

# Common Total Value Framework

## Briefing Report and Progress

*Sept/2024*

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## Issue & Revision Record

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A	14/06/2024	Arup	Briefing note	MNbS Value Framework task and finish group and technical working group	Granville Davies
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# 1. Introduction

## 1.1 Background

The Mainstreaming Nature-based Solutions to Deliver Greater Value (MNbS) project aims to enable greater adoption of NbS by water sector and environmental stakeholders and facilitate the systemic transition of NbS into collaborative business-as-usual opportunities. The project has five interconnected workstreams. The Common Total Value Framework (TVF) task will be developed as part of the project.

The Common TVF project team aims to develop a draft common value framework and guidelines so that NbS are appropriately valued in the decision-making process. Our working definitions for the terms in "Common TVF" are provided in Table 1.1.

**Table 1.1 Key components of the Common Total Value Framework.**

Component	How we are defining the component
<b>Value framework</b>	A Value Framework is <i>a decision-support tool</i> . It enables the valuation of a range of benefits to ensure that broader impacts of an investment are accounted for in decision making, alongside financial costs. The sum of these benefits can be described as the "value" of the investment.
<b>Common</b>	By "common" we mean the value framework should be commonly agreed upon by water sector stakeholders (see Section 0 Users and their needs) and it should allow comparability between different options and programmes by providing a common set of valuations.
<b>Total</b>	By "total" we mean the value framework should be sufficiently broad to capture <i>material</i> impacts and dependencies for all stakeholders impacted by the investment.

## 1.2 Purpose of the report

This report has been prepared after consulting with stakeholders interested in the Common TVF. The purpose of the report is to

- ensure we have a common understanding and vision of what a successful common TVF would look like, and
- report on findings from user engagement during the review stage of the project.

## 2. Vision for the Common Total Value Framework

Based on our engagement findings, we have identified six user-led principles that describe the vision and will guide development of the Common TVF. The Common TVF should be user focused; following these principles gives the greatest opportunity for the Common TVF to meet user needs.

- **Aligned:** The Common TVF needs to **work with UK water companies' expenditure decision-making process**, while being available to support other stakeholders' decisions, so that it can be used at different project stages and by different interested groups.
- **Flexible:** The Common TVF should **accommodate the varying levels of maturity** in value-based decision-making practices across different users, to ensure its adaptability and relevance to diverse organisational contexts.
- **Material:** The Common TVF needs to **capture and value a broad range of material impacts of NbS** and be clear on the beneficiaries, to allow different users to apply different lenses for their needs and support collaboration (see Appendix A. for more information).<sup>1</sup>
- **Factual:** The valuations within the Common TVF must be **well evidenced, sufficiently justified, auditable, presented with an indication of confidence, and updated at an agreed interval** to ensure their credibility and provide transparency.
- **Supported:** The Common TVF needs to be **open source** and **accompanied by supporting guidance, training and case studies**, to allow it to be easily applied.
- **Endorsed:** The Common TVF needs to be **endorsed by the water sector, its regulators and industry bodies, policy makers and environmental NGOs** for it to be a valued and trusted tool in decision making. It will be designed with the user in mind to improve usability and adoption.

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<sup>1</sup> We will more closely define what counts as a material impact when we have started to compare valuations and impact.

## 3. Users and their needs

### 3.1 How we have defined users

Through our engagement process, we identified various stakeholder groups that could be directly or indirectly impacted by the Common TVF. To ensure its effectiveness and widespread adoption, the Common TVF needs to be designed in a way that meets the diverse needs of these stakeholders.

To achieve this, we have categorised the stakeholders into three groups based on their expected usage or influence over the Common TVF.

- **Primary Users:** Those who will directly utilise the Common TVF to inform decision-making. Water companies have been identified as the primary users of the Common TVF. We acknowledge that there are also stakeholder groups within water companies ranging from data providers (e.g. asset managers) to decision makers (e.g. senior management and executives). The needs of these groups will be considered as the Common TVF is developed.
- **Key Stakeholders:** Those whose buy-in is crucial for the successful implementation of the Common TVF. Water sector regulators and policy makers are considered the key stakeholders in this regard.
- **Other Beneficiaries and Stakeholders:** NbS impact a wide range of stakeholders, both positively and negatively. It is essential that the Common TVF addresses the needs of these groups, which include environmental non-governmental organisations, highways authorities, industry, landowners, farmers, local authorities, communities, and investors.

