial research was undertaken in October 2020. This explored the ways in which UUW could share the plan in order to maximise customer engagement and inform the ongoing development of the UUW DWMP customer webpage.
- A second piece of customer research was completed in April 2021. This was undertaken in collaboration with UUW Water Resources colleagues. This immersive research aimed to understand customer priorities about the way in which UUW should resolve risk. The outputs have been used to inform the selection of options within the DWMP.
- The third piece of customer research was completed in February 2022, and triangulated results from five projects:
  - Customer priorities: testing prioritisation of services across UUW;
  - Conjoint Water Resources Management Plan (WRMP) and DWMP analysis to understand how customers prioritise wider benefits: e.g. carbon, social, natural and human capital;
  - State of the Nation COVID-19 tracking;
  - Storm overflows; and
  - Social value, insight synthesis.
- The fourth piece of research was completed in May 2022 and focused on customer usability of the DWMP Customer Portal; the Customer Portal forms part of the DWMP publication. This is the first time UUW has produced an online geospatial tool for public use and so customer input to its development was critical. The research informed changes made to the Customer Portal prior to 'go-live'.



- The final pieces of research were the customer acceptability testing which sought endorsement and support from customers of the DWMP plan. These were undertaken in December 2022 and May 2023.

3.5.3.2 To enable successful and informative customer research, the UUW customer challenge panel and YourVoice were involved in the development of materials to upskill customers. YourVoice is the independent challenge group representing UUW customers and stakeholders across the North West. Its role is to provide independent challenge to the company and independent assurance to Ofwat. By taking this approach to customer engagement, it has allowed us to make informed choices.

Figure 4 Customer engagement





## 4. Assurance and audit

### 4.1 General assurance process

- 4.1.1 U UW has undertaken a risk-based assurance approach to support the development of the DWMP. This methodology is in line with U UW published assurance practices.
- 4.1.2 In order to establish the need for both the depth and coverage of assurance activities, high-risk areas are defined by application of the U UW AMP7 assurance framework, which is used consistently across all regulatory submissions. This process assesses each product against:
- impact (financial, reputational and performance); and
  - probability (reporting rules, complexity, internal and external interactions, and external regulatory requirements).
- 4.1.3 Following the gross risk review (paragraph 4.1.2), the assessment reviewed the programme’s existing controls (general controls, experience of the team, and evidence of historical errors) and, from this, derives the level of net risk per product. Where the net risk is considered high or critical, the need for further third-party assurance was identified. Where the work has been undertaken on behalf of U UW by a third party, further external assurance is not applied as any consultancy organisation employed by U UW has been rigorously tested for quality standards as part of the procurement process. This methodology allows U UW to consistently determine the need, and therefore the use of, independent third parties to support the submission.
- 4.1.4 In the U UW risk assessment framework, where DWMP products, after control, are considered high or critical, there is a need for third-party assurance. This is applicable to the following DWMP products:
- Technical Appendix 5 – Assessing Future Risk (TA5): High;
  - Technical Appendix 7 – Options Development and Appraisal (TA7): High;
  - Technical Appendix 8 – Programme Optimisation (TA8): High; and
  - Data tables: High.
- 4.1.5 Details of the third-party assurance conducted can be found in section 4.3. All other impact categories are subject to, as a minimum, first and second line assurance (section 4.2).

### 4.2 Three lines of assurance approach

#### 4.2.1 First line of assurance: within business team

- Review of methodologies and approaches against the DWMP framework.

#### 4.2.2 Second-line assurance: peer review

- Managed through the governance structure outlined above in section 2.1;
- Technical elements of the plan have been reviewed by subject matter experts. In addition, peer review of outputs that have been delivered by internal teams (e.g. Head of Modelling review of Options Development process);
- Internal, but independent, assurance of the manipulation of the optimisation outputs to ensure correctness and reliability of the outputs; and
- Internal Corporate Audit team assurance of programme who report to independent group audit risk committee (Assurance 1).

