

Strategic Regional Water Resource Solutions: Annex D: Stakeholder and Customer Engagement Report Standard Gate Two Submission for River Severn to River Thames Transfer (STT)

Date: November 2022



Severn to Thames Transfer Stakeholder and customer engagement Report

STT-G2-S7-701
November 2022

Disclaimer

This document has been written in line with the requirements of the RAPID Gate 2 Guidance and to comply with the regulatory process pursuant to Thames Water's, Severn Trent Water's and United Utilities' statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Thames Water, Severn Trent Water and United Utilities will be subject to the statutory duties pursuant to the necessary consenting processes, including environmental assessment and consultation as required. This document should be read with those duties in mind.

Glossary	
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Cotswold Canals	Partially refurbished canal network and associated infrastructure (including pumping stations, bypass pipework, treatment plant and pipeline) with design capacity of 300Ml/d to convey river water from River Severn to River Thames.
Deerhurst Pipeline	Pipeline and associated infrastructure (including pump station, treatment plant, break pressure tank) with design capacity of 300/400/500Ml/d to convey river water from River Severn to River Thames.
Interconnector	Term used to describe infrastructure required to convey river water from River Severn to River Thames. The Interconnector options are the Deerhurst Pipeline or Cotswold Canals.
Interconnector design capacity	Raw water volume abstracted from the River Severn at the start of the Interconnector. Not the volume delivered to the River Thames at the end of the Interconnector and not the Deployable Output of the STT system.
Minworth SRO	Minworth WwTW effluent inter-catchment transfer (covered under Severn Trent Water (STW) Minworth SRO developed by Severn Trent and Affinity Water). This has the capacity to release up to 115Ml/d into the STT scheme.
Mythe Abstraction Licence	Mythe Water Treatment Works (WTW) source support element (covered under Severn Trent Sources SRO developed by STW). Unused abstraction licence transfer has the capacity to release 15Ml/d into the STT scheme.
Netheridge Wastewater Treatment Works	Netheridge Wastewater Treatment Works (WwTW) source support element (covered under Severn Trent Sources SRO developed by STW). Effluent diversion has the capacity to release up to 35Ml/d into the STT scheme.
Source support elements	Elements which have the potential to make additional raw water resources available for abstraction at the start of the Interconnector.
STT scheme	Comprises the Interconnector, the River Vyrnwy Bypass Pipeline and conveyance of the source support elements through the river systems (Vyrnwy, Severn, Avon, and Thames).
STT system	Comprises the STT scheme plus STT source support elements that are required to form an operational system.
STT system operating strategy	Description of contribution/operation of source support elements to form an operational system.
Vyrnwy Mitigation – River Vyrnwy Bypass Pipeline	Pipeline from the Raw Water Vyrnwy Aqueduct (which feeds Oswestry Water Treatment Works) to the lower River Vyrnwy. The pipeline is a mitigation measure to the River Vyrnwy from the Vyrnwy Release source support element. The pipeline has the capacity to convey up to 155Ml/d. Capacity linked to Shrewsbury Redeployment.
Shrewsbury Redeployment	Shrewsbury Redeployment is facilitated by a supply from the Oswestry WTW. This allows the reduction of the intake at Shelton WTW of 25Ml/d. This allows the reduction in the size of the River Vyrnwy Bypass Pipeline by 25Ml/d.
Vyrnwy Release	Lake Vyrnwy source support element (covered under North West Transfer SRO developed by UU). This source has a capacity of up to 180Ml/d. A release of a minimum of 25Ml/d into River Vyrnwy has been agreed with the Environment Agency.
Abbreviations	
ACWG	All Company Working Group
AMP	Asset Management Plan
AONB	Area of Outstanding Natural Beauty
BNG	Biodiversity Net Gain
CCG	Customer Challenge Group
CCW	Consumer Council for Water
DCO	Development Consent Order
DO	Deployable Output
DWI	Drinking Water Inspectorate
EA	Environment Agency
EIA	Environmental Impact Assessment
HRA	Habitat Regulations Assessment
INNS	Invasive Non-Native Species
LAs	Local Authorities
MI	Mega litres
MI/d	Mega litres per day
NC	Natural Capital
NE	Natural England
NRW	Natural Resources Wales

NSIP	Nationally Significant Infrastructure Project
NWT	North West Transfer SRO
OPEX	Operational Expenditure
RAPID	Regulatory Alliance for Progressing Infrastructure Development
rCCG	Regional Customer Challenge Group
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SESRO	South East Strategic Reservoir Option
SoCC	Statement of Community Consultation
SRO	Strategic Resource Option
STT	River Severn to River Thames Transfer
STW	Severn Trent Water
WFD	Water Framework Directive
SMNR	Sustainable Management of Natural Resources
SWQRA	Strategic Water Quality Risk Assessment
TCPA	Town and Country Planning Act 1990
TWUL	Thames Water
UU	United Utilities
WRMP	Water Resource Management Plan
WRSE	Water Resources South East
WRW	Water Resources West
WTW	Water Treatment Works
WwTW	Wastewater Treatment Works

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1. Introduction

- 1.1. This document is the annex to Section 9 of the Gate 2 submission for the Severn Thames Transfer (STT) Strategic Resource Option (SRO). It provides more detailed information on the engagement undertaken with stakeholders and customers to inform the feasibility and conceptual design for STT up to Gate 2. It includes an overview of the engagement activity, the main points of feedback from stakeholders and customers and how they have been considered in the on-going programme of work and development of the solution. It also sets out the issues that need further investigation.
- 1.2. We developed our approach in line with RAPID's guidance for Gate 2¹. We built on the stakeholder and customer feedback received prior to Gate 1, activity completed through Gate 1, the representations made to RAPID on the Gate 1 draft decision and direct feedback from RAPID and other regulators.
- 1.3. It is important for clarity, consistency and efficiency that the engagement activity to inform the development of the STT SRO, as well as the other SROs, is coordinated with dialogue on the regional plans, company Water Resource Management Plans (WRMPs) and company PR24 Business Plan submissions. The customer and stakeholder engagement activities have been undertaken on that basis, to ensure there is a flow of insight through the process as illustrated in Figure 1.

Figure 1: Insight flow from customer and stakeholder engagement



- 1.4. We are committed to working in an open and transparent way and have worked to achieve this by:
 - Raising awareness on the challenge for water resources, the planning process and opportunities to contribute and input to shape long-term plans at a formative stage. This included briefings, webinars, Q&A sessions and newsletters as part of the regional plan consultations.

¹ Strategic regional water resource solutions guidance for gate two.

- Engaging with a wide range of stakeholder organisations to share work to develop the plan for our long-term future water supply and the potential solutions and to listen to feedback and take it into consideration.
- Sharing information and providing updates to stakeholders, on the STT programme of work and the studies underway, and giving opportunity to comment, thus ensuring there are “no surprises”.
- Working closely with regulators through technical liaison meetings. This approach has enabled discussion on all stages of the technical work from the definition of the scope of work and technical methodologies to review of the outputs at an early formative stage of work.
- Engaging with stakeholder organisations who have specialist technical knowledge, or a specific interest, to share relevant information and draw on knowledge and expertise.

1.5. The structure of this annex is as follows:

- Section 2 presents a summary of our learning from previous engagement with customers and stakeholders, which has informed our approach leading to Gate 2.
- Section 3 outlines our approach to engagement with stakeholders and reports on the activity completed and the main issues and risks to Gate 2.
- Section 4 sets out our engagement undertaken during Gate 2 with stakeholders from Wales.
- Section 5 presents the research undertaken with customers to inform the ongoing development of the solution
- Section 6 sets out the next steps.

2. Learning from previous engagement

- 2.1. A water transfer from the Severn to the Thames has been considered for some time and most recently, the transfer has been promoted in Thames Water's Water Resource Management Plan 2019 (WRMP19). The transfer was also included as a Strategic Resource Option (SRO) in the Price Review 19 Final Determination for Thames Water, Severn Trent Water, and United Utilities. During this period there has been engagement with national and regional stakeholders, interest groups, and with customers.
- 2.2. We have a good understanding of the main issues of interest and concern, including the potential environmental, social and economic opportunities STT could bring. This knowledge is summarised in this section of the document and is the foundation for the on-going stakeholder engagement activity.

Summary of activity prior to Gate 1

- 2.3. Thames Water included STT in its WRMP19 and they received a large number of representations² in respect of STT as part of the public consultations held on the draft and revised draft WRMP19. There were points made in support and points of issue.
- Comments in support of STT were focused on highlighting that the transfer of water from surplus areas to water-stressed areas was a common-sense approach for dealing with droughts.
 - Comments that raised issue with the option were focused on the viability of the proposal, potential impacts on river flow and ecology.
 - Comments from members of the Cotswold Canals Trust, and supporters of canals and canal restoration, supporting the use of the restored Cotswold Canals to transfer water from the River Severn into the Thames region.
- 2.4. A summary of the main issues of concern and opportunities raised in relation to STT in the WRMP19 statutory public consultations are provided in Tables 1 and 2 respectively.

Table 1: Overview of main concerns raised in respect of STT

Issue	Description
Availability of resource	Availability of water resources from the Severn catchment, including potential losses. The potential impacts on other abstractors from the River Severn.
Water quality and quantity	Potential impacts on both the quality and quantity of river flow.
Environmental impacts	All necessary adverse environmental impacts are fully explored and mitigated including the need to demonstrate that the Wellbeing of Future Generations Act and the Environment (Wales) Act have been considered. Potential impacts of a pipeline on the Cotswold AONB and the need for appropriate landscape mitigation and opportunities for landscape enhancements.

² Thames Water draft and revised draft WRMP19 Statements of Response No 1 and No 2

Invasive non-native species (INNS)	Concerns about the potential for invasive non-native species (INNS) to migrate into the Thames Catchment from the River Severn; and the possibility of high algal loadings in water transferred from the Lower Severn.
Droughts increasingly aligned between catchments	Concerns that climate modelling suggests that droughts are very likely to become increasingly coincident between the Thames and Severn catchments in coming decades, raising the question that water transfers in the future may become unviable during dry periods when they are required most.
Regulation	Concerns over the complexity of how a transfer of water between catchments, and its water sources would be regulated.
Carbon	Carbon impacts of transferring water over long distances.

Table 2: Overview of main opportunities raised in respect of STT

Issue	Description
The right thing to do	Respondents explained that it seemed common sense to move surplus water to a water-stressed area.
Feasible	Respondents highlighted those assessments prepared from previous WRMPs have considered the scheme is feasible.

2.5. There were also a significant number of responses in support of the restoration of the Cotswold Canals, and the use of the canals for transferring water from the Severn to the Thames. The responses centred around two main points; firstly, the environmental, recreational, social wellbeing and economic benefits that could be realised through the restoration of the canals; and, secondly, the reasons for rejection of the option in the draft WRMP19.