### 3.2 User needs

We completed 11 no. interviews to engage with representatives across a range of stakeholder groups. Engagement feedback was analysed to identify the needs of each user type (Table 2). We spoke to representatives from

- |                           |                          |
|---------------------------|--------------------------|
| • The Environment Agency  | • Northumbrian Water     |
| • Ofwat                   | • Southern Water         |
| • Defra                   | • Severn Trent           |
| • Natural England         | • Dŵr Cymru Welsh Water. |
| • Natural Resources Wales | • Yorkshire Water        |
| • North Star Transition   |                          |

Workstream leads will be kept informed on the plans and progress of the TVF task through the distribution of this briefing report. Workstream leads have also had an opportunity to provide feedback on the plans and progress of the TVF task at task lead calls.

**Table 2: Users and their needs.**

	Identified by

	Primary users	Key stakeholders	Other beneficiaries and stakeholders			
Needs	Water companies	Regulators	Communities	Investors	Landowners	Local authorities
The Common TVF should align with regulatory rules and standards (including following Green Book guidance).	x	x				
The Common TVF should receive support and recognition from regulators.	x					
The Common TVF should provide a standard and auditable methodology that creates a level playing field for all companies.	x	x		x		
The Common TVF should accommodate the varying levels of maturity in valuebased decision-making practices across different water companies.	x					
The Common TVF should be easy to apply.	x					
The Common TVF should be accompanied by supporting guidance.	x					
The Common TVF should be accompanied by case studies to demonstrate the value of the approach.		x				
Valuations in the Common TVF should be robust and come from trusted sources.	x	x				
The robustness of the valuations in the Common TVF should be understood.		x				

Valuations in the Common TVF should be justified and represent value to society and the environment, not just water companies.		x				
Valuations in the Common TVF should be useful across the lifecycle of a project or programme.	x					
The Common TVF should capture value from a range of perspectives	x		x	x	x	x
The Common TVF should facilitate meaningful conversations with stakeholders and partners about the benefits and disadvantages of NbS.	x		x	x	x	x
The Common TVF should be open source.	x		x	x	x	x

### 3.3 Benefits of the Common TVF

Benefits of the Common TVF include:

- Ensuring long-term value creation for customers – by incorporating the value of NbS into decision making, we can level the playing field between NbS and traditional options to maximise the overall benefit to society and the environment. This approach aligns with the expectations of customers and communities who value our impact on the environment and society, fostering greater confidence in our commitment to acting in their best interests.
- Framework for empowering people – a framework that accounts for the broader value of NbS equips primary users and decision makers with a tool to ensure their proposals align with the purpose and vision of the sector.
- Enhancing communication, trust, and advocacy – by demonstrating the broader impacts of NbS in decision making the framework helps to improve justification, transparency and communication of investment proposals with communities and stakeholders.
- Facilitating partnerships - evaluating broader value supports a better understanding of the cross-system benefits and beneficiaries of investments, unlocking potential partnership opportunities,
- Improving attractiveness to ESG investors – as investors increasingly prioritise sustainability and Environmental, Social, and Governance (ESG) factors, incorporating value considerations through the Common TVF will become crucial for attracting ESG investments. By aggregating the benefits of investment, the Common TVF may also support reporting across ESG, Task Force on Climate-related Financial Disclosures (TCFD), Taskforce on Nature-related Financial Disclosures (TNFD), corporate and regulatory reporting requirements.