### 4.2.3 Third-line assurance: independent assurance

- Assurance undertaken by Jacobs to confirm that UUW has met all of the requirements set out in the Defra Guiding Principles (Assurance 2);
- Undertaken by Jacobs at two stages across the development of UUW DWMP: BRAVA and Options Development (Assurances 3 and 4 respectively);
- Undertaken by Deloitte across the development of the UUW DWMP programme to ensure consistency with the WINEP programme and assurance of the building blocks of the DWMP submission (optimised programme, WwTW and storm overflow programme, Assurance 5);
- Undertaken by PricewaterhouseCoopers (PwC) across the DWMP data table submission requirements (Assurance 6); and
- Final aggregate assurance undertaken by Turner and Townsend to review the combined assurance activities whether internal or external (Assurance 7).

## 4.3 Specific assurance activities

### 4.3.1 Assurance 1 – Programme and governance (final review)

4.3.1.1 The UUW Corporate Audit team undertook a final review (May 2023) of the DWMP programme prior to regulatory submission.

4.3.1.2 The audit scope covered:

- A review of programme governance and management activities not already covered by other assurance providers;
- A review of the programme risk assessment process;
- A review of the assurance approach/framework and consider whether it addresses the key risks;
- A review of delivered and planned assurance activities for overall alignment to the assurance approach, including the outcome of any assurance activities performed; and
- A review the draft Board Assurance Statement to establish that the statements are reasonable and supportable.

4.3.1.3 Where corrective actions were identified these have been addressed to the agreed timelines.

4.3.1.4 Overall conclusions of the audit were:

4.3.1.5 “The programme governance and controls are satisfactory and follow the established UU methodology, including completion of a requirements traceability matrix. The final DWMP submission assurance approach is robust and is consistent with the standard approach applied to regulatory submissions. A risk assessment of the submission has been completed and third party assurance has been obtained for the high risk components. Planned assurance activities over the submission have been completed with no unresolved material issues. The Board Assurance Statement is a reasonable reflection of the assurance activities performed and the results of those activities, with sufficient evidence to support the assurance statements.”

### 4.3.2 Assurance 2 – Defra Guiding Principles

- 4.3.2.1 Jacobs has been utilised to provide independent third-party assurance to ensure that the UUW DWMP has fulfilled all the requirements as set out in the Draft Guiding Principles for DWMPs (Defra, 2022) in May 2022.
- 4.3.2.2 The audit was designed to test that the UUW DWMP has met all necessary requirements.
- 4.3.2.3 In summary, the findings of this audit confirm that all requirements have been met and that no corrective actions were required.

### 4.3.3 Assurance 3 – Technical audit of BRAVA methodologies

- 4.3.3.1 The first technical assurance was undertaken in October 2020 by Jacobs. The assurance focus was to assess the technical methodologies for the 'Baseline Risk and Vulnerability Assessment' phase of the DWMP, thereby ensuring that the methodologies used met the requirements of Appendix C of the DWMP framework, and that the outputs of the process were reflective of baseline and forecast performance.
- 4.3.3.2 The overall conclusions of the audit were:
- BRAVA methodologies were suitably robust and materially compliant with DWMP BRAVA guidance;
  - The data output used to inform the BRAVA assessment provides a fair and balanced overview of the 2020 baseline and 2030/2050 forecasted position; and
  - Explanations of the baseline and forecast positions were reasonably based.
- 4.3.3.3 In summary, the information within, and that supports the DWMP BRAVA outputs, has been assembled using appropriate data and methodologies, and provides a reliable representation of the baseline and forecast position. Good evidence of senior management engagement, governance and programme management was found.
- 4.3.3.4 In May 2023, an addendum to support the BRAVA assurance conducted by Jacobs in October 2020 was received. This is due to at draft DWMP submission in June 2022, the requirements of SODRP and the WINEP were uncertain. For the final DWMP submission, UUW have undertaken extensive analysis to align with the SODRP and WINEP requirements.
- 4.3.3.5 With this in mind, Jacobs have confirmed the following:
- 4.3.3.6 "On the basis of the explanations provided by UUW, as summarised above, we are content that the output from the storm overflows and spill frequency methodology developed for the BRAVA 2020 assessment (based on SOAF) has been subsequently updated to ensure the DWMP and WINEP submissions are consistent with the SODRP guidance."

