

# Water Resources and Bioresources Bid Assessment Framework

November 2022



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## 1 Introduction

Our primary objective is to deliver best quality services to the customers and communities that we serve at the lowest possible cost. This means that we are constantly striving to identify better and cheaper ways of delivering the services that we provide. Third parties that can offer good value inputs to our business have a vital role to play in helping us to pursue this objective, and this is especially true in the area of water resources, leakage, and demand management. From the beginning of AMP7 we will have in place a formal framework that supports the procurement of those inputs.

This document constitutes an updated version of our “Bid Assessment Framework”. The previous version, published alongside our PR19 Business Plan covered water resources, this version has been expanded to also incorporate Bioresources, in line with the guidance published by Ofwat <https://www.ofwat.gov.uk/wp-content/uploads/2022/02/Bioresources-bid-assessment-framework-%E2%80%93-final-guidance.pdf>.

The document is structured as follows: sections 2 and 3 set out an overview of our overall procurement procedure and pre-qualification criteria. Section 4 presents details on “Need Specification”, drawing upon the detailed analysis presented in our Water Resource Management Plan (WRMP). Section 5 presents details of our Bioresources need specification. The remaining four sections complete the procurement aspects of the framework, including the procedures for bid evaluation and reward.

## 2 Procurement procedure

We are open to receipt and assessment of competitive bids for the provision of solutions for our water resources deficit zones as set out in this document and as published in our Water Resource Management Plan (WRMP) for 2019, as updated from time to time and published on our website. The next version of our WRMP will be published in 2024.

We will issue a call for competition in accordance with the Utilities Contract Regulations 2016 on a frequency interval that is appropriate to the requirements that arise.

We may also instigate a call for competition in response to a market opportunity or a material change in information regarding water deficit/ bioresources zones.

## 3 Prequalification

Organisations who wish to respond to a contract notice that we issue should provide the information requested in the notice, which shall include the following.

- ✓ the organisation’s financial position, including provision of financial accounts;
- ✓ the mandatory grounds for prequalification as set out in the Utilities Contracts Regulations 2016;
- ✓ details and evidence of required insurances;
- ✓ details and evidence of health and safety accreditation; and
- ✓ form of tender

Organisations will also be required to provide any further information set out in the notice that is not listed above.

## 4 Need specification

A specification may be issued together with the contract notice, and organisations should review the specification and this Bid Assessment Framework documentation to determine their position on making an application.

This Bid framework document may be updated from time to time and made available on our website

We reserve the right to set out the requirements of the notice or to establish the basis of the call for competition in line with the frequency intervals for competitions explained in section 3 above

In the meantime, we are keen to ensure that third parties are able to familiarise themselves with our possible needs as soon as possible. Accordingly, the remainder of this section provides indicative details of the water resources need that might feature in the first notice issued under this Bid Assessment Framework.

There is no specific Bioresources need at present, should such a need arise we will provide relevant information and notice to potential providers in the market.

### 4.1. Water resources planning overview

We published in 2019 our Water Resources Management Plan (WRMP19) which covers the period 2020 to 2050. The updated version of our WRMP will be published in 2024. In order to develop our WRMP19 we project the future total demand for water from our domestic and business customers and leakage from our supply system. We then calculate how much water will be available from our current water sources in each zone to meet the demand. Long term water resource planning is a complex process involving the analysis of large amounts of data. We need to make an allowance for the uncertainties in our supply and future demand data and this risk allowance is known in the industry as “headroom”. We generate a supply against demand balance for each water resource zone which includes an uncertainty/headroom allowance. Figure 1 below shows a graphical representation of this balance.

Where the zonal supply demand balance, including the effect of uncertainty, shows a potential shortfall, the Plan identifies the options that either reduce demand or increase supplies to resolve the imbalance.

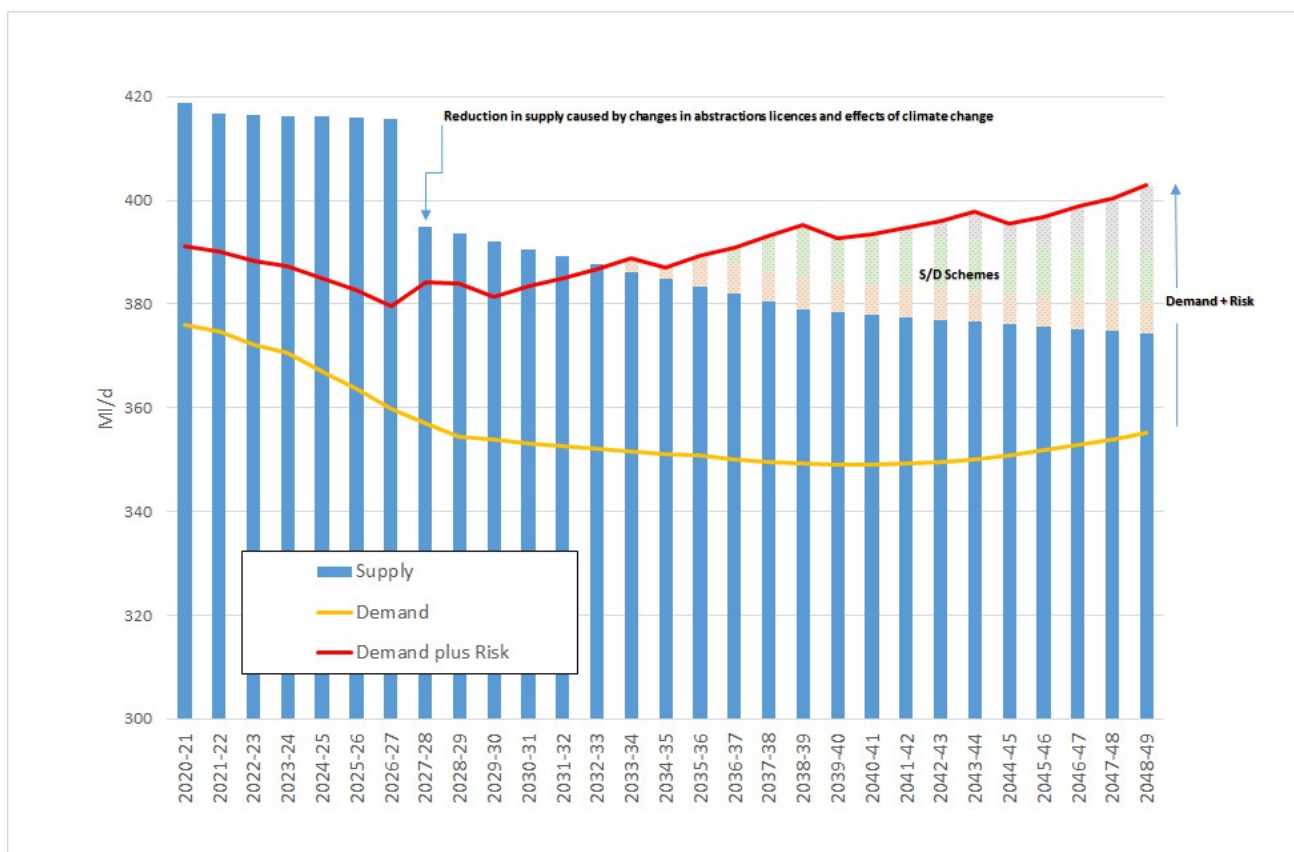


Figure 1 Example supply demand balance graph

## 4.2. Water resource zone position

Figure 2 and Table 1 below show the Supply/Demand balance position for each of our water resource zones. There are two zones where we forecast a water resource deficit during the 30 year planning period, namely Tywyn Aberdyfi and Pembrokeshire.