- Aligning with regulatory expectations – adopting the Common TVF helps water companies meet and evidence a key pillar in Ofwat’s strategy “for water companies to provide greater social and environmental value, delivering more for customers, society, and the environment”<sup>2</sup> and have in place “[mechanisms that] facilitate the delivery of social and environmental benefits that are measurable, lasting and important to customers and communities.”<sup>3</sup>

### 3.4 Value lenses

As described above, the Common TVF will help primary users to communicate the rationale for investment decisions with regulators and other beneficiaries by providing different value lenses. Different stakeholders will have their own perspective of what value means. As shown in Figure 1, a quantified impact like carbon sequestration can be valued through different lenses depending on who the stakeholder is. For more information on value lenses, see Appendix A.

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<sup>2</sup> Ofwat (2019) Time to act, together: Ofwat’s strategy. Available online: <https://www.ofwat.gov.uk/wp-content/uploads/2019/10/Time-to-acthttps://www.ofwat.gov.uk/wp-content/uploads/2019/10/Time-to-act-together-Ofwats-strategy-1.pdf>together-Ofwats-strategy-1.pdf (Accessed 12 June 2024).

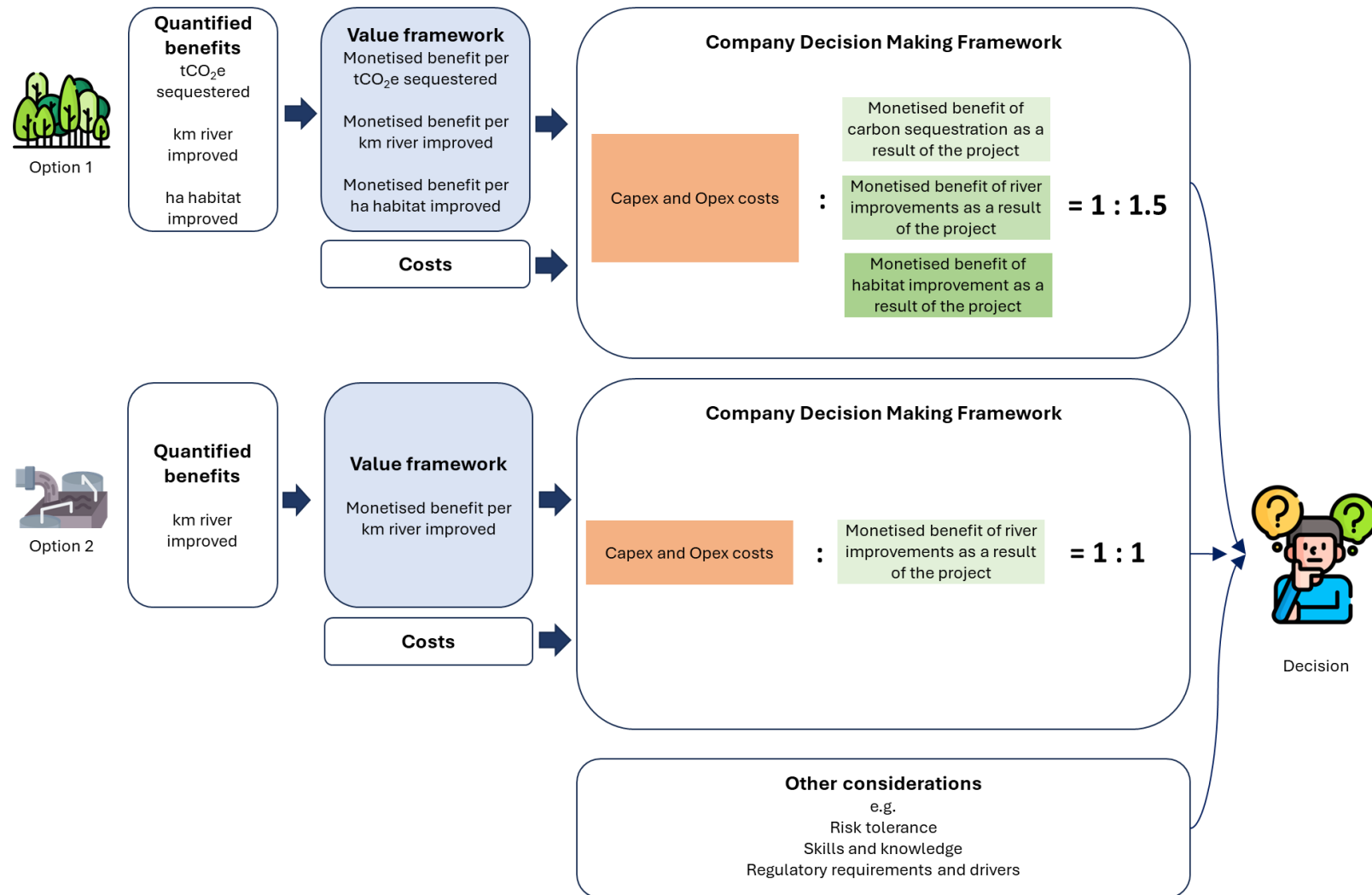
<sup>3</sup> Ofwat (2021) Public value in the water sector: A supporting set of principles. Available online: <https://www.ofwat.gov.uk/wphttps://www.ofwat.gov.uk/wp-content/uploads/2020/12/Ofwat-Response-to-Public-value-discussion-document.pdfcontent/uploads/2020/12/Ofwat-Response-to-Public-value-discussion-document.pdf> (Accessed 12 June 2024).