Summary of activity during Gate 1

2.6. The stakeholder engagement activity undertaken through Gate 1 was two-fold:

- activity to inform the development of the regional plans to ensure stakeholders understand how STT, and other solutions, fit within the strategic water resource planning framework.
- STT specific discussions focused on legal, regulatory and strategic issues which could prevent the scheme progressing or substantially change the design of the scheme. The engagement was primarily with regulators and technical stakeholders and designed to be collaborative, with regular progress meetings. This approach facilitated agreement on the scope of the technical studies and methodological approaches³.

2.7. The Gate 1 submission to RAPID presented the approach and work completed to date. RAPID published its draft decision on the Gate 1 submission⁴ on 14 September 2021,

³ STT Gate 1 Submission Annex Customer and Stakeholder Engagement

⁴ RAPID, Standard gate one draft decision for STT, September 2021

alongside the draft decisions for the other standard SROs. The draft decision determined that good or satisfactory progress had been made on all the assessment areas, with a number of actions and recommendations⁵. In summary these were:

- Cost and benefits – further work on elements which impact on Wales ecosystem resilience and present the outcomes of the resilience assessment with a focus on comparisons between the routing options and investigate multi sector benefits.
- Programme and Planning – demonstrate understanding of the risk to the solution from regulatory barriers
- Environment – assessments to comply with Environment (Wales Act 2016) and Well-being of Future Generation (Wales) Act 2015; investigate impact on Severn Estuary SAC and illustrate relationship between carbon reduction, sector net zero commitments and solution design and delivery choices.
- Solution Design – Ensure Welsh stakeholders and customers are engaged in solution specific engagement; ensure relationships with receiving SROs in the south east are closely managed and communication aligned; develop a stakeholder engagement plan once a decision on a preferred route is made.

2.8. RAPID held a representation period on its draft decision for the standard SROs until 8 October 2021. RAPID received representations on its draft decision on STT from 5 organisations, plus a joint representation from United Utilities, Severn Trent and Thames Water. The stakeholder representations were received from Colne Valley Fisheries Consultative, GARD, South Oxfordshire District Council, Vale of White Horse District Council and Oxfordshire County Council.⁶ These are summarised in Table 3.

Table 3: Overview of main topics raised in representations to RAPID on their draft decision and responding action by STT

Topic	Stakeholder	Summary of representation	STT Responding action
Water loss	Colne Valley Fisheries Consultative (CVFC)	CVFC highlighted concerns over risk of a net loss of water between the two rivers with increased risk of drought impacting both catchments.	Chapter 4 of the Gate 2 report summarises the water resource assessment, including how water losses and droughts impacting both river catchments have been considered.
INNS	Colne Valley Fisheries Consultative (CVFC)	CVFC referred to the potential risk of INNS spreading between catchments.	Chapter 6 of the Gate 2 report summarises the solution environment assessments. An INNS assessment is included as Annex B3.5.
Transparency	GARD	GARD highlighted concerns over a lack of transparency in solution cost estimate, deployable output and flow data.	Chapter 3 of the Gate 2 report summarises the solution development. A Conceptual Design Report is set out in Annex A1.1. Chapter 8 of the Gate 2

⁵ RAPID, Standard gate one draft decision for STT, September 2021, Appendix Actions and Recommendations

⁶ RAPID, Standard gate one final decision for STT, January 2022

			report summarises the solution costs and benefits.
Carbon	GARD, South Oxfordshire District Council (SODC) and the Vale of White Horse District Council (VoWH DC)	GARD highlighted concerns over shortcomings of carbon data. SODC stated the pipeline may involve pumping water uphill which could require significant amounts of energy. SODC and the VoWH DC stated that the scheme's carbon footprint should be made public.	Chapter 6 of the Gate 2 report summarises the solution environment assessments, including on carbon. Annex A3 sets out the detailed carbon appraisal.
Phasing	GARD	GARD suggested consideration should be given to combining the unsupported transfer with Mythe bringing in Vyrnwy regulation to a level that requires minimal new source development for United Utilities.	Chapter 3 of the Gate 2 report summarises the solution development. It highlights the engagement with donor water companies on optimising the phasing of sources to support the transfer of water to the Thames.
Interconnector	GARD, Oxfordshire County Council (OCC)	GARD support the use of the Cotswold canals if it can be shown that a 300 Ml/d transfer is sufficient and the canal is a better option than transferring via the pipeline from Deerhurst. OCC favour the use of existing or refurbished infrastructure, such as the canal transfers, or infrastructure which is underground, such as pipes.	Chapter 3 of the Gate 2 report summarises the solution development, including the options considered for the Interconnector. An Interconnector Options Appraisal has been undertaken and is submitted as Annex A1.4, with a summary report as Annex A1.5.
Deployable Output	GARD	GARD requested a rigorous and transparent investigation into the Deerhurst hands off flow; suggested releases of up to 400 Ml/d are considered in Gate two for Lake Vyrnwy and a water balance approach considered for assessing river losses between Vyrnwy and Deerhurst.	Details of the proposed Deployable Output (DO) and an explanation as to why the DO has been selected, and the approach to river losses, are set out in Chapter 4 of the Gate 2 report.
Water resource need	Oxfordshire County Council (OCC)	OCC considered the option should only be pursued with a full understanding of the forecast need for additional water and the water savings that can first be achieved.	Forecasted need for additional water, and proposed water savings, including leakage reduction and water efficiency measures, are set out in the regional plans and water company WRMPs.
Procurement, ownership and operation	GARD	GARD sought a consistent view on how the transfer, and its components should be procured, owned and operated.	Chapter 7 of the Gate 2 report summarises the solution programme and planning. Further work on procurement, ownership and operation of the solution will be undertaken in Gate 3.
Environmental effects	Oxfordshire County Council (OCC), South Oxfordshire District Council (SODC), and the Vale of White Horse District Council (VoWH DC)	OCC highlighted the need for further assessment of social, economic and amenity costs & benefits. SODC and the VoWH DC highlighted there could be significant environment impacts and stated it was not clear if the solution could achieve biodiversity gain.	Chapter 6 of the Gate 2 report summarises the solution environment assessments. Annex B1 to B5 provide a suite of environmental appraisals and assessments, including

2.9. RAPID considered the representations received in relation to STT and published its final decision⁷ in January 2022. We reviewed, and took account of, the feedback received from regulators and stakeholders, to ensure we had a robust understanding of issues and concerns, as well as opportunities, and this information informed the work programme through Gate 2. This is summarised in Table 4.

Table 4: Overview of Gate 2 work programme

Topic	Main activities
Engineering Assessment	A full review of routing options, sizing of the pipeline and treatment of the water for the interconnector has been undertaken. A routing options appraisal for the Vyrnwy bypass pipeline has also been undertaken. Chapter 3 of the Gate 2 report summarises the solution development. A Conceptual Design Report for the Interconnector is set out in Gate 2 Annex A1.1 and the River Vyrnwy bypass pipeline conceptual design is set out in Annex A1.2.
Environmental Assessment	Updated solution assessments have been undertaken, including terrestrial and aquatic assessments. Gate 2 Annex B1 to B5 provide a suite of environmental appraisals and assessments, including biodiversity net gain and wider benefits.
Environmental monitoring	Continued and update environmental modelling has been carried out, including water quality monitoring, river modelling and habitat assessment.
Water resources modelling	A full review of utilisation, frequency, duration and magnitude of source options has been carried out. Chapter 4 of the Gate 2 report summarises the water resource modelling undertaken.
Planning and procurement	A planning consent strategy, project delivery plan and procurement strategy have been prepared. These are set out in the Gate 2 report: Annexes E, F and G.
Stakeholder engagement	Ongoing support provided to the WRW, WRSE & company WRMP engagements. Continued engagement with regulators and stakeholders on the scheme itself, working collaboratively, to introduce the scheme, develop the feasibility assessments and conceptual design.

⁷ RAPID Final decision on STT, January 2022

3. Gate 2 Engagement with stakeholders

Overview of engagement undertaken

- 3.1. Our engagement activity through Gate 2 built on previous engagement, taking account of issues and concerns raised by local communities and stakeholders, and was designed to:
 - fit within the regulatory process established under the guidance of RAPID
 - coordinate with regional and company strategic water resource planning activity to ensure a clear and joined-up approach for stakeholders.

- 3.2. Our approach has two main parts:
 - activity to inform the development of the WRW and WRSE regional plans to ensure stakeholders understand the approach, the planning challenge, the range of solutions identified and they could understand how STT and other SROs fit within the strategic planning framework; and
 - engagement with regulators and stakeholders on the scheme itself, working collaboratively, to develop the feasibility assessments and conceptual design of the scheme.

Engagement as part of developing the SE regional plan

- 3.3. Water Resources South East (WRSE) is working closely with the six water companies in the South East region, and the wider stakeholder community, to develop a resilient water plan for the region. The emerging regional plan included Severn Thames Transfer as a strategic water resource option for the South East. The strategic resource options set out in the draft regional plan will be included in water companies statutory Water Resource Management Plans 2024. It is therefore important that stakeholders have an awareness of, and understand, the overall strategic planning process, the key decision points, and opportunities to contribute.

- 3.4. Engagement has been, and continues to be, a thread throughout the development of the regional plan. The engagement involves a wide range of water users – customers, businesses, other sectors and stakeholders – and aims to understand their priorities and preferences and to take these into account in decisions leading to the draft regional plan.

- 3.5. WRSE, and the member companies, have endeavoured to work openly and transparently, sharing information in a timely way, and across a range of channels and activities, to enable participation and ensure stakeholders are clear about why they are being consulted, the scope of the consultation and how that fits with the wider water resources planning landscape.

- 3.6. WRSE has established stakeholder groups to help guide the development of the plan. The groups are the stakeholder advisory board, environmental stakeholder group and the multi-sector stakeholder group. These groups meet regularly and minutes of meetings are published in accordance with principles of open and transparent working.

- 3.7. In addition to these specific groups, WRSE has proactively engaged with the wider stakeholder community through meetings, webinars and consultations throughout the development of the SE regional plan. Furthermore, Thames Water has continued to host regular Water Resources Forums to give stakeholders the opportunity to keep up to date, and contribute to, the discussions on the long-term water resource planning.
- 3.8. WRSE has strong links with other regional groups to ensure the opportunities to share resources effectively are understood and fully investigated and to ensure a coordinated national water resources picture.
- 3.9. The WRSE engagement and consultation programme is hosted on a dedicated engagement platform [Water Resources South East \(engagementhq.com\)](https://www.engagementhq.com) and has three main phases:
- **Plan and prepare** – To 2020 the focus was on the “building blocks” of the plan. This included the development of the technical methods, approaches and tools that would be applied in the development of the plan, for example the forecasts for future growth and demand for water; the environmental assessments; and the regional policies for the region. WRSE ran a programme of webinars and held topic specific consultations.
 - **Develop** – During 2021 the focus broadened and set out the planning challenge for the region, shared information on feasible solutions, including the SROs, and the approach to determine the best value plan.
 - **Consult and update** – During 2022 the focus moved to the plan itself. WRSE held an 8-week period of engagement and consultation on the emerging plan. In the Autumn a further round of consultation will be undertaken on the draft plan, alongside the statutory consultation on the draft WRMP24s.
- 3.10. WRSE produced a Stakeholder Engagement Report which summarised the extensive engagement and consultation activity that has taken place to date. The report was published alongside the emerging plan in January 2022⁸. Annex 1 presents a summary of the engagement completed to date to support the development of the SE regional plan.