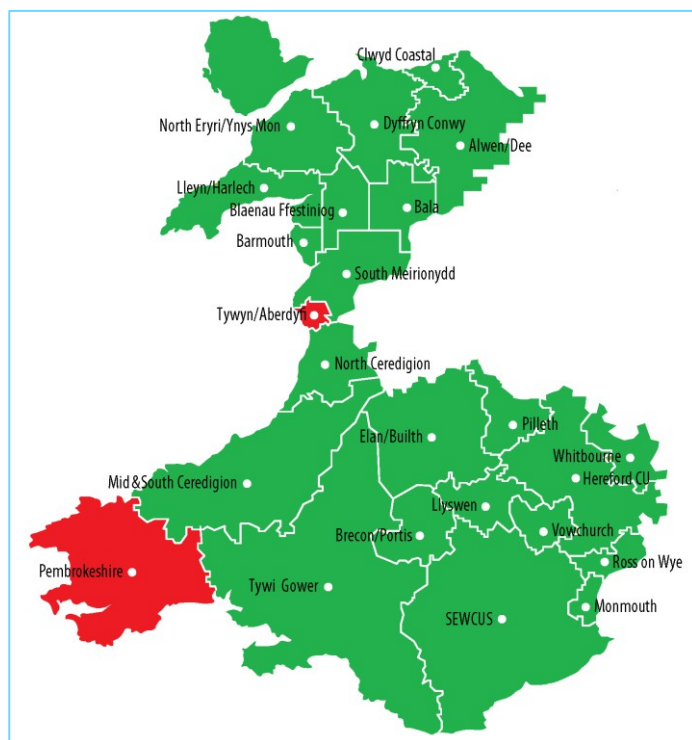


Figure 2 Water Resource Zone Supply Demand Position

| WRZ                  | 2025<br>Surplus<br>MI/d | 2050<br>Surplus<br>MI/d |
|----------------------|-------------------------|-------------------------|
| NEYM                 | 8.1                     | 6.4                     |
| Clwyd Coastal        | 1.3                     | 2.5                     |
| Alwen Dee            | 2.1                     | 2.1                     |
| Tywyn Aberdyfi       | -0.8                    | -1.5                    |
| Bala                 | 0.3                     | 0.3                     |
| Blaenau Ffestiniog   | 0.3                     | 0.3                     |
| Barmouth             | 0.0                     | 0                       |
| Lleyr Harlech        | 3.0                     | 2.9                     |
| Dyffryn Conwy        | 2.1                     | 2.7                     |
| Sth Meirionnydd      | 0.4                     | 0.4                     |
| Ross                 | 3.3                     | 3.6                     |
| Elan                 | 0.4                     | 0.5                     |
| Hereford             | 8.8                     | 9.9                     |
| Llyswen              | 1.5                     | 1.5                     |
| Monmouth             | 0.6                     | 0.7                     |
| Pilleth              | 0.3                     | 0.3                     |
| Brecon               | 0.6                     | 0.7                     |
| Vowchurch            | 0.0                     | 0                       |
| Whitbourne           | 0.1                     | 0.1                     |
| SEWCUS               | 16.0                    | 18.6                    |
| Tywi                 | 22.7                    | 24.5                    |
| Mid & Sth Ceredigion | 2.7                     | 2.5                     |
| Nth Ceredigion       | 1.8                     | 2.0                     |
| Pembrokeshire        | -3.6                    | -13.8                   |

Table 1 Water Resources Zone Supply Demand Position

Supply demand balances for the two deficit zones (Tywyn Aberdyfi and Pembrokeshire) are set out in Figures 4 to 7 below.