### 4.3.4 Assurance 4 – Technical audit of Options Development methodology

- 4.3.4.1 In April 2022 Jacobs undertook technical assurance to assess the appropriateness of the UUW interpretation of Stage 4 of the Water UK guidance document, relating to Options Development and Appraisal. This took the form of two distinct phases:
- Phase 1: A review of the approach taken to develop traditional wastewater treatment options comprising: wastewater treatment works upgrades and new assets, transfers and diffuse pollution offsetting; and
  - Phase 2: A complete audit of the Options Development methodology against the requirements set out in the DWMP framework. Assurance was to test and confirm that the approaches to each phase of the options development (generic, unconstrained, constrained, feasible and preferred) and associated screening steps were delivered in line with the framework requirements.

- 4.3.4.2 Phase 1 was undertaken by a review of a selection of sites, to ensure the options proposed were technically feasible, deliverable and costed consistently, in accordance with the wastewater options development methodology.
- 4.3.4.3 Phase 2 consisted of audit meetings with the DWMP Plan Development Manager and the DWMP Project Engineering Manager, followed by a desktop review of the TA8 document.
- 4.3.4.4 In summary, the conclusions of the assurance work for Phase 1 stated that “On the basis of our sample audit, we are comfortable that the company has reasonably interpreted Appendix D of the DWMP guidance (Options Development and Appraisal) and developed a repeatable methodology to produce generic wastewater treatment enhancement options to address a number of potential future scenarios.”
- 4.3.4.5 With regard to Phase 2 of the assurance work, Jacobs concluded that UUW has “...developed a methodology that:
- Contains a good selection of option types across all key management areas;
  - Ensures estimating assumptions are consistent across all options;
  - Demonstrates that the screening criteria has been applied consistently and in accordance with the guidance for each of the screening steps; and
  - Is accompanied by a series of rejection registers, including suitable explanations of the reasons for rejection.”

### **4.3.5 Assurance 5 – Technical audit of the DWMP programme**

- 4.3.5.1 In May 2023, Deloitte undertook assurance to review the development of the UUW DWMP programme to ensure consistency with the WINEP programme and assurance of the building blocks of the DWMP submission (optimised programme, WwTW and storm overflow programme).
- 4.3.5.2 The audit scope included:
- A review of the process and to assess how the inputs to programme appraisal meet the relevant DWMP requirements as defined in the Water UK Framework;
  - A review of the process and to assess how the six capitals have been considered in the inputs to programme appraisal;
  - To understand and challenge how the cost benefit analysis (CBA) accounts for asset life and how the approach compares to the WINEP, WRMP and PR24 and the Green Book methodology including the Spackman approach;
  - To understand and challenge how carbon is accounted for and how this aligns with the WINEP methodology; and
  - To highlight any misalignment and to comment on the materiality with regard to the DWMP submissions robustness.
- 4.3.5.3 Deloitte concluded that:
- 4.3.5.4 “UUW has applied a logical and consistent methodology (regarding both scope and expenditure estimation) to developing and assessing the options within the DWMP submission. As the programmes within the submission have developed, we have seen an improvement in the level of adherence to DWMP requirements, including alignment with the requirements set out in the Water UK DWMP Framework and other associated requirements documents. UUW has confirmed completion of its management assurance activities over its service provider’s Quality Assurance procedures for the final optimisation run used within the DWMP submission.

4.3.5.5 Based on the work we performed, we did not identify specific errors or inconsistencies within the evidence provided to us relating to UUW’s DWMP methodology or its application which would impact the Executive's decision to proceed with the planned first DWMP submission.”

#### **4.3.6 Assurance 6 – DWMP data tables**

4.3.6.1 UUW has engaged PwC to undertake assurance on the draft DWMP data tables in June 2022, and the final DWMP data tables in May 2023.

4.3.6.2 The audit scope covered:

- A review of the processes undertaken to prepare each data point;
- A review of the methodology statements and commentary to support each data point;
- A review of the accuracy of each data point including evidence of any forecast data, assumptions, judgements and to assess the reasonableness; and
- A review of the governance process followed.

4.3.6.3 PwC concluded that:

4.3.6.4 As of 30 May 2023 we have reviewed all 802 green ‘in scope’ cells within the DWMP table and have confirmed that all previously identified errors have been corrected. We have seen evidence of a well attended and rigorous sign-off process, demonstrating strong governance principles as well as challenge by Executives on the efficiency factor applied with the latter resulting in revisions being made to the proposed submission. We have also seen evidence of commentaries being updated to reflect issues identified to ensure reporting to Ofwat is robust, transparent and consistent.