Consultation on the emerging plan

- 3.11. The engagement and consultation on the emerging regional plan took place between January and March 2022. The emerging plan gave early sight of the big issues and emerging solutions to gain initial feedback from stakeholders. As well as publishing documents for review and comments, a series of online workshops were held for stakeholders to provide an overview of the plan, the work to date and further work planned to transition to a best value plan.

⁸ WRSE Stakeholder engagement Report, January 2022

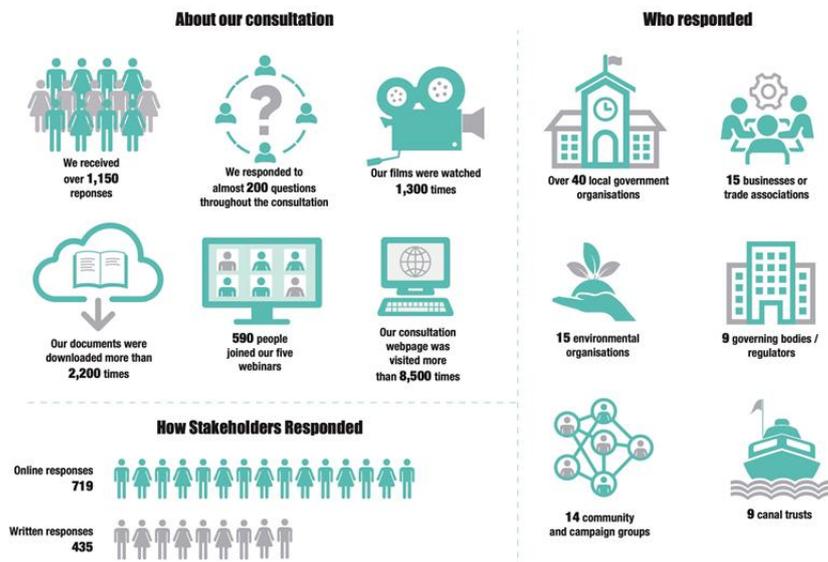
3.12. WRSE, and the SE water companies proactively raised awareness of the consultation on the emerging plan and took a range of actions to explain the plan and encourage wide participation. The activities included:

- Engagement with a range of organisations both ahead of, and during, the consultation:
- Pre-briefings with several organisations including CPRE, National Farmers Union, National Infrastructure Commission, Blueprint for Water and CCW, who in turn communicated the consultation to their peers and associations.
- Media, trade press articles and social media promotion
- Webinars and events throughout the consultation period
- Response to questions and comments

3.13. WRSE received over 1,150 written responses to the consultation. WRSE published a response document⁹ in May 2022 which provided a summary of the consultation responses, highlighted the main themes and issues raised in the responses and provided WRSE’s consideration of the points and resultant action.

3.14. Figure 2 provides a summary of the consultation, and responses, on the SE emerging plan. Over half of the individual responses to the consultation on the emerging plan focused on specific water resources options identified for development, such as large new reservoirs, strategic water transfers, and water recycling schemes.

Figure 2: The consultation on the SE emerging plan



3.15. STT was the SRO that received the second largest number of individual responses, with approximately 300 responses expressing support for a transfer, the majority of whom supported an option which involved utilising the restoration and use of the Cotswold Canals.

⁹ WRSE Emerging Regional Plan: Consultation Response Document, May 2022

- 3.16. Supporting responses were received from a number of local authorities in the area, canal, recreational and environmental organisations, and many individual respondents. Responses were received from Oxfordshire County Council, Vale of White Horse and South Oxfordshire District Councils, Cotswold District Council, Cotswold Canals Trust, CPRE and other environmental and campaigning organisations, together with individual Councillors, Parish Councils and individuals.
- 3.17. The principle of transferring water through STT was welcomed by many respondents as a means of securing additional resources into the region. Sharing water between regions was broadly supported for the greater resilience it delivers, although some respondents questioned whether such transfers are secure in the longer-term, especially as other regions have their own environmental constraints. A summary of stakeholder responses to WRSE's draft emerging regional plan in relation to STT is set out in Annex 2.
- 3.18. The main opportunities raised by consultees on the emerging plan in relation to water transfers are listed below:
- Less environmental damaging compared to other options
 - Quickest to build compared to other options
 - Lower cost compared to other options
 - Considered to have greatest public support amongst options
 - Flexible and adaptable, supporting national water grid
 - Could reduce flooding from donor catchment
 - Considered low risk – simple approach and simple technology
- 3.19. The main concerns raised by consultees on the emerging plan in relation to water transfers are listed below:
- Concerns that water transfers will become tied up with protracted studies related to INNS, fish diseases and chemical imbalances before permission is given
 - Concerns about the longer-term viability of transfers beyond the region due to climate change
 - Concerns over energy and cost of pumping water over long distances
 - Concerns over legal costs to access land to where pipe would be laid
 - Concerns pipework would leak
 - Concerns over water quality and water chemistry changes
- 3.20. Many respondents supported the use of canals for water transfer, and these respondents specifically supported the restoration of the Cotswold Canals in preference to other options. Common reasons respondents favoured the transfer via the restored canals were:
- Delivers public amenity benefit across a wide area
 - Supports cultural conservation and enhancement
 - Delivers biodiversity enhancements
 - Encourages local regeneration
 - Provides social and health benefits, e.g., linked to leisure use

- Supports local communities, e.g., local employment opportunities
- Can be delivered relatively quickly compared to other options
- Has public support
- Considered to have lower energy requirements to operate than pipeline, with a lower summit to pump
- Considered to have lower environmental impact compared to other options
- Creates cooperation and mutual benefit between regions
- Could provide income streams from canal, boat users
- Considered to be built with limited disruption compared to pipeline
- Would provide positive publicity for the water industry
- Could provide a future legacy
- Considered lower cost to construct and operate compared to pipeline
- Seen as missing link in the canal system
- Considered a visionary and imaginative solution

Engagement as part of developing the WRW regional plan

3.21. The Water Resources West (WRW) region spans the North West, the Midlands and the cross border catchments between Wales and England. The WRW core members are United Utilities, Severn Trent, South Staffs Water, Dwr Cymru and the Environment Agency. Like the WRSE they are also developing a regional plan which will support investment in water supply for each water company. The plan will also identify which schemes will be required to support other water resource regions and measures in the donor region to mitigate the impacts from these schemes. STT source support elements, the elements which have the potential to make additional raw water resources available for abstraction at the start of the Interconnector, are located with the WRW region.

3.22. WRW's Emerging Regional Plan was open for consultation between 17 January and 28 February 2022. This emerging plan presented an updated assessment of the region's water needs, reflecting growth, climate change and the regions environmental destination. It indicated options that are emerging as candidates to meet those needs and explores the role that transfers might play in supporting national resilience. The focus of the public consultation was to seek views on strategic questions aimed at shaping the development of a more detailed plan, which will be published in autumn 2022.

3.23. As part of the consultation Water Resources West (WRW) hosted a series of virtual workshops for stakeholders. Each of the workshops had a regional focus – the first on the North West, the second on the Midlands, and the third on Wales – and were designed to seek feedback from stakeholders on a variety of water issue topics, including on water resources options. Stakeholders were informed that by the 2040s, supply options will be needed to serve the Midlands, potentially Carlisle, and, further away, to the South East. The findings from the workshops are set out in the WRW Emerging Regional Plan Consultation Workshops report¹⁰ and are summarised below in relation to water transfers.

¹⁰ WRW. Emerging Regional Plan Consultations Workshops: North West; Midlands; and Wales. 2022

- 3.24. Each session consisted of a short presentation given by WRW representatives and / or their counterparts at United Utilities, Severn Trent Water, South Staffs Water, and Dwr Cymru, followed by facilitated discussions in virtual breakout rooms. In addition, stakeholders were asked to vote in an online poll using Slido on a number of topics.
- 3.25. From the workshops, there was majority support for sharing water resources, with 75% agreeing or strongly agreeing with the proposal. However, this was also a divisive issue that reflected regional concerns and differences: some delegates objected to their more water-rich regions losing out to development in the South, while others felt that ethically it was correct to share water resources. There was little appetite for 'hard engineering' solutions, such as new reservoirs and bulk water transfers, which were seen as contentious, compared to catchment-based solutions.
- 3.26. There were many stakeholders who adhered to the approach of water transfer, referring to the need to work together to tackle this problem. For these stakeholders, while bulk transfers might not be ideal, they were seen as unavoidable, and if one region was facing shortages, the ethical thing to do was share. Some stakeholders cited a concern of 'giving their water over the border to England' just for the benefits to be felt elsewhere.
- 3.27. Other stakeholders raised the issue of the 'levelling up' agenda and took issue with resources from their region fuelling more growth in London.' Others felt that the idea of bulk transfers 'doesn't scream resilience' and perceived them as fixing an issue temporarily rather than addressing the root cause of stretched water resources.
- 3.28. Some stakeholders expressed concern that by looking for economic benefits under water transfer arrangements, water was becoming a trading commodity rather than a necessity of civilised living, penalising those areas without water in a way that was damaging to national cohesion.
- 3.29. When asked to rank the benefits of water transfers, enhancements to the environment was first, followed by improvements to water supply and resilience, and investment into the area.
- 3.30. In transferring water by region, the key benefits to safeguard for most stakeholders pertained to the environment and biodiversity, such as by ensuring that natural differences and flows in rivers and water bodies were protected.

Our response to feedback from the emerging regional plan consultations

- 3.31. We have considered the points raised in both the WRW and WRSE consultations, and in dialogue with stakeholders, and ensured all these points are fully addressed in the further work to develop the long-term water resources plans and the ongoing work to examine potential options, of which STT is one option. These are summarised in Table 5.

Table 5: Summary of feedback to the WRW and WRSE Regional Resilience Plan consultations in respect of STT, and resultant actions.