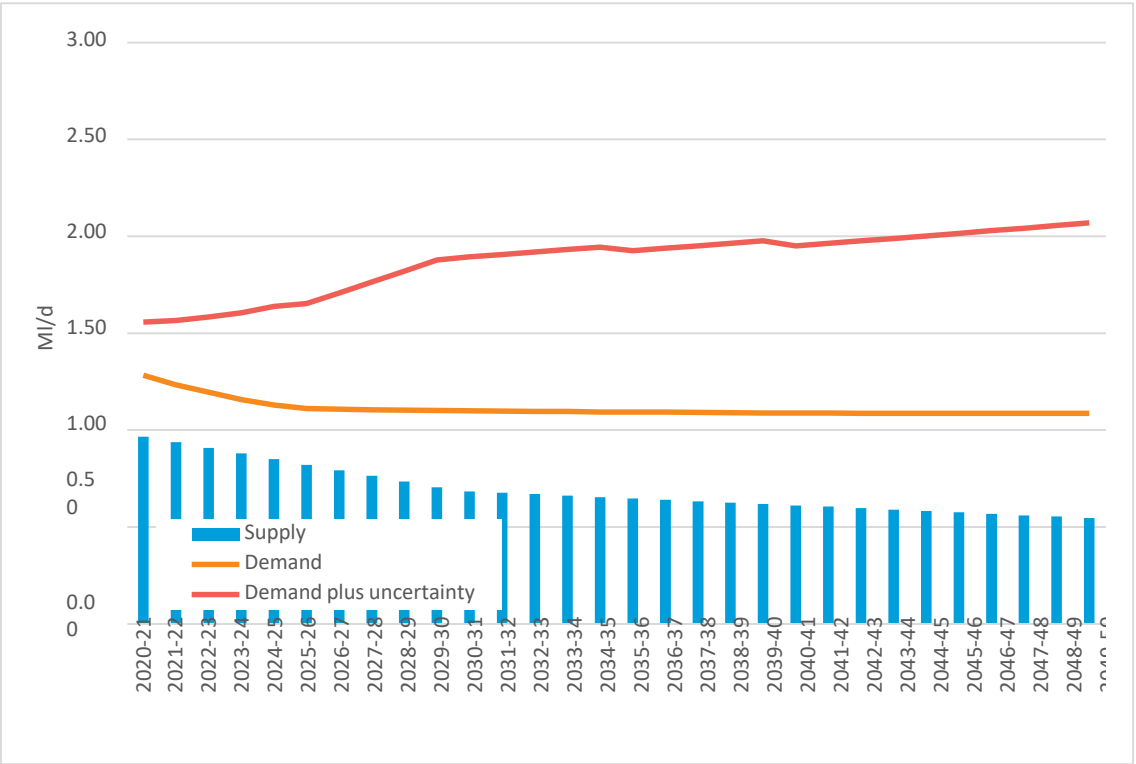


Figure 3 Tywyn Aberdyfi Annual Average Supply Demand Balance

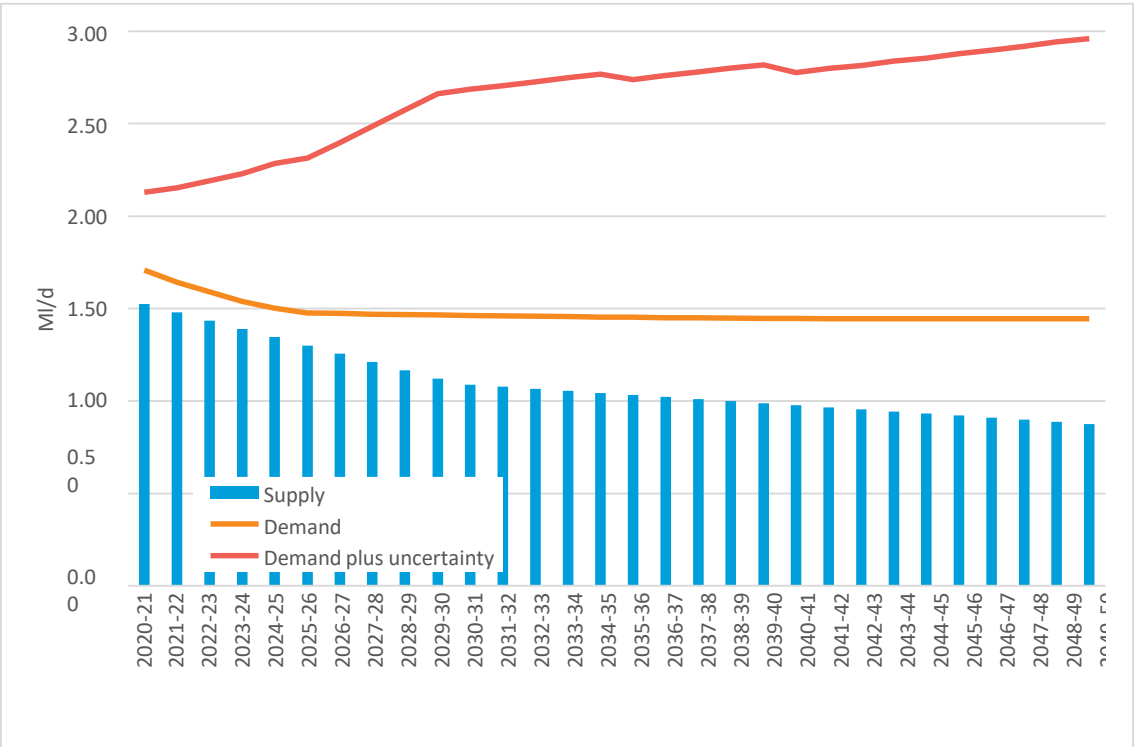


Figure 4 Tywyn Aberdyfi Critical Period Supply Demand Balance



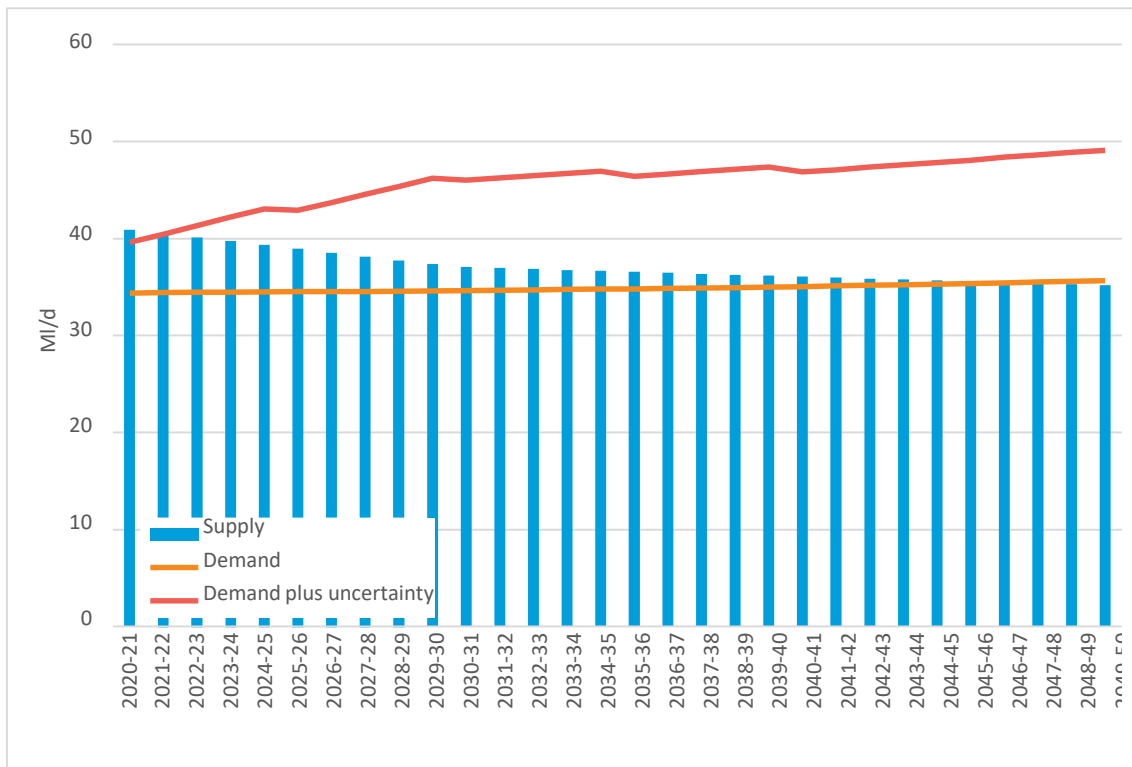


Figure 5 Pembroke Annual Average supply demand balance

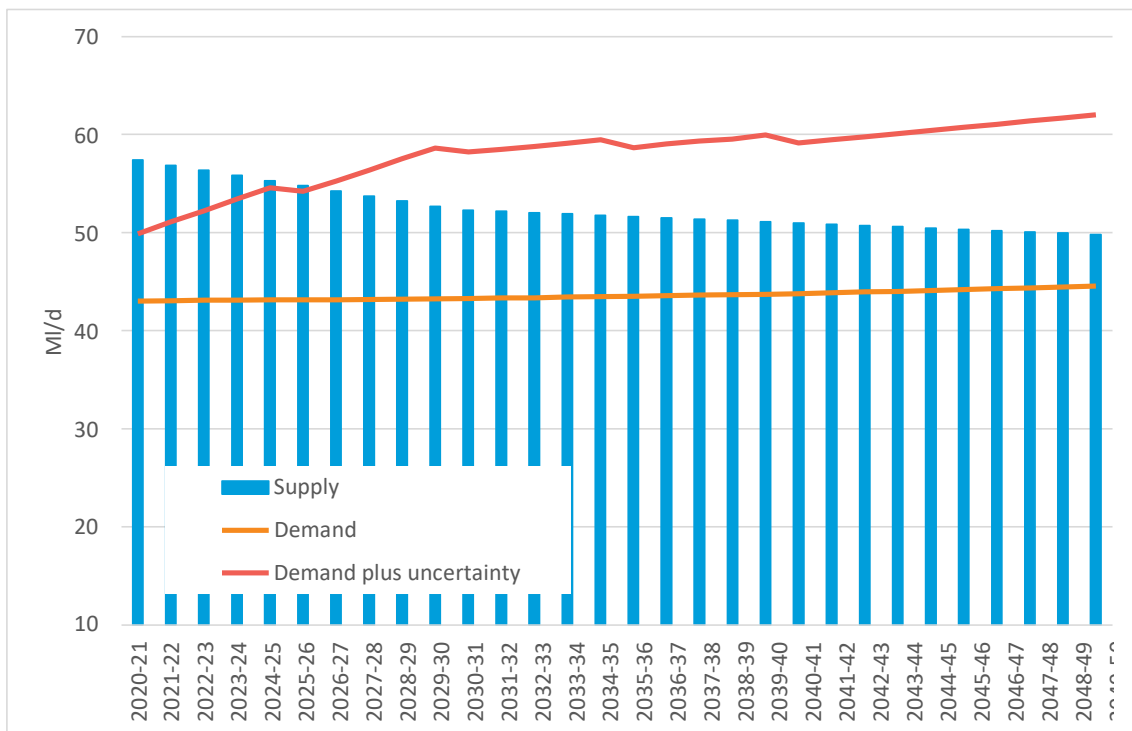


Figure 6 Pembroke Critical period supply demand balance

Details of the two deficit zones and the drivers behind the shortfalls are set out in the following sections.