#### **4.3.7 Assurance 7 – Aggregate assurance**

4.3.7.1 In February and May 2023, UUW engaged Turner and Townsend to undertake an aggregation assurance exercise. The purpose of the aggregation assurance was to undertake a holistic review of the DWMP and to provide confidence that project management and associated governance activities have been established and implemented, that best practice is being used and that governance structures are being followed.

4.3.7.2 The audit scope covered:

- Evidence of the application of the UUW AMP7 assurance framework;
- Evidence of the application of applicable project management, including governance and controls;
- The application of a RTM aligned with the relevant regulatory requirements; and
- Evidence that previous assurance actions have been appropriately addressed.

4.3.7.3 Turner and Townsend concluded that:

4.3.7.4 “UUW is operating acceptable project management processes and governance for the final DWMP submission. Our aggregate assurance of your final DWMP observed alignment to processes and did not identify material issues that would impact the Board’s decision to go ahead with the planned final submission.

4.3.7.5 Based on the interviews and risk-based sampling undertaken with your teams as part of this aggregate assurance, and ahead of successfully clearing your final project control Medal Gateway:

- The DWMP appears to have been managed with satisfactory alignment to the defined processes as adapted to suit regulatory plan submissions;
- No process issues/gaps were identified that have a material impact on the draft plan submission;
- Where First, Second and Third line assurance had been applied at the time of our review, we saw evidence it had been applied in line with the results of the UUW Assurance Framework. Additionally, we have seen evidence of work completed to address material actions raised through technical assurance (including updated technical assurance output that recognises this); and

- We have seen evidence that the team has actively tracked, managed and closed actions for areas where we observed potential for further improvement.”

4.3.7.6 Since the initial conclusion, Turner and Townsend have further reviewed both the Jacobs addendum (section 4.3.3.4) and the PwC final data tables assurance (section 4.3.6.4) and concluded that:

4.3.7.7 “Based on the documents we have received and the interviews which took place, we have conducted an examination of the changes to the DWMP submission. We have not identified any errors in the application of the revisions from an Aggregate Assurance point of view. We note that we have seen additional assurance statements from the related third party assurers about the correction of the errors in the cost tables, as well as updating the storm overflows and spill frequency methodology to align the DWMP submission to the SODRP targets. On the basis of the information we have received, we are content that the changes to the DWMP submission have been applied following good Project Management practices and flexibility to align to required revisions in a short amount of time.”

## 5. Conclusions

- 5.1.1 U UW believe that our DWMP meets the requirements of the DWMP planning process, and as a consequence of our governance and assurance of our DWMP programme, we are confident that:
- The preferred plan delivers against progress towards our objectives with our AMP8 targets for internal and external flooding and sewer collapse being met, and goes a significant way to meeting our AMP8 pollution target and 2050 internal flooding target;
  - Our future long term pollution, external flooding and sewer collapse planning objectives prove more challenging to meet in a cost effective manner;
  - These objectives are impacted by both hydraulic risk and by ‘other causes’ of capacity constraints, including sewer misuse, blockages and collapses. We consider that there are good reasons to expect that innovation, legislative changes, synergy benefits from the significant overflows programme and future improvements in forecasting should be capable of substantially closing the gap for these planning objectives by 2050;
  - The strategy for assurance and governance processes included all reasonable steps to deliver against the requirements most recently defined by Defra, Ofwat and the Environment Agency, including measures in place to achieve objectives set in the Government's SODRP;
  - There are clear links between DWMP process and PR24 business plan development through alignment of the WINEP programme and developing partnership schemes; and
  - The DWMP is informed by customer research and underpinned by robust optioneering and estimation to ensure it represents a best value plan for customers and the environment.
- 5.1.2 The development of the DWMP has been undertaken in accordance with the U UW published AMP7 assurance framework used to support regulatory submissions. This framework requires a detailed requirements traceability matrix and the risk assessment of products to identify areas of risk and therefore the determination of where greater assurance is required.
- 5.1.3 The DWMP submission has been assured, both internally and externally, where areas were deemed high risk.
- 5.1.4 U UW believes that the adoption of the AMP7 assurance framework has resulted in the production of a high-quality submission which is supported by the U UW assurance partners used throughout the development of both the draft and final DWMPs.



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