

**Investment Planning, Prioritisation & Delivery  
Group**

**Progress of Interventions to  
Meet the Needs on the  
Development List -  
Report Q1 2023/24**

November 2023

## Investment Planning, Prioritisation & Delivery Group

### PROGRESS OF INTERVENTIONS TO MEET THE NEEDS ON THE DEVELOPMENT LIST – REPORT Q1 2023/24

#### Contents

1. Purpose .....	1
2. Summary of Current Investment Maturity .....	2
3. Indicator of overall progress towards the Committed List .....	3
4. Progress of the development of interventions with Level 1 and 2 appraisals .....	3
5. Summary .....	11

#### 1. Purpose

This report sets out how Scottish Water is progressing in developing interventions to address the needs on the 'Development List' up to the end of June 2023 (Quarter 1 2023/24). It has been prepared for the Investment Planning, Prioritisation & Delivery Group (IPPDG) set up by Ministers to provide reassurance and report on the delivery of their Objectives.

#### What Is Monitored

The Development List contains named Needs and Needs associated with repair, refurbish and replacement activities.

Where interventions are forecast to exceed £3m or are novel or contentious, a Level 1 or 2 project investment appraisal is developed to assess the options to deliver the need.

Each quarter Scottish Water reports to IPPDG on its progress in developing interventions to address the needs on the Development List. This report includes:

**Section 2** – Summary of Current Investment: providing an overview of the current investment forecast over the 6-year investment period

**Section 3** - Indicator of overall Progress towards the Committed List (PCL): to provide reassurance to stakeholders on the overall volume of intervention development relative to what is required to meet expected investment levels in future years.

**Section 4** - Progress in the development of interventions with Level 1 and 2 appraisals: to provide reassurance to stakeholders on progress of developing interventions subject to a Level 1 and Level 2 appraisal [and other projects and

programmes of interest to stakeholders] and a view of current expectations of when they will reach future appraisal stages.

## 2. Summary of Current Investment Maturity

The current outturn forecast of investment over the 6-year investment period is provided below (Figure 1). This shows the maturity of investment across the period and how it has developed since the previous quarter (Q4 22/23 versus Q1 23/24). Appendix A contains the inflation assumptions.

Live Investment is categorised by Plan (Gate 30-60), Prepare (Gate 70/80), Deliver (Gate 80 -120) and Non-live Investment, (Pre-Gate 30). The “Deliver” category includes both projects which have been committed for delivery (post Gate 90) and those at detailed design stage but not yet committed. The data also includes allowance for risk associated with the potential additional cost increase of the SR15 Completion programme.

The level of investment in delivery for 2023/24 has increased by £147m to £793m since previously reported in Q4 (blue bars). This is as a result of projects continuing to mature through the Plan and Prepare phases and is in line with what is necessary to achieve the planned level of annual investment. The total of investment in Delivery is now £2.9bn.

The combination of the Live and Non-Live Investment can exceed the Planned Investment Level shown on the figures as interventions can be initiated but will not necessarily be committed. A tabular view of the data represented in the figure is available in Appendix B.