### 4.3. Tywyn Aberdyfi water resource zone

This water resource zone covers the small coastal area around the towns of Tywyn and Aberdyfi in Mid Wales. There are approximately 4,700 customers in this zone but demand can increase significantly during the summer due to tourism.

#### 4.3.1. Operation of the water resources

Penybont is the only water treatment works in the zone. It is fed from two small river abstractions; the Afon Fathew and the Nant Braich-y-Rhiw (see Figure 7 below). The Nant Braich-y-Rhiw abstraction licence has a condition which prevents us from using this source when the river levels are low. This comes into operation during most summer periods; we are then reliant upon the Afon Fathew.

The zone currently has no exports or imports of water.

#### 4.3.2. Demand

Demand in the zone is expected to decrease slightly across the planning period. A very marginal increase in population is forecast from 4,730 in 2020 to 4,900 by 2050 although this demand is expected to be offset by a reduction in how much water is used per person per day. As with other zones across Wales, the reduction in usage per person is supported by a forecast increase in metering in the zone, from 60% of households in 2020 to 88% by 2050.

#### 4.3.3. Climate change

A detailed climate change assessment has been undertaken which indicates there is a high risk to our supplies in the future. The two river abstractions are highly vulnerable to low flows in the summer, which are forecast to become more severe due to the effects of climate change. It is likely that the current operation of the zone is not sustainable when accounting for potential future effects of climate change. We have therefore had to include a large margin for uncertainty within our calculations.

#### 4.3.4. Resilience

An initial analysis of extreme drought events has been undertaken for the zone, the results of which show that in a 1 in 200 year drought event, supplies to the zone as a whole cannot be maintained. River flows in the Afon Fathew and Nant Braich y Rhiw would not be sufficient during a 1 in 200 year drought to support the required levels of abstraction to meet zonal demand.

#### 4.3.5. Water resource position

For our WRMP19 we investigated further the catchment hydrology and now believe the river flows in a dry summer are likely to be even lower than previously thought and so there is less water available for abstraction. This makes the zone extremely vulnerable to dry periods, an effect which is exacerbated when we take account of climate change. This means that the water available to us across the planning period is less than we need to meet the predicted demands for water plus our Target Headroom uncertainty allowance. For this Plan we are therefore forecasting a supply demand shortfall in the zone. Our analysis shows that the flow in these streams will not be sufficient to meet demand during severe drought periods and this will lead to a zonal supply demand deficit reaching 0.8 Ml/d by 2025. This might be compounded

by the risk of poor stream water quality during summer storm events which can cause water treatment issues.

#### 4.3.6. WRMP19 solution

Our preferred solution is to construct a new river intake on the nearby Afon Dysynni which can provide the volumes of water required, and to transfer this water to the Penybont water treatment works. The Afon Dysynni is much larger than our existing sources and the amount of water that we would abstract is a small fraction of the amount of water in the river even during drought periods. This is a sustainable and more resilient source of water to severe droughts and the effects of climate change. This solution is by far the lowest cost of all options, with the least environmental impact. It is proposed to support this solution with a raw water bankside storage reservoir to enable short term shut down of the existing stream sources. The overall scheme cost is estimated to be approximately £7.5 million.

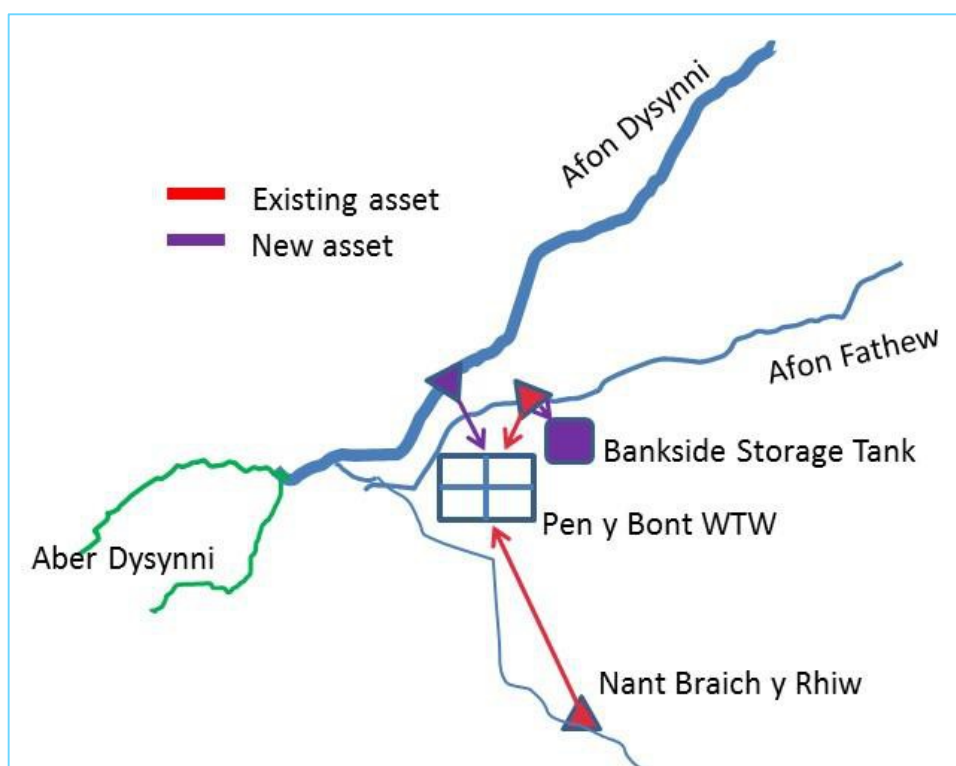


Figure 7 The Tywyn Aberdyfi Water Supply System

#### 4.4. The Pembrokeshire water resource zone

This zone covers the far south west corner of Wales, stretching from Pendine Sands in the east to the Pembrokeshire Coastal National Park in the west and from the villages of Manorbier in the south to Newport in the north (see Figure 8 below).

##### 4.4.1. Operation of the water resources

The largest treatment works in the zone is Bolton Hill, which is supplied by Canaston Bridge pumping station on the Eastern Cleddau and Crowhill pumping station on the Western Cleddau.

Canaston Bridge pumps water from two sources: a river intake on the Eastern Cleddau which is supported by releases of water from Llysyfran Reservoir, and a small piped supply from Valley Court springs. In addition to treated water for domestic customers, the Canaston Bridge – Bolton Hill arrangement supplies untreated water to the oil refineries south and north of Milford Haven.

The other major treatment works in the zone is Preseli, which is supplied from Rosebush reservoir. If storage in Rosebush is low, Preseli can be supported with water pumped from Llysyfran whilst Rosebush can be supported with water pumped from a river intake on the Eastern Cleddau at Pont Hywel. However, this supply is limited due to recent restrictions placed upon the abstraction licence for this source.