Issue	Our response
Alternative schemes have not been fully considered	WRSE and WRW are developing best value plans and considering a wide range of potential solutions. For WRSE in total over 1,400 options have been presented as potential solutions. The option assessments have been undertaken on a comparable basis and this information will be shared openly and transparently with stakeholders. The timing and sequence of solutions has not been decided. The consultation on the draft regional plans and draft WRMP24 will give stakeholders the opportunity to participate in the decision making.
Climate mitigation and carbon	<p>The water companies are committed to make the best use of existing resources through the roll out of smart meters and the promotion of the efficient use of water and to halve leakage by 2050.</p> <p>The water companies are also committed to reach net-zero carbon emissions for operational activities by 2030 and further work is underway to consider opportunities to reduce both the operational and the embodied carbon impact of future solutions.</p>
Sufficiency of water available from donor regions and protecting the donor region environment and economy	Water availability from donor regions and the impact on the donor region environment has been subject to study, modelling and assessment in Gate 2, including a detailed water resource assessment which considered frequency, duration and magnitude of STT utilisation. The results from these assessments are set out in Chapter 4 and Chapter 6 of the Gate 2 report.
Vyrnwy reservoir utilisation for the South East	Stakeholder presentation material for STT has been updated to provide additional clarity that water from Vyrnwy reservoir will come from existing United Utilities abstraction licences, with no additional water proposed for abstraction.
Preference for catchment-based solutions over 'hard infrastructure'	Stakeholder engagement material for STT has been updated to provide an explanation to the need for water transfers as part of a package of water resource measures that flow out of the Regional Plans and WRMPs.
Water quality impacts	Water quality changes from STT operation have been subject to assessment in Gate 2 including a Strategic Water Quality Risk Assessment (SWQRA) which provides a high-level risk assessment based on a drinking water safety approach to identify limiting hazards and assessing their risks across the water supply system. This will be updated in Gate 3 with any new information.
Management of INNS	The assessment of INNS and its mitigation have been subject to extensive studies and assessment in Gate 2 with ongoing dialogue with regulators. Details of treatment technologies will be set out in Gate 3.
Support for restoring canals to transfer water	The Interconnector Options Appraisal through its longlist, shortlist and validation stages assessed opportunities to reconstruct parts of the canal network in combination with a pipeline. The assessment included an appraisal of wider benefits a canal restoration could bring.
Energy requirements for pumping	The interconnector and bypass pipeline options methodology and assessment for Gate 2 included cost of pumping, energy and carbon evaluations.
Transparency to interconnector route corridor optioneering	A summary of the interconnector route options methodology was presented to stakeholders ahead of the Gate 2 submission. Further engagement with stakeholders on the methodology will take place in Gate 3.

Consideration of environmental impacts to construct and operate source solutions, Vyrnwy bypass pipeline and interconnector	Initial environmental impacts to construct the interconnector and bypass pipeline have been assessed as part of the route options appraisals. The initial environmental impacts of the source support elements were considered in Gate 2 by the relevant United Utilities and Severn Trent SRO teams. Further detailed environmental assessments will be undertaken in Gate 3 in liaison with technical and prescribed consultees, including Historic England and National Highways.
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STT specific discussions

3.32. Engagement has been embedded throughout the Gate 2 programme of work, it builds on the Gate 1 engagement with regulators and technical stakeholders and feedback previously received. It comprises meetings with regulators, introductory sessions with stakeholder groups, 1-2-1 sessions with technical specialists and interest groups, as well as activity to support WRW, WRSE and WRMP company engagement.

3.33. Further information on the STT specific engagement activities is presented here:

- Quarterly update meetings have been held with RAPID to discuss the programme, outputs, risks and issues.
- EA, NRW and NE technical briefings
- Technical briefings and updates to CCT and GARD
- Presentation to the Wales Water Management Forum
- Introductory briefing for environmental organisations
- Introductory briefing for river organisations
- Introductory briefing for Local authorities in the Thames Water catchment interested in the interconnector
- Introductory briefing for Local authorities in the Severn Trent catchment interested in the interconnector
- Introductory briefing for Local authorities interested in the Vyrnwy Bypass pipeline

Table 6: Overview of the Introductory briefings to stakeholders

Briefing for	Discussion topics	Attendees	Meeting dates
Environmental organisations	INNS; river losses; pipeline size; impact on AONB; wider benefits.	CPRE; Cotswold Trails and Access Partnership; Gloucestershire Wildlife Trust; Gloucestershire Rural Community Council; GARD	28 June
River organisations	Interconnector optioneering; UU sources; impacts on Lake Vyrnwy; sweetening / base flow for treatment works and pipeline; INNS; addressing water quality impact from Severn catchment; treatment works technologies and decarbonisation opportunities.	The Canal and River Trust; Angling Trust; Thames Rivers Trust; Cotswold Canals Trust	30 June
Local authorities – TW interconnector catchment	Canal restoration options; INNS; pipeline size; construction techniques; construction impacts; including on road network; Biodiversity Net Gain & wider benefits; future engagement; Timing of LA	Swindon; South Oxon & Vale; Cotswold; Oxfordshire County, Wiltshire; West Oxfordshire	6 July

	discussions on optioneering; partnership working opportunities; safeguarding of pipeline route; comparisons with other pipeline projects.		
Local authorities – ST interconnector catchment	Netheridge STW & pipeline; safeguarding of land; planning policy implications; canal restoration opportunities; impact on donor regions.	Gloucester City; Tewksbury; Gloucestershire County	12 July
Local authorities – Vyrnwy Bypass pipeline	River Severn flows; flood risk; future community engagement	Powys, Malvern Hills, Shropshire, Wyre Forest, Wychavon, Worcestershire County	13 July

- 1-2-1 engagement on specific matters including:
 - Engagement with CCT on options appraisal, including methodology, outcomes and next steps (June 2022)
 - Engagement with GARD on scheme size, sources and deployable output (August 2022)
 - Presentation to Oxfordshire County Council and Vale of White Horse District Councils (November 2021)
 - Engagement with Bristol Water (December 2021)
 - Engagement with the company Water Quality teams in relation to the Drinking Water Quality Risk Assessment, and sharing this information with the DWI
 - River Severn Partnership meeting to explore flood water storage opportunities.
 - Correspondence with Colne Valley Fisheries Consultative on INNS assessment.

- Company engagement
 - Thames Water continue to host a regular Water Resources Forum, this is open to all interested stakeholder organisations and the purpose of the Forum is to update stakeholders on the progress to develop the regional plan and in turn company WRMP24s, and to share information at a formative stage to enable stakeholders to participate in the process. Three Forums were held during Gate 2 - in November 2021, February and June 2022. At the November 2021 Forum information was shared on each SRO, including the programme of activities and summary of work packages to provide visibility of the work areas for each SRO and the opportunity for discussion on these options.
 - Severn Trent and United Utilities will be updating stakeholders leading up to the draft consultations on their WRMPs in November 2022.

3.34. In summary, we have proactively engaged with regulators and stakeholders and taken their feedback into account as we have progressed the technical feasibility and conceptual design work to Gate 2. Table 7 reflects the main topic areas raised by stakeholders in relation to STT during Gate 2, highlighting our response and signposts the relevant section and reports published as part of the Gate 2 submission.

Table 7 Feedback topics

Feedback topic	Comments	Response	STT Gate 2 Submission – relevant section
Water availability	Water resources in the donor region could be worse off, and could shift water availability problems.	There would be no net water resource losses, rather moving excess water in times of need.	Chapter 4 – Water resource assessment.
Water quality	Understanding of the impact on river water quality from a transfer of water between river catchments, including from INNS, fish diseases, chemical imbalances, land contaminants.	Flow and water quality changes from STT operation have been subject to extensive studies and assessment in Gate 2 with ongoing dialogue with regulators.	Chapter 5 – Drinking water considerations and Chapter 6 – Environmental Assessment.
Resilience	How would the project be resilient to future requirements reflecting growth and climate change.	Additional source water from Severn Trent and United Utilities will not compromise the resilience of water supplies to their customers and the scheme should provide additional resilience to the donor companies when water is not being transferred.	Chapter 4 – Water resource assessment.
Change in water source	Understanding of the impact of water quality from a change in source of water supply.	A water quality assessment framework for the STT System has been undertaken in accordance with the All Company Working Group (ACWG) requirements. This assessment considers water quality risks to human health and acceptability of water to customers. Treatment to drinking water quality standards will occur at points of abstraction from the Thames.	Chapter 5 – Drinking water considerations.
Energy requirements	Concerns over energy and cost of treating and pumping water over long distances	The Interconnector Options Appraisal methodology includes cost of pumping, energy and carbon evaluations. Opportunities for decarbonisation and nature based treatment solutions being considered in Gate 3.	Chapter 3 – Solution design and Annex A1.4 Interconnector Options Appraisal Main Report.
Impact on Wales	Comments that water in Wales should not be transferred outside of Wales	During times of transfer as part of the United Utilities additional source water, the scheme proposes to redeploy Lake Vyrnwy	Chapter 3 – Solution design and Chapter 6 – Environmental Assessment.

		water that would otherwise be used to supply United Utilities customers through its existing licence. There are no proposals to take additional or new water from Wales.	
Interconnector optioneering	The wider benefits of restoring the canal network, e.g. social and cultural benefits should form part of the Interconnector optioneering methodology.	The Interconnector Options Assessment includes an assessment of wider benefits.	Chapter 3 – Solution design and Annex A1.4 Interconnector Options Appraisal Main Report.
Wider benefits	Opportunities to be considered for wider benefits, including consideration of whether opportunity to reducing flood risk in Severn and environmental enhancements along interconnector route.	A bespoke benefits assessment approach has been developed to consider the wider benefit opportunities in the STT catchments. These will be developed further in Gate 3.	Chapter 3 – Solution design and Chapter 6 – Environmental Assessment, including Annex B5 Wider Benefits Study.

4. Engagement with stakeholders in Wales

- 4.1. Welsh stakeholders have been engaged through the course of Gate 2. This includes with Welsh Government, Welsh local government and Welsh stakeholders interested in the scheme from a water resource impact perspective.

Welsh Government

- 4.2. During Gate 2 regular updates on STT were provided to Welsh Government officers through ongoing engagement by WRW, supported by United Utilities, Severn Trent and the STT project team.

Welsh technical stakeholders

- 4.3. Meetings were held regularly with representatives from NRW as part of wider technical engagement with environmental regulators including the EA and NE. Engagement focused on reviewing water quality assessments, hydrological modelling and wider benefits assessment. Feedback from NRW was incorporated into our environmental modelling and assessment work.

Welsh local government

- 4.4. Briefings were provided to Welsh local government through the WRW draft regional plan engagement and water company WRMP pre consultation engagement.
- 4.5. Powys County Council officers attended a STT project introductory briefing on the 13 July 2022.

Wales Water Management Forum

- 4.6. STT, alongside WRW, presented to the Wales Water Management Forum (WWMF) on the 12 May 2022 to explain the project, its context within regional water resource planning and to capture stakeholder feedback.
- 4.7. WWMF is made up of representatives from Welsh Government (water, marine land, nature, forestry, and landscape teams) Public Health Wales, NFU Cymru, FAW, Tenant Farmers Association, CLA, Wales Local Government Association, CONFOR, National Trust, and water companies.