*Figure 1 Impacts and dependencies will have a different value depending on the beneficiary*

## 4 Scope of the Common TVF

Based on our review of user needs, the proposed scope for the Common TVF is a database of monetised valuations, capturing the broad impacts (positive and negative) of investments to ensure the value of NbS is captured in decision making. The scope is based on the understanding that a value framework does not make decisions; rather, it is a tool that informs a decision alongside other considerations like cost, risk tolerance, skills and knowledge, and regulatory requirements and drivers (Figure 2).



<a href="https://www.flaticon.com/free-icons/forest" title="forest icons">Forest icons created by Freepik - Flaticon</a>  
<a href="https://www.flaticon.com/free-icons/treatment" title="treatment icons">Treatment icons created by Uniconlabs - Flaticon</a>  
<a href="https://www.flaticon.com/free-icons/think" title="think icons">Think icons created by Freepik - Flaticon</a>

Figure 2 How a value framework informs decisions



investors will be out of scope for this project as we don't believe the investor community will find third party valuations useful, but instead would prefer to use their own valuations depending on their own investment goals.

- The Common TVF will focus on valuing the material impacts of NbS, (i.e. impacts where their inclusion is likely to influence or support the decision). Each valuation will be thoroughly researched, considered, and accompanied by supporting information describing (as a minimum)
  - whether it is a use or non-use value (where this information is available);
  - authoring organisation;
  - age;
  - geographic applicability; and
  - assessment of suitability (i.e. does the intended use of the valuation match its application in the Common TVF).
- Each valuation will be accompanied by an assessment of confidence, possibly following the approach to confidence grading in Annual Performance Reports.
- Each valuation will also be presented alongside the stakeholder who is set to benefit (or disbenefit).
  - There may be several valuations for the same outcome. For example, the monetary value of carbon could differ depending on who is assessing value (see 3.4 Value lenses).
- Each valuation will be presented in an agreed base year e.g. all valuations inflated to 2030. This could possibly be dynamic, so the user can enter their own base year. However, this would require frequent maintenance as the GDP deflators produced by the ONS are frequently updated.
- Each valuation will be accompanied by guidance on quantification of the impact being monetised, for example appropriate units for input data (e.g. tCO<sub>2</sub>e).
- A valuation won't be provided for some benefits due to gaps in the literature. These non-monetised benefits will be clearly identified in the Common TVF and provide a scope for possible primary valuation research in the future. In addition, some benefits may never be able to be valued or monetised. In this instance, the Common TVF will allow these benefits to be captured and presented alongside monetised information for decision makers.

## 4.3 Publication of the Common TVF

The Common TVF will be

- open source and published online on a suitable platform.
- accompanied by practitioner guidance to help with implementation. This will include guidance on the appropriate scale for valuations to be applied at (e.g. project, programme or catchment scale).
- accompanied by case studies to demonstrate its benefits and potential uses.