Pendine borehole supplies the eastern part of the WRZ which can also be supported from the Bolton Hill system.

#### 4.4.2. Changes to the zone

To protect the Afonydd Cleddau Special Area of Conservation, the amount of water we are allowed to take from the river will reduce in 2019.

At Pont Hywel, this reduces the support which can be provided to Rosebush and results in lower storage in the reservoir.

At Crowhill, this reduces the amount that can be taken from the river to supply Bolton Hill. This increases the reliance of Bolton Hill on Canaston Bridge.

At Canaston Bridge, a licence change reduces the amount that can be taken from the river in the spring and autumn and so increases the need for releases of water from Llysyfran to support the river.

With increased demand on Llysyfran to support Rosebush and Canaston Bridge, the storage in the reservoir is fully utilised in dry years. This increases the vulnerability of the resource to the effects of climate change and more severe droughts than those we have seen historically.

#### 4.4.3. Climate change

Our modelling of climate change has shown that affects our resources in two ways; first, it directly reduces the inflow to our reservoirs and secondly, it reduces the flows in rivers that are supported by reservoir releases. In Pembrokeshire this means less water would be available in Llysyfran into the future and more water would need to be released to support abstraction at the Eastern Cleddau at Canaston Bridge. Llysyfran is also required to provide greater support to Preseli works.

This combined pressure exacerbates low storage in drought years in Llysyfran. As the amount of water remaining in storage in Llysyfran and Rosebush in a dry year already limits the amount of water which can be put into supply, this further reduces the amount of water available to customers. The impact of climate change will increase across the planning period, hence our available supply steadily decreases.

#### 4.4.4. Resilience

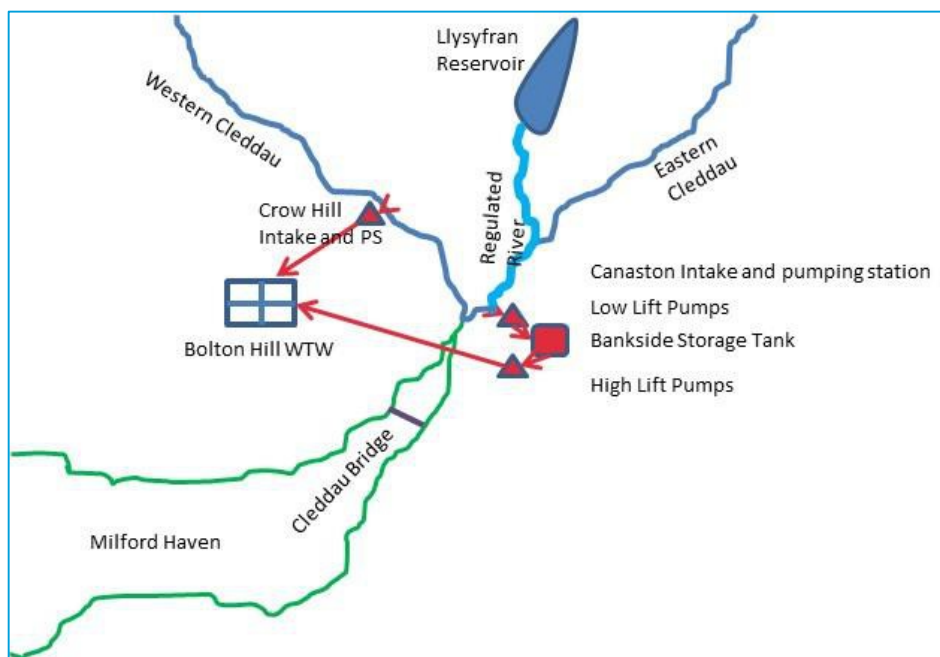
To assess the resilience of the zone to drought, we tested our model with more extreme and varied droughts than those in our historical record. This testing revealed that the zone is currently vulnerable to droughts between 1 in 50 and 1 in 100 year severity, as storage in Llysyfran becomes critical to maintaining supply to customers.

Population is forecast to increase from 123,000 to over 136,000 by 2050. Demand is forecast to rise steadily through the planning period. Housing development, centred on 'Haverfordwest, Milford Haven, Neyland,

Pembroke, Pembroke dock, Fishguard and Goodwick'<sup>1</sup>, and the commensurate increase in demand will be partially mitigated by a reduction in how much water is used per person across the population.

#### 4.4.5. Water resource position

The supply demand balances for the zone shows a deficit starting in 2022/23 which increases to a maximum of 14 MI/d in 2049/50. This deficit is driven by the reduced storage in Llysyfran, which is forecast to worsen when the impacts of climate change are assessed. This reduction in storage increases the allowance that we need to make for both the impact of climate change, and the uncertainty surrounding the potential scale of that impact.



*Figure 8 The Pembrokeshire Water Supply System*

The Canaston pumping station has fixed flow rate pumps and the operation of the station, within the terms of the abstraction licence, means that we currently need to over-release water into the Eastern Cleddau River while we are abstracting lower down the river. This means that we release too much water that could be saved during dry years in case of drought. The installation of variable speed pumps in the pumping station will enable more efficient river regulation to preserve Llysyfran reservoir storage during critical dry years. The change in operation will preserve sufficient water in Llysyfran to meet the supply against demand shortfall during severe droughts.

This scheme was identified as the best value solution as it was by far the lowest cost option of those available that resolved the forecast deficit and provided additional resilience against climate change and severe drought. The existing pumping station is relatively old and we will need to maintain the existing pumps in the near future and this scheme also meets the capital maintenance needs at the pumping station. The estimated cost of this option is around £13 million.

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<sup>1</sup> 5.56 Pembrokeshire County Council Local Development Plan, Adopted 2013

## 5 Bioresources

### 5.1 DCWW (Dwr Cymru Welsh Water) Bioresources operating area

DCWW operates in Wales and parts of England, as shown in the map below.



The North East and South East regions include large populated areas that are served by a variety of large medium and small sewage treatment works, as shown in the map below. Our largest facility is Cardiff with a population equivalent of 1 million. The North West and South West are served by smaller sewage treatment facilities.

DCWW recycles about 148,000 tonnes of biosolids to agricultural land from our Advanced Anaerobic Digestion (AAD) plants in Cardiff (55,000 tonnes biosolids/yr), Afan (28,000 tonnes biosolids/yr), Cog Moors (projected capacity 21,000 biosolids/yr) and Five Fords (44,000 tonnes biosolids/yr).