Feedback themes

- 4.8. Table 8 below sets out the key feedback themes from Welsh stakeholders and our response.

Table 8 key feedback themes from Welsh stakeholders

Theme	Feedback	Response
Impact on Wales water supply	How does the UU source development affect Wales?	The source developments do not affect the supply

Impact on water levels on Lake Vyrnwy	Concerns that water levels in Lake Vyrnwy would reduce thereby reducing supply to Welsh communities.	The source developments would ensure there is no additional impact on water levels within Lake Vyrnwy.
Integrity of Severn estuary	Understanding the impact on the Severn Estuary SAC status and flow regime.	We are liaising with NRW/EA on ensuring we do not affect estuary integrity and could seek to enhance regime working with others.
Condition of Vyrnwy aqueduct	Vyrnwy Aqueduct is aging and has failures in the past, concerns that project will exacerbate this.	Work will be undertaken in Gate 3 to assess whether improvements to the aqueduct are needed.
INNS risk between catchment	Concerns that INNS will be transferred between catchments.	A pre-treatment strategy is being proposed as part of scheme and will be developed further in Gate 3.
Flooding in the Severn catchment	Questions on whether project could reduce flooding in the Severn catchment.	STT would have minimal impact on Severn flooding, but team will continue to work with stakeholders to assess.
Clywedog Reservoir	Are their proposals to raise Clywedog and use this as a source.	There are no current proposals to raise Clywedog Reservoir.
Water trading opportunities	Wales has the opportunity to recover more income for both existing and any proposed use of water.	Noted.

4.9. Our engagement strategy for Gate 3 for Welsh stakeholders will cover the following:

- **Strategic engagement:** Updates and feedback from Welsh Government through WRW and water company WRMP forums
- **Technical engagement:** Continuation of technical meetings with NRW.
- **Local authorities:** Briefings to officers and councillors through WRW, WRMP and SRO specific meetings
- **Local communities:** Briefings for communities around Lake Vyrnwy and the River Vyrnwy. These will be planned in liaison with the local authorities.

5. Gate 2 Customer engagement

5.1. We have worked collaboratively across many of the water companies to ensure both a consistent and efficient programme of customer engagement to support the development of all the SROs. Where practical we have utilised regionally led work from WRSE and WRW. While for other areas we have formed customer research projects with other SRO teams – maximising the expertise across the companies.

5.2. From our engagement at Gate 1, it was clear from the perspective of Thames Water, Severn Trent and United Utilities customers that:

- Customers' understand the need for large scale regional water resource solutions and support, in principle, sharing water resources.
- Reducing leaks and saving water was needed as the foundation to a future strategy and a pre-requisite, to an extent, to sharing resources.
- When considering a range of potential solutions, transfer options are ranked towards the lower end of the scale, reflecting a preference for self-reliance within the water company over a perceived riskier strategy of long-term dependence on sources from outside the water company.
- Customers are less willing to see water transferred out of their region if the recipients (companies and customers) are more wasteful in their water use.
- Customers are more willing to support water transfers when they experience less individual impact.
- Points raised in relation to the STT and the scheme design focused on cost, disruption from construction, environmental impacts, energy use, lack of benefits to local communities, and deteriorated service levels for donor customers.
- Previous research by companies has found that transfer via river or canal is more appealing than via pipeline because of perceived wider benefits (e.g. social and economic).
- Broadly, Thames Water customers, as the direct recipients, were most supportive of the STT proposal. Severn Trent Water customers were also supportive if helping others came with no or little detriment to them, as were United Utilities customers who raised concerns around deteriorated service levels and the possibility of changes to the taste and hardness of their water.

5.3. These conclusions were supported by a review of customer research undertaken by WRW. They reviewed the quantitative and qualitative customer research from all the WRW water companies including on aesthetics, source preference and transfers.

5.4. The summary of the research found that for supply solutions, water transfers are favoured against abstraction and desalination. Water transfers are seen as sensible and inexpensive as long as they are not to the detriment of the donor. They are less favoured if travelling excessive distances due to concerns of environmental damage, cost and greater reluctance to share.

5.5. Their review found that Welsh customers favour sharing water within Wales (making the most of a natural asset) but are less positive about sharing further afield.

Overview of Gate 2 engagement

5.6. Our Gate 2 activity has built upon the work completed in Gate 1. It has been undertaken in collaboration with other water companies, and SRO project teams, to ensure a consistent and efficient programme of customer engagement to support the development of all the SROs.

5.7. The work has focused on exploring some of the aspects raised at Gate 1 in more detail. There were five main components to our work and these components are summarised as follows and set out in detail in this section:

- a) exploring, through the regional engagement, what customers view as 'best value' and how they weight and prioritise aspects of best value.
- b) how we can make schemes more acceptable to customers. One of the key issues for customers is the lack of understanding of what a transfer involves, concerns regarding potential disruption and perceived lack of wider social and environmental benefits. The research aimed to gain a deeper insight into public value – exploring with customers what they understand as public value, their preferences, whether their views alter dependent on their proximity to the scheme and how much they would be willing to pay for a range of possible 'added value' options for a scheme such as STT, and how this differs depending on the type of scheme.
- c) how customers perceive, understand and ultimately how we need to communicate when we change their source of water. We explored this immersively including taste testing and co-designed a communications framework which was then quantitatively tested with a wide range of customers.
- d) deeper dive on customer views regarding water quality on the Shrewsbury water resource zone. This reflects the proposal to change where the water comes from in the Shrewsbury water resource zone to support flows for STT.
- e) consideration of wider insight gathered as part of company operations and long term planning.

5.8. To ensure transparency we involved WRSE's regional Customer Challenge Group (rCCG) in the work to explore the best value criteria as set out in a) above, and for the SRO joint projects we shared the research materials and findings through workshops with the technical teams involved and interested stakeholders such as the DWI and CCW (the webinars are available at <https://vimeo.com/725590317>).

a) **WRSE seeking customers' views on "Best Value"**

5.9. WRSE commissioned an independent market research agency to explore with customers what they consider to be 'best value' in respect of planning future water resources, testing their views on best value criteria and metrics to be used to assess the performance of regional plans including the importance, or weights, that customers place on each. This research aimed to provide insight on the strength of customer preference for different aspects of a best value plan, as well as the trade-offs that customers are comfortable with when making choices between the enhancements, timings, and the bill impacts of alternative plans. Over 300 household customers were engaged in this research. The

criteria were grouped into 4 outcomes and the criteria were explained in a customer 'friendly' way. These are shown in Figure 3.

Figure 3: Best value outcomes and criteria

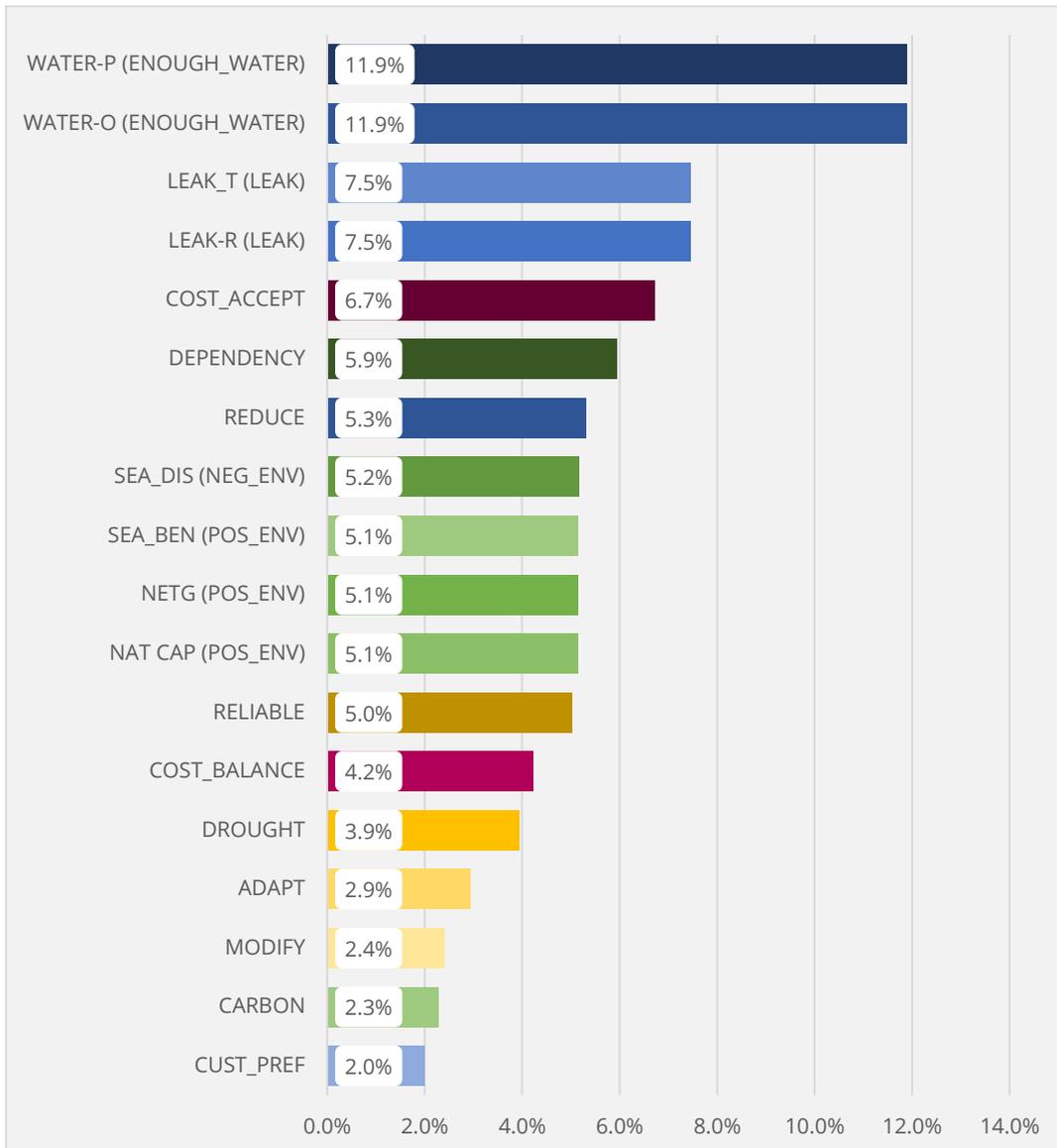
WRSE best value planning criteria

Outcome	Value criteria	Metric
Deliver a secure supply of water to customers and other sectors to 2100	Meet the supply demand balance	Public Water Supply - supply demand balance profile (Ml/day)
		Provides additional water needed by other sectors (Ml/day)
	Leakage	50% reduction in leakage by each company by 2050 from 2017/18 baseline (%)
		% leakage reduction above 50%
	Water consumption	Distribution input per head of population (Litres/person)
Customer preference	Customer preference for option type (score)	
Deliver environmental improvement and benefits to society	Strategic Environmental Assessment (SEA)	Programme benefit (score max)
		Programme disbenefit (score min)
	Natural capital	Enhancement of Natural Capital Value (£m)
	Abstraction reduction	Reduction in the volume of water abstracted at identified sites (Ml/day) and by when (date)
	Biodiversity	Net-gain score (%)
Carbon	Cost of carbon offsetting (£m)	
Increase the resilience of the region's water systems	Drought resilience	Achieve 1 in 500-year drought resilience (date achieved)
	Resilience assessment - reliability	Programme reliability score
	Resilience assessment - adaptability	Programme adaptability score
	Resilience assessment - evolvability	Programme evolvability score
Delivered at a cost that is acceptable to customers	Programme cost	Net Present Value (NPV) using the Social Time Preference Rate (£m)
	Intergenerational equity	Health rate (THDR 1%)

Source: WRSE (2021) Developing our 'Best Value' multi-sector regional resilience plan, A consultation on our objectives, value criteria and metrics, February 2021.