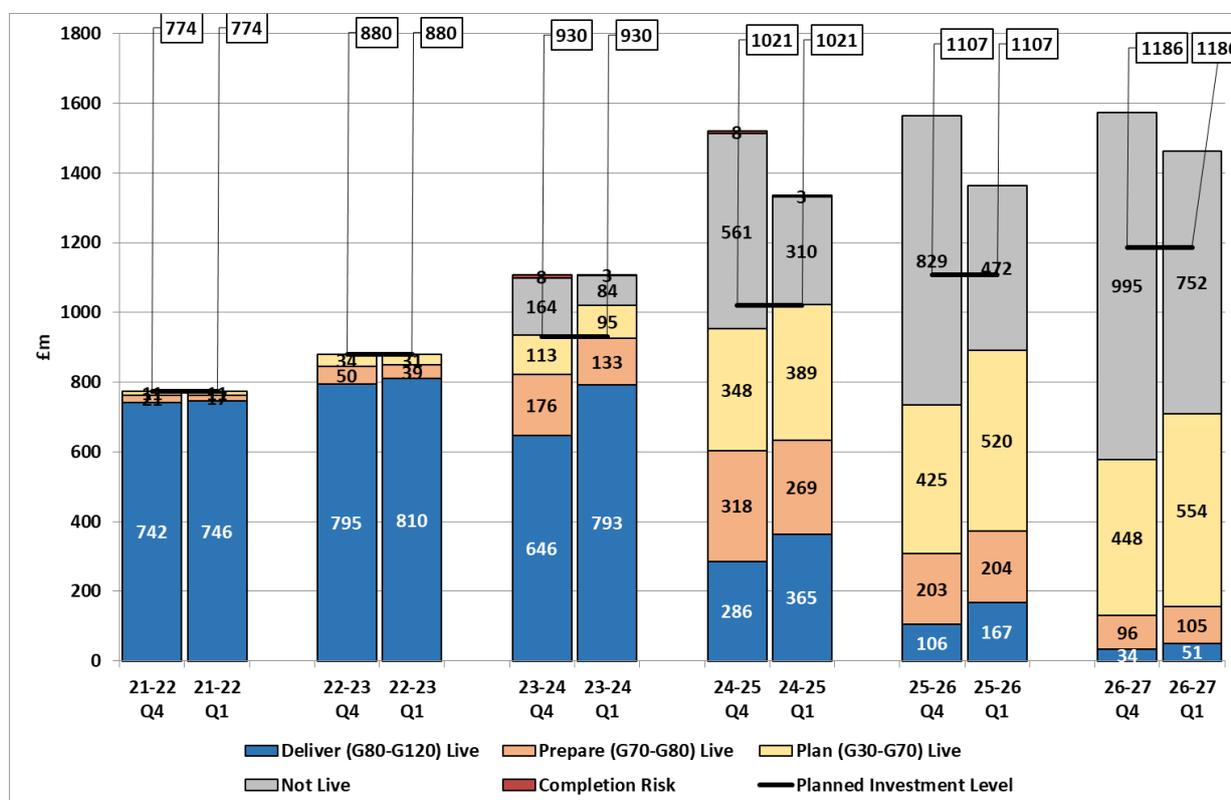


Figure 1: Annual Investment Profile – maturity of investment at the end of Quarter 4 2022-23 (previous) and at the end of Quarter 1 2023-24 (current)

### **3. Indicator of overall progress towards the Committed List**

The indicator of overall Progress towards the Committed List (PCL) is a high-level measure of the overall volume of intervention development relative to what is required for expected investment levels in future years. This measure assesses whether we are promoting sufficient volumes through the stages in each of its development pathways.

PCL was created using a top-down approach by splitting the investment profile between each development pathway. PCL tracks the impact of project forecasts on future investment levels.

PCL was set at 100% to achieve the required investment profile in future years. A score of less than 100% indicates that the rate of overall progress in developing interventions may not be sufficient. A score of more than 100% indicates that the rate of overall progress is more than sufficient to achieve planned investment levels and will allow prioritisation/choice in what to commit to delivery. Changes may occur due to 'positive' or 'negative' attrition. 'Positive attrition' occurs if forecast costs for an intervention have reduced or if the required delivery timescales have been extended. 'Negative attrition' occurs if forecasts costs have increased, or additional evidence is required which extends the project appraisal process.

This indicates that we are developing sufficient volumes of investment across the programme to achieve planned investment in future years.

Some interventions are taking longer to progress through the appraisal process than was originally forecast (Section 3 provides an overview) and continue to be monitored closely. The development and commitment of other interventions that meet the MA policies have been progressed to maintain delivery efficiency.

### **4. Progress of the development of interventions with Level 1 and 2 appraisals**

The purpose of this section is to provide:

- An overview of the progress of interventions in Q1 that are subject to Level 1 and 2 appraisals<sup>1</sup>
- Highlights from significant Level 1 or 2 project investment appraisals completed in the last quarter
- A review of lessons learnt from the delivery of PIA forecast in the last quarter and a look ahead to the next quarter.
- The full list of interventions with Level 1 and 2 appraisals, with an indication of the anticipated timing, is shown in Appendix C, which is an additional document to this paper.

---

<sup>1</sup> Level 1 appraisals are carried out for needs that require the early identification of placemaking and external partnership involvement. These are likely to be complex and time intensive. Level 2 appraisals are carried out for needs that are likely to require substantive system, programme and project investments and will be subject to a robust economic appraisal

## **Quarterly review of progress of appraisals**

Good progress has been made in project level decision making within Q1:

- 8 Project Investment Appraisal stages were completed within the quarter. This includes the addition to the forecast (1 or 5% of the initial demand).
- 7 of 8 projects progressed through first time at Investment Group or through offline approval. These projects had a value of c.£113m.
- 3 Project Investment Appraisal documents were shared with all sector stakeholders in July.

Highlights from project investment appraisals completed within the quarter are included in Table 1.