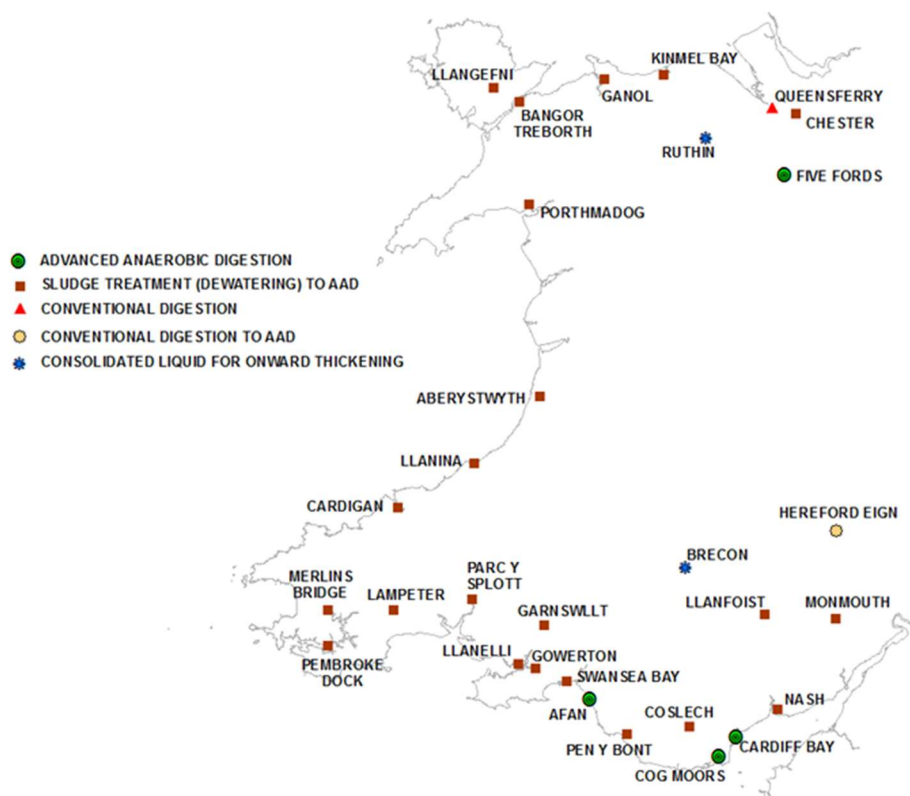


Figure 10 - Locations of Dŵr Cymru Wastewater Treatment Sites

## 5.2 Bioresources Statutory obligations

Since 2018, all companies have been obliged to publish market information at least annually by the end of July each year. The objective of this is:

- to provide standardised and defined information to enable potential market participants to identify opportunities to supply services in the treatment, transport, recycling and disposal of bioresources;
- to ensure information is comparable and reliable for use by market participants; and
- to enable Ofwat to monitor the bioresources markets to see how effectively they develop.

The published information for all companies can be found at <https://www.ofwat.gov.uk/regulated-companies/markets/bioresources-market/bioresources-market-information/> and specifically for DCWW at <https://corporate.dwrcymru.com/en/library/bioresrouces-trading-documents>

Our approach to independent assurance of our Bioresources Market Information is consistent with that adopted for other regulatory publications, notably the Annual Performance Report (APR) and Cost Assessment publications. Our internal and external auditors have performed a review of the information provided by management for the purpose of providing assurance to the Directors and the Audit Committee that the data to be published has been produced in accordance with the guidance provided by Ofwat.

Based on the results of their review our auditors have confirmed that no exceptions or issues were noted. The data reported in all the tables has been reconciled to supporting documentation and to data taken from our corporate systems. The data is also consistent with that used in the preparation of our APR and Cost Assessment submissions, the assurance for which is detailed in our 2021/22 Data Assurance Summary document. Where an

estimated approach has been adopted our Internal Audit team have confirmed that the assumptions made are appropriate and in line with the guidance provided by Ofwat.

### 5.3 Sludge Quality - Bioresources Technical Requirements

DCWW require the following details for assessing any potential bids:

- Delivery sites details
- Volumes per day/week/month
- Method of delivery – contractor or NWL fleet plus delivery window/working hours
- Waste Carrier Licence if applicable
- Percentage % dry solids
- Screened/non screened
- Primary/secondary/mixed sludge type
- Sludge age
- Waste Transfer notes, or method of recoding both legislatively and for billing purpose
- Finally to remain BAS (Biosolids Assurance Scheme) compliant we would require from the receiving site
  - 
  - o 1/Source Material Risk Assessment
  - o 2/Treatment Site Risk Control form

## 6 Time limits and bid clarification

For time limits and bid clarification we will follow a process which fully complies with the Utilities Contract Regulations 2016.

In order to meet the requirements of the Procurement Regulations we utilise an eSourcing portal which provides a framework for the issuing and management of tenders – including the provision of a full audit trail covering all documentation and communications with tenderers. The below stages will be followed:

### 6.1 Project Initiation and Approval

All procurements of significance require a Project Initiation Document (PID) to be completed and approved prior to commencement. This document outlines the nature of the procurement, market background, environmental and health and safety considerations as well as the nature of the contractual framework to be used and the prequalification and tendering process to be followed (including details of the scoring regime to be followed at both stages). Additionally, a proposed project plan detailing key activities and their associated dates will be provided within this document.

### 6.2 Issuing of Contract Notice via FTS

All requirements above the Procurement threshold specified by the Utilities Contract Regulations 2016 must be advertised via the UK Government's Find a Tender Service (FTS). The requirement, due to its value, will be required to follow processes stipulated by the Utilities Contract Regulations 2016.



In the first instance a Contract Notice is issued which must provide an accurate description of a requirement, its value and an outline of the procurement process to be used.

From the issuing of the Contract Notice under normal circumstances interested organisations must be provided with a minimum of 30 days to respond with their expression of interest supported by a completed pre-qualification questionnaire (PQQ) document.

### **6.3 Pre-qualification Questionnaire**

In unison with the issuing of the Contract Notice we will publish pre-qualification documentation via the eSourcing portal. This will include standard questions concerning the responding organisations' general suitability to supply our requirements as well as compliance with the Utilities Contract Regulations 2016 (see section 3 for further details).

Following the deadline for receipt of PQQ responses all received questionnaires shall be assessed and a recommendation report issued to take forward shortlisted organisations to participate in the tender stage.

### **6.4 Tender**

Tender documentation encompassing both technical and commercial aspects of our requirements will be issued to all shortlisted organisations via the eSourcing portal. The suite of documents provided will include Instructions for Completion, Scope of Service, Commercial Response and Technical Response. Additionally, draft Contract documentation will be issued.

Any queries arising from the documentation provided are dealt with via the eSourcing portal. All clarification, except those agreed to be commercially sensitive, will be issued to all Tenderers. The assessment process to be used in the treatment of both commercial and technical responses forms part of this documentation.

The length of time allowed to complete and submit tenders will depend upon the complexity of the tender but shall not be less than 10 days. However, a more usual tender response timeframe is likely to be at least 30 days in order to provide tenderers with time to submit an appropriate response and in order to provide time for any clarifications to be answered and incorporated into the tenderers' responses. All key process stages and dates will be detailed within the Instructions for Completion.

## 7 Evaluation

### 7.1 Our decision-making process

To obtain a preferred set of solutions that resolves the supply demand imbalances in the Tywyn Aberdyfi and Pembrokeshire zones, our WRMP19 followed a robust process that is compliant with regulatory guidance and best practice. We would therefore expect that bids received would follow the same process.

Bioresources need will be established through solutions we identify to deliver our obligations under the National Environment Programme. These will be set out within our PR24 business plan.

Our approach to decision making is outlined in figure 9 below.