## 5 What the Common TVF won't do

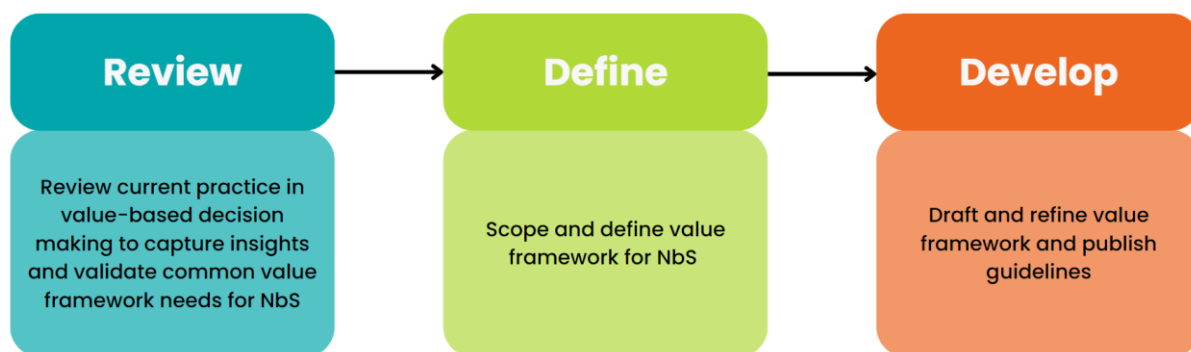
Engagement highlighted several barriers in the investment decision-making process to the widespread adoption of NbS. The Common TVF cannot address all these barriers, but there may be potential for other workstreams to consider them. For example, the Common TVF cannot

- overcome the time constraints imposed by a five-year investment planning cycle. This could be considered by **workstream two: policy and regulation**.
- actively upskill practitioners in how to quantify the benefits of NbS. This could be considered by **workstream four: standardised approaches to NbS** or **workstream one**.
- provide costs (capex and opex) for NbS. This could be considered by **workstream four: standardised approaches to NbS**.
- overcome regulatory barriers that specify interventions for certain drivers and therefore occlude NbS as an option. This could be considered by **workstream two: policy and regulation**.
- provide information about stacking benefits in environmental markets. This could be led by **workstream two: policy and regulation with input from other workstreams** as it is an ongoing regulatory issue.
- replace **workstream four: standardised approaches to NbS** in providing a repository of information about NbS. However, as the Common TVF is embedded it may act as a tool to capture the benefits realised by NbS. Therefore, the Common TVF should work closely with workstream four to ensure alignment and avoid duplication.

## 6 How will we develop the common total value framework?

### 6.1 Our approach

This report summarises the “review” stage of work and marks the beginning of the “define” phase of the project.



*Figure 4 Approach to developing the Common TVF.*

In the define stage, we will cement the scope, purpose, format, components and application of the Common TVF. We will continue to engage with a range of stakeholders to ensure the Common TVF meets their needs. During the define stage, we will look to confirm

- the types of NbS that the Common TVF will value the impacts of.
- the impacts that the Common TVF will value.
- the preferred valuation sources for the Common TVF.
- the comparability and appropriateness of using different valuation approaches in the Common TVF (e.g. market rates, willingness to pay, use, and non-use values).
- the correct approach to inflation indices for willingness to pay data (how far into the future is it appropriate to adjust willingness to pay value for inflation).
- how the Common TVF will be structured to be most useful for practitioners.
- the level of guidance and training that will be provided alongside the Common TVF.

In the design stage, we will develop the first draft of the Common TVF, gather feedback from water companies to inform the design, update the Common TVF based on this feedback, and produce interim Common TVF guidelines.