5.10. The output from the research is presented in Figure 4. In general, top priorities for customers are the long-term security of supply for public supply purposes and other sectors. Ranked just below this are improving the efficiency of the water supply system and reducing dependency on sensitive habitats and groundwater sources, along with the cost and customer affordability constraints for the plan. Lower priorities include wider aspects of the resilience of the water supply system, including minimising the risk of emergency drought restrictions, along with balancing the carbon impact and the mix of options used. Outputs have been used in the investment modelling undertaken by WRSE to develop the best value plan. The output is also helpful to consider in the design of the SROs and the prioritisation of additional aspects that the SROs could potentially deliver.

Figure 4: WRSE regional research to understand customers "weights" for best value criteria



Label

CUST_PREF
 CARBON
 MODIFY
 ADAPT
 DROUGHT
 COST_BALANCE
 RELIABLE
 NAT CAP (POS_ENV)
 NETG (POS_ENV)
 SEA_BEN (POS_ENV)
 SEA_DIS (NEG_ENV)
 REDUCE
 DEPENDENCY
 COST_ACCEPT
 LEAK-R (LEAK)
 LEAK_T (LEAK)
 WATER-O (ENOUGH_WATER)
 WATER-P (ENOUGH_WATER)

Metric

Customer preference for option type
 Cost of carbon offsetting
 Programme evolvability score
 Programme adaptability score
 1 in 500-year drought resilience
 Health rate (THDR 1%)
 Programme reliability score
 Enhancement of natural capital value
 Net-gain score
 Programme benefit (score max)
 Programme disbenefit (score min)
 Distribution input per head of population
 Reduction in the volume of water abstracted at identified sites
 Net present value using the social time preference rate
 Percentage leakage reduction above 50%
 50% reduction in leakage by 2050
 Provides additional water needed by other sectors
 Public water supply - supply demand balance profile

Criteria

Customer preference
 Carbon
 Resilience assessment - evolvability
 Resilience assessment - adaptability
 Drought resilience
 Intergenerational equity
 Resilience assessment - reliability
 Natural capital
 Biodiversity
 Strategic environmental assessment
 Water consumption
 Abstraction reduction
 Programme cost
 Leakage
 Meet the supply demand balance

5.11. The full report is included in Annex 3.

b) Exploring customers preferences for public or added value

5.12. This research study was undertaken as a “club project”, a collaboration across 11 SROs. It aimed to:

- understand what added value our customers perceive is important, as part of infrastructure development
- understand preferences for the added value, i.e. the balance between options such as economy, jobs, apprenticeships, leisure, education and carbon sequestration, etc
- determine if the preferences change, depending on the geographical location/type of scheme or other factors
- establish how much customers are prepared to pay
- determine the nature of the language we should use to explain the added value to customers

The engagement included both a qualitative and quantitative phase.

5.13. The research study comprised:

- A desk review of guidance on public/added value and case studies involving the measurement of customer preferences for added value.
- A quantitative stage of research which focused on estimating customer willingness-to-pay (WTP) valuations of 26 possible project additions at SRO sites via a stated preference survey. The survey included a pairwise choice exercise to obtain willingness-to-pay values for each of 26 project additions (economic, social, or environment).
- A contingent valuation exercise providing a measure of maximum WTP for project additions in total. The distance from the participants' location to the SRO sites was a part of the scenarios shown and was specified as either local (5 miles) or far away (50 miles).

5.14. The survey was carried out online and via face to face interviews, achieving a sample of 5,902 households and 553 non-household customers. The data were weighted to UK census data (households) and UK business population estimates (non-households) to be reflective of the population.

5.15. The qualitative research showed that the concept of “public value” needed to be explained, it is not a commonly used term but once the concept was understood the majority of people felt that it is important. However, most are ‘contingent supporters’ i.e. they need convincing that additional costs are justified particularly in the current economic climate.

5.16. The quantitative research indicated participants willingness to pay (WTP) for a set of potential project additions in the context of the strategic resource options (SROs). The proposed additions are shown in Table 9.

Table 9 Descriptions of potential project additions

	ID	Project addition	Full description shown in the survey questionnaire (where different)
Economic	Att1	One in every 50 jobs will be an apprenticeship	One in every 50 jobs created to develop the site will be an apprenticeship
	Att2	A quarter of all employees are local	A quarter of all employees working to develop the site will be recruited from the local area
	Att3	Increased visitor numbers, with economic benefits	Increased visitor numbers, with economic benefits to the surrounding area
	Att4	Links to heritage and local history, through signs	Links to heritage and local history, through signs put up at the site.
	Att5	Space provided for sustainable agriculture	Space provided for sustainable agriculture, including regenerative farming and re-wilding
	Att6	Irrigation reservoirs to improve local farmland	
	Att7	Café with locally sourced food	
	Att8	Fishponds created, with public access	
Social	Att9	Visitor centre	
	Att10	Shop selling sustainable products	Shop selling sustainable products and gardening materials
	Att11	Outdoor BBQ/picnic facilities	
	Att12	Water sports facilities, e.g., sailing, paddleboarding	
	Att13	Land-based recreation/amenities	Land-based recreation/amenities, e.g. Go Ape, Segway hire, cycle hire
	Att14	Restaurant/café/welfare facilities	
	Att15	Wildlife viewing platform, Bird watching facilities	
	Att16	Children’s playground	
	Att17	Sensory garden for those with learning difficulties	Sensory garden/space for those with learning difficulties
	Att18	Walking paths, Boardwalk, Bridleway, Cycle trail	
	Att19	Beach area	
	Att20	Campsite	
	Att21	Conference centre	
	Att22	Education/training/research facility	
	Att23	Links to bus and rail stations	
Environmental	Att24	Reduced flood risk to surrounding area	
	Att25	New wetland area	New wetland area, with benefits for flood risk, wildlife habitats and carbon capture
	Att26	Specialist habitats created for wildlife	Specialist habitats created for wildlife, including butterfly bank, wildlife refuge, ponded areas, reed beds, new woodland and meadow, and creation of landscape scale habitat corridors

5.17. The highest valuations for household customers were:

- ‘Specialist habitats created for wildlife’ (£3.87 annually);

- 'New wetland area' (£3.24 annually);
- 'Space provided for sustainable agriculture' (£2.61 annually).

5.18. Households' average valuation was considerably higher in the environmental area (£3.05), compared to the economic area (£1.19) and the social area (£1.16). The combined annual valuation of all project additions was around £36.

5.19. For non-households, the highest valuations were:

- 'Beach area' (0.98% of the water only bill, annually)
- 'Sensory garden for those with learning difficulties' (0.93% of the water only bill, annually)
- 'Specialist habitats created for wildlife' (0.73% of the water only bill, annually).

5.20. The combined annual valuation of all project additions for non-household customers was 11.83% of the water only bill.

5.21. These findings will inform the next stages of design for STT and what additional investment could be incorporated into the design to provide wider environmental and social benefit.

5.22. The full report of the research study is provided in Annex 4.

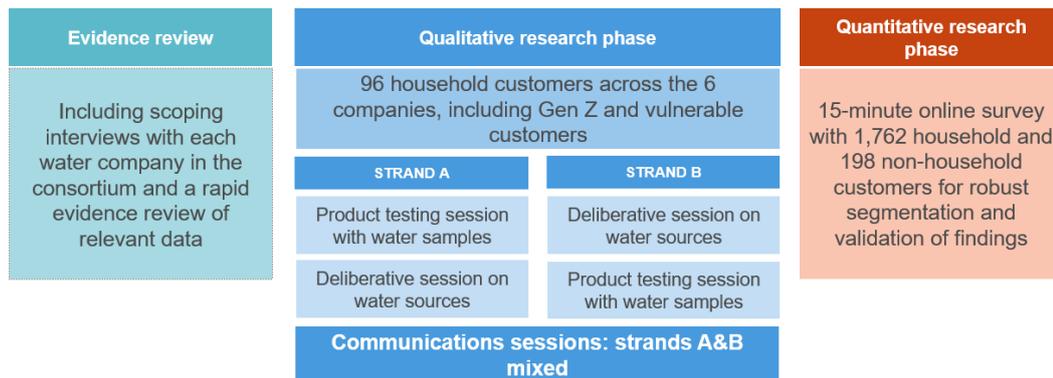
c) Changing water sources

5.23. This was a collaborative project across 11 of the Strategic Resource Options (SROs) with the aim of understanding customers' views on changing their water source. It comprised three stages of research:

- a review of existing evidence to understand attitudes towards water source change.
- a qualitative phase to explore customers' views about water resource options, taste tests using samples representing a range of source options and engagement on how to communicate changes to water sources for each option type including content, tone of voice, timing and format. 96 household customers were engaged in this phase.
- quantitative testing of draft communications using different framings – environmental, human and practical. 1,762 customers and 198 non-household customers were engaged during the quantitative phase.

5.24. The methodology is summarised in Figure 5

Figure 5: Summary of the approach taken for the changing sources customer research



5.25. The key findings were:

- Water is a low salience topic, with customers indicating a low level of awareness and understanding of issues relating to it. This, in part, is driven by general satisfaction with the customer experience of water, in terms of taste, smell and hardness.
- Customers also have low awareness of water scarcity, and, whilst all take steps not to 'waste' water, most are not actively trying to reduce their water consumption. Information on the topic is easily understood, however, this is not always enough to unseat long-standing perceptions that water is abundant in the UK.
- Customers believe that water companies should be taking steps to respond to the issue of water scarcity now and recognise that a mix of demand and supply-side solutions are required. However, there is a general desire to see water companies implement demand-side options first, including fixing leaks and educating customers.
- Customers say they are unlikely to engage with communications on source change, and taste tests indicate that most are not able to detect differences at the level that might be expected in a source change. However, there is still a need to communicate to explain the rationale for the change, alleviate taste concerns and provide clear guidance on the impact.
- In terms of communication, the 'human' frame, which combines the qualitative and quantitative findings together the most effectively, works best.
- Most household customers want initial notification three to six months in advance of the change, although non-household customers are more likely to want an earlier notification of a change. Most respondents then want to be reminded again of the change, at a point closer to the time, but generally only once.