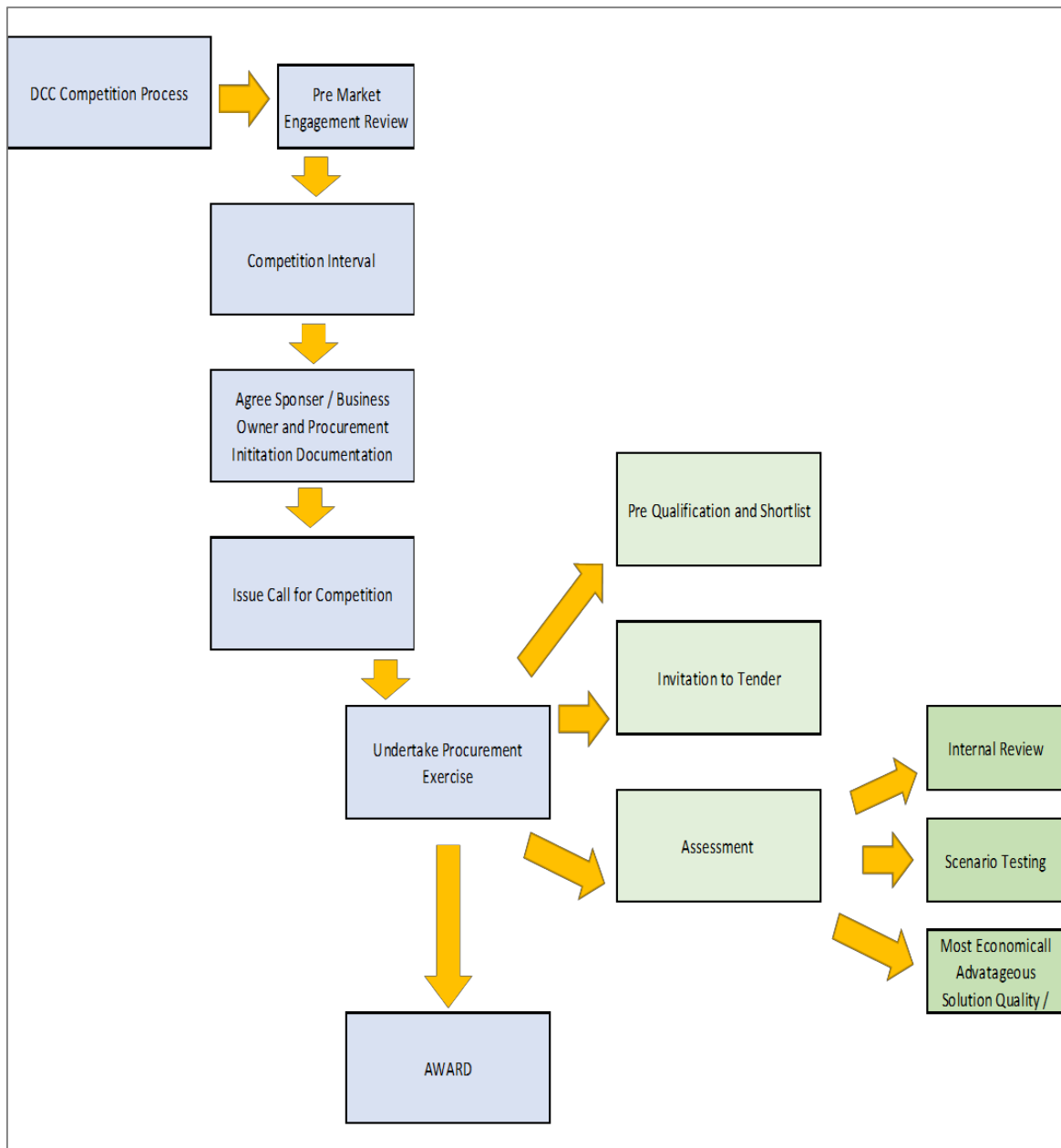


Figure 11 Decision making approach

## 7.2 Screening

The table below outlines the screening criteria we would apply to any option received. Where an option is assessed as having an over-riding constraint (i.e. against any single criteria) or which performs poorly against the majority of criteria, then they will be rejected at this screening stage.

| Assessment Category                 | Coarse Screening Key Considerations  | Rationale for Rejecting Options at this Stage  |
|-------------------------------------|--|--|
| <b>Feasibility and Risk</b>         | Political and customer acceptability   | The option directly contravenes either a stated policy or known customer preferences.  |
| <b>Engineering Implementation</b> / | Engineering complexity and technological risks   | The engineering or non-engineering implementation are either impossible or there are known insurmountable barrier.   |
| <b>Performance</b>                  | Likely scale of supply relative to the supply deficiency.  | There is confidence that the resultant yield will be negligible and / or that an alternative option would serve this need better and more effectively.   |
| <b>Operational</b>                  | Compliance risks   | The option would cause a non-compliance issue (or increase the risk of non-compliance).  |
| <b>Environmental</b>                | Statutory risks to international and national designated sites                                     | The option would have a major and unacceptable impact on a designated site, either during construction or longer- term operation.  |
|                                     | HRA and compliance risks WFD   | The option would have a major and unacceptable impact on a HRA site or WFD waterbody, either during construction or longer-term operation.   |
|                                     | Planning risks including landscape, recreation and heritage  | The option would have a major and unacceptable impact on landscape, recreation, and heritage at a strategic level/number. E.g. major disruption / change to landscape, eyesore, removal of recreation access/facility etc. |
|                                     | Socio-economic risks (including consideration of the Well Being of Future Generations (Wales) Act) | The option would result in loss of jobs, would directly prevent job creation (that is otherwise expected), or otherwise have a major negative impact on society.   |

Table 2 Option Screening criteria

### 7.3 Option details - Water Resources

For each option we require a robust estimate of the Yield/Demand Saving, CAPEX, OPEX (Fixed and Variable), Carbon cost and environmental impact (SEA, HRA, WFD assessment). For WRMP19 we utilised our company standard Unit Cost Database (UCD) to calculate the Whole Life Costs of supply side options. Whole Life Costs include construction and commissioning costs, periodic replacement of equipment costs (Recurring CAPEX) and the cost of subsequent ongoing operating and maintenance to allow the continued efficient operation of the scheme (OPEX). All indirect costs have also been included such as insurance, management fees, design, investigation, overheads, project management and land compensation.

We would also require any chemical and power costs associated with the option, together with any additional OPEX costs of labour, maintenance, 'Bought in Services' and 'other' (such as administration costs) to be provided. To meet regulatory guidance we would require each option submitted to provide Fixed and Recurring CAPEX carbon quantities and Operational carbon quantities.

### 7.4 Selection of the preferred solutions - Water Resources

For WRMP19 the way in which we assessed the best value solutions in our deficit WRZs involved the initial application of a least cost water resource planning optimisation model. Under this approach we first examine which programme of options is the most economical in terms of scheme costs against the benefit they provide. The benefit is defined as either the amount of additional water an option can provide, or the reduction in customer demand through water saved.

The model uses a mathematical optimisation to produce a least cost schedule of investments in these zones and is now an industry standard through guidance. We have applied the decisionLab model which was developed in 2012/13 to implement the EBSD methodology while providing the required flexibility in usage. It has been used to support multiple water companies in WRMP14 as well as WRMP19, and is therefore at a good stage of maturity.

The model produces a least cost optimised programme of investments over the selected planning period to meet the defined planning challenge.

There are 3 types of decision variables within the formulation:

- ✓ **Which Options** should be selected;
- ✓ **In which year** should the Option be selected / activated;
- ✓ **What utilisation** should be made of the Option in each year of the planning period.

The diagram below provides a high-level view of the model operation. The principal input data to the model is our supply demand balance information, all feasible supply and demand side options costs (CAPEX, OPEX, Carbon) and yields (expressed as MI/d).

The assessment period is the number of years of costs that the model takes into account in the calculation of the NPV for a particular solution. This will be either equal to or longer than the planning period. A longer assessment period is recommended, and our model is set up to use an 80-year assessment period in line with the Water Resources Planning Guideline.