### 6.2 How we will measure success

Development of the Common TVF will be guided by the vision described in Section 2 Vision for the Common Total Value Framework Benefits of the Common TVF include:



- Ensuring long-term value creation for customers – by incorporating the value of NbS into decision making, we can level the playing field between NbS and traditional options to maximise the overall benefit to society and the environment. This approach aligns with the expectations of customers and communities who value our impact on the environment and society, fostering greater confidence in our commitment to acting in their best interests.
- Framework for empowering people – a framework that accounts for the broader value of NbS equips primary users and decision makers with a tool to ensure their proposals align with the purpose and vision of the sector.
- Enhancing communication, trust, and advocacy – by demonstrating the broader impacts of NbS in decision making the framework helps to improve justification, transparency and communication of investment proposals with communities and stakeholders.
- Facilitating partnerships - evaluating broader value supports a better understanding of the cross-system benefits and beneficiaries of investments, unlocking potential partnership opportunities,
- Improving attractiveness to ESG investors – as investors increasingly prioritise sustainability and Environmental, Social, and Governance (ESG) factors, incorporating value considerations through the Common TVF will become crucial for attracting ESG investments. By aggregating the benefits of investment, the Common TVF may also support reporting across ESG, Task Force on Climate-related Financial Disclosures (TCFD), Taskforce on Nature-related Financial Disclosures (TNFD), corporate and regulatory reporting requirements.
- Aligning with regulatory expectations – adopting the Common TVF helps water companies meet and evidence a key pillar in Ofwat’s strategy “for water companies to provide greater social and environmental value, delivering more for customers, society, and the environment” and have in place “[mechanisms that] facilitate the delivery of social and environmental benefits that are measurable, lasting and important to customers and communities.”

Value lenses. The vision broadly aligns with the Principles set out by the Water Sector Multi-capitals Network, which we have adopted and amended to reflect the ambitions of the Common TVF.

Reviewing the Common TVF against the principles in Table 3 will help the Common TVF to align with our user-led vision and established industry guidance.

**Table 6-1 Criteria against which success of the Common TVF will be assessed. \* Marks criteria in the vision for the Common TVF. Other principles are published by the Water Sector Multi-capitals Network.**

Comprehensive	
Connected	The Common TVF should acknowledge that impacts are interdependent.
Material*	The Common TVF needs to capture and value a broad range of material impacts of NbS and be clear on the beneficiaries, to allow different users to apply different lenses for their needs and support collaboration.

Broad	The Common TVF should recognise that such approaches account for a broader range of value than conventional assessments but are unlikely to ever capture total value.
<b>Trustworthy</b>	
Factual*	The valuations within the Common TVF must be well evidenced, sufficiently justified, auditable, presented with an indication of confidence, and updated at an agreed interval to ensure their credibility and provide transparency.
Robust	The Common TVF should embed proportionate quality control and assurance techniques.
Consistent	The Common TVF should align with relevant standards and frameworks to promote consistency, reduce the potential for bias, and build trust among stakeholders.
Continually improving	The Common TVF should report on the limitations and assumptions of the approach and acknowledge where there is room for improvement.
<b>Useful</b>	
Balanced	The Common TVF should consider how the impacts of a decision may affect relevant stakeholders, and the extent to which impacts can be enhanced or mitigated to deliver the best outcome
Proportionate	The Common TVF should be applied at an appropriate level of detail to support informed decision making while remaining simple enough for stakeholders to understand
Informative	The Common TVF should give appropriate weighting to qualitative issues, intangible factors, and wider risks and opportunities when making decisions
<b>Useable</b>	
Supported*	The Common TVF needs to be open source and accompanied by supporting guidance, training and case studies, to allow it to be easily applied.
Flexible*	The Common TVF should accommodate the varying levels of maturity in valuebased decision-making practices across different users, to ensure its adaptability and relevance to diverse organisational contexts.
Endorsed*	The Common TVF needs to be endorsed by the water sector, its regulators and industry bodies, policy makers and environmental NGOs for it to be a valued and trusted tool in decision making.
Aligned*	The Common TVF needs to work with water companies' expenditure decision making process, so that it can be used at different stages e.g. strategy, optioneering, risk assessment, benefit realisation.

Success will be measured through a qualitative assessment of how well the Common TVF addresses each of these points.

## 7 Next steps

Our next steps are:

- To share and receive feedback on this briefing report with the Task and Finish group.
- To update this briefing report based on feedback from the Task and Finish group.
- To continue to engage on the Common TVF with subject matter experts from different disciplines, organisations (for example the Rivers Trust), and Risk Management Authorities.
- To define and start to build a draft Common TVF.
- To hold a session with the Task and Finish group to discuss valuation.