- An email message and a letter, separate from the water bill, are the preferred forms of communication about source changes, consistent across sources. Most customers claim they would click through to look at additional information. Whilst, this number may be lower, providing comprehensive information to those who may want it is key.
- Of those who are more inclined to visit a website for further detail on the change, there is an expectation that this would include a wealth of comprehensive information. This includes detail on bills, taste, the process, the reason behind the change, safety, environmental impact, and information from an independent source.

5.26. Specifically in respect of water transfers, the concerns arise from comprehension issues and worries about water quality and the environmental impact.

- **Comprehension:** Many customers struggle to understand the logistics and infrastructure required for water transfer and so find the specifics difficult to grasp.
- **Quality:** Customers have some sense that the taste or characteristics of their water may change if it is coming from a different area of the country and worry that this water will be 'worse' in quality.
- **Environment:** Customers are concerned how environmental impacts, such as the potential disruption of natural habitats, will be managed.

5.27. The product sample tasting reassured customers that water transferred from other areas will not necessarily taste noticeably different from what they are used to.

5.28. A summary of what's needed regarding future communications for a water transfer is shown in Figure 6.

Figure 6: Communicating with customers on a future water transfer



5.29. A communications framework which took all the learning from the research, has been produced as a practical tool to use when a change to customers' water source is required including the language, framing and timings of communications. The customer research study findings are presented in Annex 5.

d) Water quality (Severn Trent water quality customer research)

5.30. Severn Trent commissioned a survey to measure customers' perceptions of water quality and views on switching water sources. The Severn Trent team were keen to compare the views of customers in Oswestry and Shrewsbury with the regional (Severn Trent catchment) view and to collect the views of non-household (business) customers in Oswestry and Shrewsbury. In relation to switching water sources this focused upon perceptions about whether water source / water quality remains the same or changes over time; views on switching water sources and acceptability of Severn Trent switching their water source for different reasons.

5.31. The samples size for Shrewsbury and Oswestry households was 108 (4%). This compared to 996 households for the region, and 199 for Shrewsbury and Oswestry Non-households. Key conclusions from the research of relevance to STT were that when asked about switching water sources, acceptability levels were generally high, with only 1 in 20 households (regionally and for Shrewsbury and Oswestry) stating it was unacceptable for their water to come from a different resource. The majority (both household and non-households) felt it is acceptable to switch water supplies to help prevent restrictions locally and nationally (even if it impacts water quality).

5.32. Customers wanted to be kept informed if Severn Trent needed to change the source of their water supply. Around nine in ten households indicated that they would like to be kept informed if Severn Trent needed to change the source of their water supplies. This compared to around seven in ten amongst non-households in Shrewsbury and Oswestry.

5.33. The findings of the report will be used to support engagement with customers ahead of any changes to customer water quality as a result of the STT Sources. For example, it will help to explain why the works are being undertaken and any potential changes to their supply and whether this is permanent, intermittent or a temporary change. The summary research report is presented in Annex 6.

e) Wider customer research evidence

5.34. Thames Water has collated customer, stakeholder and community insights¹¹ to consolidate their understanding of the needs and expectations of their customers, and to provide a robust evidence base for decision making for strategic and business planning. A summary of the insight, relevant to water resources, is included here alongside the specific water resources and SRO research and reconfirms the priorities and preferences of customers. Note the work reported here is a point in time and will continue to be extended and refined with further insights.

¹¹ Thames Water What Customers, communities and Stakeholders Want – A summary of our customer, community and stakeholder insights, v 15, May 2022

5.35. The top “15” customer wants are presented in Figure 7 with those most relevant to water resources and planning long term future water supply highlighted.

Figure 7: Thames Water consultation insights on customer “wants”

The current view of what customers, communities and stakeholders want can be broken down into 15 Wants

	Service that 'just works' today and in the future...	provided in an environmentally responsible way...	by a company that always has good customer service...	which gives something back to the society and communities it touches.	
	Water	Wastewater	Environment	Customer Service	Community Impact
All audiences	WT1. I want a constant supply of safe, high-quality water at good pressure WT2. I want you to fix leaks to reduce wasting drinking water WT3. I want you to be self-sufficient and ensure a reliable supply of water into the future	WS1. I want a reliable sewerage system that works 24/7 WS2. I want you to prevent sewer flooding into my property WS3. I want a reliable and sustainable wastewater service in the future	ENV1. I want you to stop polluting rivers and to improve their quality ENV2. I want you to reduce the strain on the environment and restore environmental habitats ENV3. I want you to reduce emissions and reach net zero	CS1. I want fair, affordable and accurate bills CS2. I want ease of contact and quick resolution of my issue CS3. I want you to treat me as an individual	CI1. I want you to give something back to the community CI2. I want you to be responsible and transparent CI3. I want you to minimise the impact of your operations
Greater emphasis from stakeholders	We want you to ensure the long-term resilience of the water and wastewater system through continued investment in infrastructure and new sustainable strategic water supply arrangements and wastewater solutions (at the same time as improving core service)	We want you to improve the ecological health of rivers and restore natural habitats We want you to collaborate with stakeholders to reduce the strain on rivers We support the sector's 2030 net zero ambitions, but see potential to go beyond this	We want sufficient notice for planned work and information on length/severity of disruption We want engaging and reliable communication for impactful unplanned incidents We expect you to raise awareness of social tariffs and priority services with eligible customers	We expect stable leadership that engages effectively with stakeholders and communities We want you to do more to benefit society for the long term	

5.36. Aspects highlighted which are specifically relevant to the ongoing development of SROs, are the following:

- Reduce the strain on the environment and restore environmental habitats
- Reduce emissions and reach net zero – plus increase the use of green energy and generate more renewable energy without increasing costs
- Work with, and give something back to the community – undertake corporate responsibility activities; engage in local issues and provide more access to sites for recreation and minimise the impact of our operations

Working openly and transparently

5.37. The process of collaboratively delivering our customer engagement activity has been driven through a Regional Engagement and Communications Board and steering groups formed by the SRO companies for each project.

5.38. We have benefited from a wide range of expertise from within water company insight, regulation and water resources teams to help the design and development of the engagement activities, both ensuring best practice and alignment to wider insight activities to inform the PR24 business planning activities. The work was delivered by independent market research agencies compliant with the MRS code of conduct.

5.39. In addition, WRSE have facilitated a regional Customer Challenge Group (rCCG), bringing representatives from the Consumer Council for Water (CCW) and the company

independent challenge groups to share and input on the approaches and materials used to engage customers. Both CCW and the DWI have been engaged as part of the collaborative research activities.

6. Next steps

- 6.1. Our engagement strategy is based on the principles of raising awareness, engaging widely and transparently, providing stakeholder opportunity to comment at appropriate stages, taking into consideration feedback whilst drawing on stakeholder knowledge and expertise. Scheme consultation will happen at a sufficiently early stage to allow consultees a real opportunity to influence the proposals.
- 6.2. We will build on the stakeholder and customer feedback received during Gate 2, and the representations made to RAPID on the Gate 2 draft decision and direct feedback from RAPID and other regulators.
- 6.3. Our Gate 3 engagement will include:
 - Ongoing and continued engagement with key stakeholder groups
 - Engagement with local communities and landowners affected by STT
 - Engagement with customers on changes to potable water sources
 - Statutory consultation as required by the Planning Act 2008 ahead of the DCO submission
- 6.4. We will utilise a stakeholder database, a stakeholder management response system and a commitments tracker to ensure stakeholder feedback is recorded and to set how feedback has been addressed or will be addressed as STT develops.
- 6.5. Set out below we summarise our engagement next steps in relation to the Regional Plans, WRMPs, technical project engagement, landowners, interested bodies, local communities and customers.

Regional Plans and WRMPs

- 6.6. Engagement activity will continue to be coordinated with dialogue on the regional plans, and company Water Resource Management Plans (WRMPs).
- 6.7. There will be ongoing engagement with stakeholders as part of the development of the consultations on the draft regional plans and draft WRMP24s in Autumn 2022. For example, Thames Water will be undertaking a range of face to face and online engagement to explain their draft WRMP. The STT project team will be supporting Thames Water at community events to explain how the STT Interconnector forms one of Thames Water's proposals within its draft WRMP.
- 6.8. Severn Trent and United Utilities are also proposing a suite of engagement to promote feedback on their WRMP, including community events aligned to SRO locations. Their plans are currently being refined.
- 6.9. Engagement with Welsh stakeholders will continue, co-ordinated through the WRW and water company WRMP consultation teams, including with Welsh government, Welsh regulators, and Welsh interest groups.

Technical engagement

6.10. We will continue to engage with technical stakeholders to ensure the further technical assessments draw on the detailed technical knowledge of specialists and experts. These include:

- RAPID on checking the progress on the programme of work, articulation of issues and risks, and time demonstrating efficient spend.
- EA, NRW, NE and DWI, as well as other stakeholder organisations to ensure the further work is robust and reflects the requirements for future consents and duties, including under the Planning Act 2008, Town and Country Planning Act 1990, Water Industry Act 1991 and Well-being of Futures Generations Act (Wales) 2015.
- Local authorities, including planning, environment, water and infrastructure officers, to understand local opportunities and constraints.
- 1-2-1 engagement with other technical stakeholders (for example: National Highways, Historic England) to ensure the technical studies are robust and based on the most up-to-date data and assessment methods.

Landowner engagement

6.11. We will need to plan and develop detailed survey work to support the development of the concept design for the scheme and will engage with landowners for the Interconnector and River Vyrnwy Bypass pipeline in accordance with the STT land strategy.

6.12. A 'landowner journey' will be prepared which will take landowners through route planning, route refinement and confirmation of route and construction. We will design STT seeking to minimise impacts to landowners, tenants and the local environment, in doing so we will work landowners to understand any constraints, concerns and opportunities.

Engaging with interested bodies

6.13. Through Gate 3 the concept design will be developed building on the opportunities highlighted through engagement. This engagement will include with organisations such as:

- Environment and access groups to discuss opportunities for local amenity benefits.
- Wildlife Trusts to discuss potential biodiversity benefits through scheme design.
- Local government, community, education, economic and growth organisations to discuss opportunities for education, local employment and skills creation.