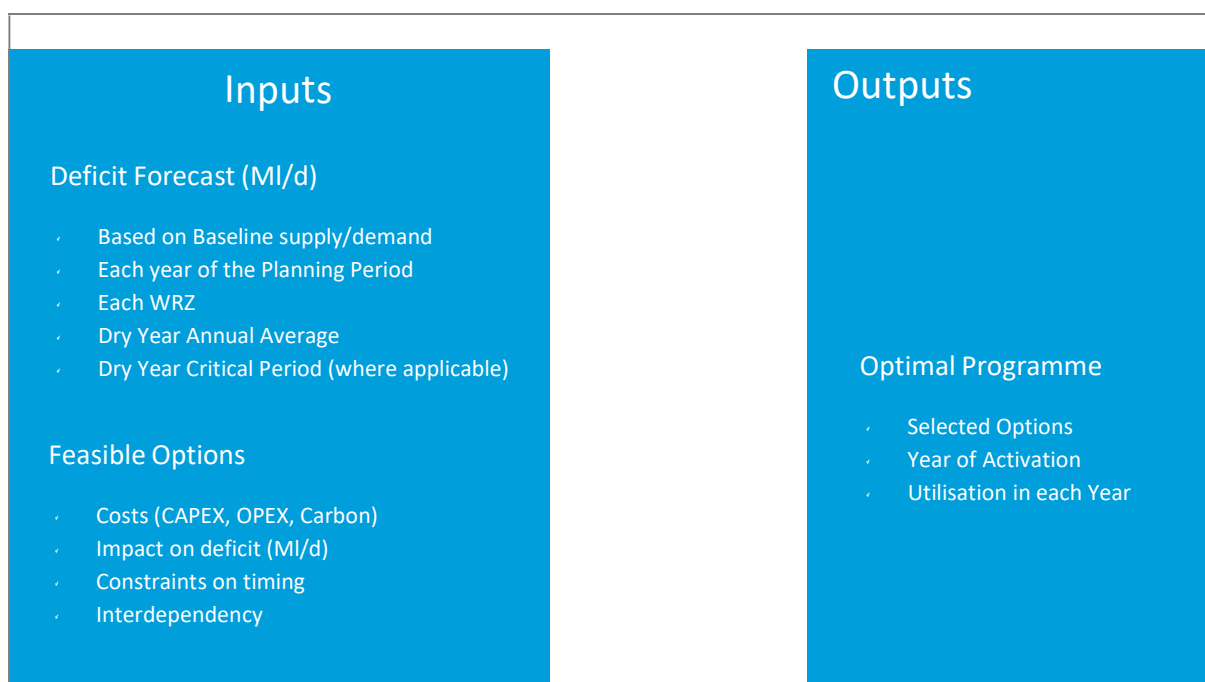


Figure 12 Overview of the optimisation modelling approach

## 7.5 Environmental assessment

The Water Resources Planning Guidance requires us to assess whether our Plan options are subject to Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA). Welsh Government's "Strategic Environmental Assessment in Wales" states that the Regulations require a responsible authority to:

- Determine, where necessary in consultation with the Consultation Bodies (Natural Resources Wales, and Cadw) whether any plan or programme is subject to the Regulations and whether an environmental assessment is required;
- Ensure (if required) that an environmental assessment is conducted and that an Environmental Report is produced, covering the proposals in the plan or programme and realistic alternatives;
- Consult the 'Consultation Bodies' Natural Resources Wales and Cadw on the scope of the Environmental Report;
- Consult those bodies and the public on the plan or programme and the Environmental Report;
- Take account of the Environmental Report and the responses to the consultation before adopting the plan or programme;
- Publish information about the adoption of the plan or programme, including how the Environmental Report and responses to the consultation have been taken into account;
- Monitor the environmental effects of implementing the plan or programme.

## 7.6 The principles of an ecosystem approach

We understand that we serve many differing groups of customers, with individual wants, needs and expectations of our services. From our extensive customer research and continued tracking of customer sentiment, we have developed six customer promises to reflect the service we should provide to all of our customers; the first two of which state:

- ✓ Safe, clean water for all;
- ✓ Safeguard our environment for future generations.

Above all, customers place a particular emphasis on the reliability of essential services – the provision of safe drinking water, and the protection of the environment. In line with WRMP guidance we have sought to integrate the ecosystem approach as far as possible within our options appraisal to ensure our preferred options fully consider any potential environmental effects.

The Ecosystem Services (ESS) Assessment undertaken as part of the Plan is a quantitative and qualitative assessment of:

- ✓ The ESS present within the zone of influence of each WRMP feasible supply option (baseline at 2017);
- ✓ How the ESS present may change within the timeframe of the assessment (by 2050) in the absence of the WRMP option – the future baseline;
- ✓ How the ESS may change after the implementation of the WRMP feasible supply option (in relation to the future baseline).

## 7.7 Derivation of the best value solution for deficit zones

Based on the above evaluation criteria, we will utilise the UKWIR WRMP19 Decision Making process seeks to provide water companies with a framework to produce robust and resilient plans that represents ‘best value’ investment. We need to demonstrate to our customers and regulators that our preferred solutions are appropriate to the scale of issue within the individual WRZs and represent the ‘best value’, rather than purely the least cost, solution.

To achieve this, the final stage in our decision making process enables this selection of the ‘best value’ solution by undertaking a broader evaluation of the benefits of the schemes over and above the least cost output from our optimisation model. We therefore balance these outputs against the requirements of the following:

- ✓ Customer surveys and other stakeholder feedback;
- ✓ Environmental impact;
- ✓ Our 2050 vision;
- ✓ Resilience to climate change;
- ✓ Resilience to 1 in 200 year drought;
- ✓ Specific sensitivities in the WRZ e.g. catchment water quality issues.

## 8 Governance

We will appoint a procurement lead to undertake the procurement process as part of the Project Initiation stage set out in Section 5 of this document. The procurement process will operate under a business sponsor who will be accountable for overseeing the technical proposal review.

The business sponsor will have organisation level of authority to manage any resultant contract following Contract Award.

## 9 Contract award

### 9.1 Assessment, recommendation and approval to proceed

Following the deadline for tender submissions, responses will be reviewed and assessed both technically and commercially via an assessment team qualified to conduct the appraisal. In respect to the technical appraisal, individual appraisers shall first independently assess each response received prior to the coming together of the assessment team to review findings and agree final scores. Commercial assessments shall consist of the checking of returns and identification of any areas of concern which may need to be investigated prior to calculating the commercial score.

Clarification meetings may be held in order to ensure that the assessment team has a clear understanding of tenderers' responses and proposals.

Following the completion of the above outline process a Tender Assessment Report will be produced and forwarded to senior management, containing the award recommendation for their review and approval.

### 9.2 Award announcement and stand still

Once the Tender Assessment Report and its recommendation have been approved, an award announcement shall be made. A 10 day standstill period is observed following this announcement to allow all tenderers to review the award decision and if appropriate issue a challenge. Each Tenderer will be issued with a summary of the assessment of their proposal and that of the awarded party.

### 9.3 Contract award

Following the end of the standstill period and provided that there have been no substantive challenges received, the contract will be issued to the successful party(s) and the contract signature and implementation process shall commence.

## 10 Communication of decision

The communication process would be undertaken via the eSourcing Portal by means of a Contract Decision Notification Letter.