The final Common TVF and guidance is due to be published in September 2025 (Table 4).

**Table 4: Programme**

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
Review																					
Define																					
Develop																					

## 8 September 2024 Update

### 8.1 Insights

Development of the Common Value Framework (CVF) has been informed by six principles derived from stakeholder engagement. A description of how the CVF is developing in line with each principle is provided below.

Principle	How the CVF is developing in line with the principle
<b>Aligned:</b> The Common TVF needs to work with UK water companies' expenditure decision-making process, while being available to support other stakeholders' decisions, so that it can be used at different project stages and by different interested groups.	<ul style="list-style-type: none"> <li>• The structure of the CVF can easily be integrated into company decision support tools (DST).</li> <li>• The valuations in the CVF will be applicable to project / programme design and benefits realisation.</li> <li>• The valuations in the CVF will be of interest to a range of interested groups.</li> </ul>
<b>Flexible:</b> The Common TVF should accommodate the varying levels of maturity in value-based decision-making practices across different users, to ensure its adaptability and relevance to diverse organisational contexts.	<ul style="list-style-type: none"> <li>• The CVF will provide recommended valuations while allowing companies to input custom values, such as those derived from their own willingness-to-pay studies.</li> </ul>
<b>Material:</b> The Common TVF needs to capture and value a broad range of material impacts of NbS and be clear on the beneficiaries, to allow different users to apply different lenses for their needs and support collaboration.	<ul style="list-style-type: none"> <li>• The CVF has been developed following an impact pathway mapping process to capture material benefits of NbS.</li> <li>• Each valuation will include a list of relevant stakeholders who may benefit from or have interest in the outcome.</li> </ul>
<b>Factual:</b> The valuations within the Common TVF must be well evidenced, sufficiently justified, auditable, presented with an indication of confidence, and updated at an agreed interval to ensure their credibility and provide transparency.	<ul style="list-style-type: none"> <li>• The structure of the CVF will provide references, clear calculations, and a confidence rating for each valuation.</li> <li>• Valuations will be developed with input from experts external to the project team to ensure rigour and robustness.</li> <li>• The time interval and process for updating the CVF is to be agreed.</li> </ul>
<b>Supported:</b> The Common TVF needs to be open source and accompanied by supporting guidance, training and case studies, to allow it to be easily applied.	<ul style="list-style-type: none"> <li>• The CVF will be open source.</li> <li>• Guidance will be developed at a later stage.</li> </ul>
<b>Endorsed:</b> The Common TVF needs to be endorsed by the water sector, its regulators and industry bodies, policy makers and environmental NGOs for it to be a valued and trusted tool in decision making. It will be designed with the user in mind to improve usability and adoption.	<ul style="list-style-type: none"> <li>• The water sector, its regulators and industry bodies, policy makers and environmental NGOs are regularly engaged in development.</li> </ul>

# Appendices

## Appendix A.

### A.1 Value Lenses

The concept of value lenses can be extended to demonstrate how stakeholder perception of value varies between individuals and organisations.

- **Society and the Environment:** Some environmental impacts may be more significant to certain stakeholders than others, and some may fall outside the scope of what is “fundable” by water company customers.
- **Customers:** There are clear examples of value that is material to customers, such as performance commitments linked to reducing leakage, decreasing spill incidents, and maintaining water quality. However, the line between material impacts that customers should fund and those that should be funded through other means is blurred. Different stakeholders, companies, and customers in various regions may have varying perspectives on this matter.
- **Water Companies:** Examples of value more material to companies include risk reduction, building social capital and trust, cost savings or avoidance, and adaptability. These values may differ across regions depending on each company's unique circumstances, strategic drivers, and stakeholder base.
- **Investors:** Investors may have a different perspective from the above stakeholders and may not be interested in the valuations provided by the Common TVF. However, it is crucial to have robust output, outcome, and impact data for projects that investors can apply their own value lens to. For instance, providing the number of tCO<sub>2</sub>e (tonnes of carbon dioxide equivalent) or biodiversity units may be more useful than providing a monetary value.