Local community and customer engagement

6.14. We will ensure there are multiple opportunities for engagement with the local communities and customers. A summary of the proposed local community and customer engagement for the Interconnector, Vyrnwy bypass pipeline and Shrewsbury redeployment to inform each scheme development, their design iterations and preconstruction activities is set out below. The approach to local community and customer engagement for Minworth SRO and North West Transfer SRO are set out in their respective Gate 2 reports.

SST Interconnector

- 6.15. For the interconnector, two non-statutory phases of consultation are proposed in summer 2023 and summer 2024. The non-statutory consultation phases will provide those with an interest in the proposals with the opportunity to share their views. This will help us better understand any concerns and issues and allow us to ensure that the Interconnector is delivered in a way that considers the needs of all parties. This staged approach to non-statutory consultation is at a sufficiently early stage to allow the local community an opportunity to influence the initial proposals.
- 6.16. For stage 1 (summer 2023) the focus of consultation with the community will be on the interconnector vision, design principles, route corridors and alternatives. Feedback from this engagement will feed into the design development and finalisation of the preferred interconnector route corridor.
- 6.17. For Stage 2 (summer 2024) the focus of consultation will be on the preferred route, including construction and permanent works. Sufficient time has been included in the programme to reflect on feedback from stakeholders ahead of statutory consultation on the Development Consent Order. Ahead of statutory consultation a draft Statement of Community Consultation will be prepared, shared and consulted upon as pursuant to section 47(1) of the Planning Act 2008.

STT Vyrnwy Bypass Pipeline

- 6.18. Briefings would be undertaken for communities around Lake Vyrnwy and the River Vyrnwy to explain the STT strategic schemes and programme, giving time to answer questions from the local community on the need for the scheme.
- 6.19. Local community engagement on the River Vyrnwy Bypass Pipeline route corridor and its initial design would be undertaken ahead of a planning application. It is currently assumed that the scheme does not fall within the Planning Act 2008, but rather the TCPA. This will be confirmed in Gate 3. If the scheme is determined to be neither EIA development nor would have a significant effect on a European site then the below ground pipeline could be considered permitted development. This will impact on the scope and timing of engagement. Therefore, the precise scope and timing of engagement with the local community will be determined once the planning strategy has been refined and updated.

STT Shrewsbury redeployment

- 6.20. For the Shrewsbury redeployment, the scheme, from a planning and environmental perspective, is relatively minor in nature. No new long-distance pipelines are required, only short cross-connections and bypass pipes. At this stage it is assumed that the works would be permitted development, with local community engagement taking place in the months leading up to construction to explain the construction programme to the local community and how any localised impacts will be managed.

6.21. As the Shrewsbury redeployment will change a potable water source, customers will be engaged ahead of any changes to their water supply to explain why the works are being undertaken and any potential changes to their supply and whether this is permanent, intermittent, or temporary change. The engagement material will reflect the findings from the Tap Water quality perceptions report and the Changing Water Sources report (Annex 5 and Annex 6).

Outline engagement strategy

6.22. An outline engagement strategy with engagement timings will be determined by the path that the regional plan and WRMPs take and the scheme consenting routes, as such it is not possible to commit to a definitive engagement strategy and timetable at this stage.

Customer research

6.23. As STT moves on to Gate 3 there will be a switch from gathering wider customer insight into community consultation and engagement. Therefore, there is no foreseen need for any specific customer research / insight to inform Gate 3 plans.

Annex 1: Overview of engagement to inform the development of the South East Regional Plan

Date	Stakeholder group/activity	Agenda/Discussion topics
2021		
January (20)	Multi-sector group	Review of non-PWS demand long-term forecast, review of potential impact of updated EA forecasts on abstraction.
February (12 & 16)	Best Value Plan consultation webinar	Presentation, discussion and Q&A on the Best Value Plan objectives, criteria, and metrics to support the consultation
February (22)	Stakeholder Advisory Board (SAB)	Introduction to refreshed terms of reference and work programme; update on the best value planning approach.
March (2)	Environmental Destination workshop – regulators and EAG technical advisors	EA presentation on proposed abstraction reduction scenarios and application of this; Development of catchment portfolios.
March (8)	Environmental Advisory Group (EAG)	Focus on environmental destination; BV planning – criteria and metrics; Catchment options and delivery mechanisms
March (17)	Multi-Sector group	Overview of position for each sector
March (25)	Thames Water & Affinity Water Water Resources Forum	Best Value planning consultation – feedback – next steps for engagement with customers and stakeholders; update on SE planning challenge
May	Future Water Resource Requirements	Publication setting out the planning challenge for the SE
May (18)	Stakeholder Advisory Board (SAB)	Workshop to consider the engagement with customers and stakeholders on alternative plans and the development of an interactive tool to clearly communicate the information.
May/June	Options - overview of the options considered in the SE plan	Series of workshops organised by option type to showcase the range of options under consideration and provide an opportunity to discuss and comment on the options.
May	Agriculture/horticulture working group	Review of opportunities for shared options with agricultural and horticultural stakeholders
June	Multi-Sector group	Update on the modelling work and discussion on the next steps for agriculture/horticulture shared options
July	Webinar for Retailers	Focus on the company drought plan consultations and introduced the regional plan
September	Environmental Advisory Group	Focus on the environmental destination for the SE
September	Agriculture/horticulture working group	Ongoing discussion on opportunities for shared options with agricultural and horticultural stakeholders
September	Multi-Sector group	Update on the modelling work and discussion on the next steps for agriculture/horticulture shared options
September	Regional reconciliation webinar	Recap on role of regional planning, overview of reconciliation process and updates from regional groups
October	Stakeholder Advisory Board (SAB)	Focus on the adequacy of the approach to ensure stakeholder and customer views are considered in the development of the plan.
November	Horticultural Trades Association	Briefing on the emerging plan
November	CPRE	Briefing on the emerging plan
November	Thames Water & Affinity Water Water Resources Forum	Update on work to develop the regional plan, with a focus on the SROs
December	NFU	Briefing on the emerging regional plan
December	CCW	Briefing on the emerging regional plan
December	Blueprint for Water	Briefing on the emerging regional plan
December	South East Rivers Trust	Briefing on the emerging regional plan
January	National Infrastructure Commission	Briefing on the emerging regional plan
January (13)	OCC & VoWH DC members and officers	Briefing on the emerging regional plan
January (17)	Wide stakeholders	National Framework led webinar on the national water resource picture including a summary of each regional group's regional plan.
January (20)	Wide stakeholders	Launch of the consultation on the emerging regional plan for the SE

January (31)	Wide stakeholders	SE (West region) launch webinar
February (1)	Wide stakeholders	SE (East region) launch webinar
February (2)	Wide stakeholders	SE (North region) launch webinar
March (1)	Wide stakeholders	Live consultation Q&A
March (1)	Stakeholder Advisory Board	Discussion on the consultation feedback and next steps
March (3)	Environmental Advisory Group	Environmental ambition & prioritisation
March (5)	Community Drop-in, Steventon, Oxon	A drop in event to enable the local community to engage with TW, Affinity and SESRO team
April (28)	Environmental Advisory Group	Overview of updated environmental ambition for all SE companies
May (20)	Environmental Advisory Group	Ongoing discussion on environmental ambition and prioritisation
June (7)	Thames Water & Affinity Water Water Resources Forum	Overview of responses to the consultation and work to transition to the best value regional plan
July (11)	EAG, SAB and MS Group joint workshop	Review alternative programmes to inform the preferred draft plan for consultation

Annex 2. Summary of stakeholder responses to WRSE Regional Plan consultation in relation to STT (March 2022)

Canal and River Trust

CRT welcomed WRSE's continued inclusion of the STT scheme in its emerging plan. CRT highlighted that water transfers along its network can support business sectors including the energy sector, agricultural sector, housing sector, construction sector, pharmaceutical sector and manufacturing sector. They also set out that canal transfers can support low carbon energy for heating and cooling. CRT noted their interest in how the interconnector options between a pipeline and restored Cotswold Canal will be assessed in the draft plan in relation to the best value metrics and sought transparency on this.

Cotswold Canals Partnership

The Cotswold Canals partnership considered that the STT should be the highest element on the preferred programme as it delivers high levels of natural capital. It expressed its view that canal restoration schemes deliver net bio-diversity benefits and compare favourably to pipelines and reservoirs in respect of the environmental, wellbeing and social benefits. Highlighted that in terms of Net Zero by 2050, the canal water transfer is considered significantly better value in respect of carbon reduction and electricity use and could be implemented many years quicker than a large reservoir in Oxfordshire.

Cotswold Canals Trust (CCT)

Consider a canal transfer offers much greater environmental, cultural and social benefits than any of the other strategic resource options. Expressed the view that the canal scheme could be a flagship best value project which could inspire people now and for generations to come. Set out that the canal option would fill the most significant missing gap in the national inland waterways network by relinking the Rivers Thames and Severn for broad beam boats without the need for a sea passage. Also highlighted wide benefits including health, heritage, economic and cultural benefits that a canal could bring. Compared to other water resource options CCT considered a canal transfer would be lower cost, lower energy use, higher natural capital benefit, and could deliver additional water resource early, alongside having public support. Considered that the disadvantages of a canal option in terms, complexity, INNS and the flow being incompatible with boating could be addressed.

Cotswold District Council (forward planning team)

The Council were supportive of a solution that promotes the reuse of the canal as this would further support the wider investment already seen within Stroud District which has reopened several miles of navigable canal from the Stroud valleys to the River Severn. The canal option could provide opportunities for social and environmental net gain, alongside heritage and cultural conservation and enhancement.

Historic England

New infrastructure developments in the form of water transfer projects or new reservoirs may have implications for heritage assets, while abstraction techniques and associated impacts on hydrology may have effects on archaeological remains. It is therefore important that the historic environment and any potential effects on it are appropriately considered as WRSE continues to develop the regional plan

Natural England

NE advised caution around relying on transfers/imports from other regions, such as the Severn Thames Transfer. They highlighted that other regions have their own environmental constraints.

Oxfordshire County Council (OCC)

OCC set out their view that STT is a much preferable alternative to SESRO, and they highlighted that it was unclear why the emerging regional plan seeks to promote SESRO first. OCC highlighted the following concerns in relation to STT: The relative merit and cost of the options of a transfer of water along the Cotswold Canals or via a pipeline across the Chilterns; whether the potential for invasive species migrating to the River Thames is negated or in fact overstated; construction effects; Whether the location of any structures is appropriate; impacts on archaeology; Impacts on biodiversity; and how biodiversity net gain would be provided for.

Annex 3: WRSE Research to test customer preferences for best value outcomes, Eftec, May 2021

Annex 4: Research to explore customers preferences for public or added value, Accent and PJM Economics, August 2022

Annex 5: Changing water sources, Britain Thinks, June 2022

Annex 6: Tap Water quality perceptions: Survey findings report DJS Research, May 2022