**Table 1: Project Investment Appraisal Highlights**

<b>Bertha Park Growth</b>		<p>Perth and Kinross Council have identified Perth as a centre for major housing and business growth. This development is already well underway to the west and north of Perth as a series of identified development packages. Existing housing developments have already resulted in Perth WWTW being loaded at 74,000PE, in excess of its 70,000PE design capacity. This growth will continue at an approximately linear rate through to 2045, at which time the Population Equivalent will be 108,500. Such significant expansion of Perth has required a holistic strategy to be developed so that water supply, wastewater collection, wastewater treatment and bio-resource treatment, are all capable of meeting the growth demand.</p> <p>The Stage 2 appraisal considered 4 options to address a number of needs for the Perth Area and formed the basis of an overall strategy to treat wastewater for the expanding city, and to ensure Perth WwTW could still operate as a sludge treatment hub for Perth and surrounding area. Two options were taken forward to Stage 3a and 3b appraisals:</p> <ul style="list-style-type: none"> <li>• Option 2: provision of a new WwTW at North Muirton</li> <li>• Option 4: upgrading Perth WwTW and reinforcing the network in Perth City Centre upstream of South Inch CSO</li> </ul> <p>The recommended option was to upgrade Perth City WwTW (Option 4). Only minor changes to the scope occurred between Stage 3b and Stage 4, and Option 4 continues to be the basis of the recommendation to proceed.</p>
Stage 4	May 2023	
<b>RCI Newfield Pump Station to Broadmuir Trunk Main.</b>		<p>The existing 12" PVC Trunk Main from Peterhead (Newfield PS) to Ellon has been causing numerous high profile recurring interruptions to supply. Due to the reputational impact associated with these frequent pipe failures an operational plan is in place to effect repairs to this 25km long rural pipeline. In the region of 700 domestic customers are affected along with almost 50 non-domestic customers (including the key customer Brewdog). This is mitigated through partial short-term rezoning with all</p>
Stage 4	June 2023	

		<p>customers normally being back in water within a 4-to-6-hour period.</p> <p>In addition to the requirement to replace the water main to avoid on-going interruptions to supply, there is significant planned growth within the Ellon Corridor, including the supply of the Brewdog Brewery in Ellon.</p> <p>Our Strategic Plan sets out the objective to transform the interconnectivity of our major water supply systems to increase their resilience. Where there is an opportunity to size replacement transfer mains such as this, sizing should match available surplus raw water capacity, in this case 15Ml/d available at Forehill WTW which could be used to support the Invercannie / Mannofield system in the future. Therefore, this main has been sized to allow this future resilience flow, which can provide protection for up to 65,000 properties.</p>
--	--	---

## **A review of lessons learnt from the delivery of PIA forecast in the last quarter.**

An overview of the appraisals at Stage 2/3a/3b/4 that were forecast to be delivered during Q1 2023/24 and the appraisals delivered is shown in Table 3, Appendix A.

The purpose of Table 2 is to provide internal visibility to enable forward planning for Level 1 and 2 needs and to ensure enough work is being appraised to support the investment programme. It is not intended to be a fixed set of dates and the dates presented are the earliest that those will be achieved.

A target of c.50% of milestones to be achieved is set due to the dynamic nature of the programme. Although 8 PIAs were presented in line with the forecast, only 7 PIA stages were achieved as more work was requested for Turriff WTW. This is 33% of the initial forecast which is down from 49% in the previous quarter. There are two main themes driving the missed forecasts:

- Repriorisation due to workload. This affected 29% (6) of the forecast projects which had forecasts adjusted to the following quarters in line with the dynamic programme. As an example, Blairlinnans and Milngavie Resilience was adjusted as the team were diverted to focus on managing the recent drought conditions across Scotland.
- Scope and costing. This affected 19% (4) of the initial projects. This has been driven by awaiting Net Present Cost and Carbon (NPCC) assurance in some cases and at Torwood WwTW a review of an option due to a cost increase within the project.

Work to minimise the time associated with these activities in the last quarter is ongoing. However, the water teams are currently operating with fewer resources as a result of recent leavers and long-term absences. Recruitment to fill vacancies has proved challenging due to the limited number of suitable candidates and our framework consultancies also have limited resources available for secondment to support the optioneering activities in the short to medium term.

## **Benefits of improved project level decision making**

Benefits of improved project level decision making are being tracked by the SIDM Programme as part of the Transformation metrics, assessing Tier 1 and 2 cost avoidance, NPCC and carbon.

**Table 2:** Appraisal at Stage 3a/b and 4 anticipated for Q1 compared to actuals.

Appraisal	Portfolio					
	Water		Wastewater		Customer Engagement and Flourishing Scotland/other	
Stage	April 23 forecast	July-23 actual	April 23 forecast	July-23 actual	April 23 forecast	July-23 actual
Stage 2: Strategic Optioneering Review (G40)	3	3	0	0	0	0
Stage 3a: Outline Investment Appraisal (G50)	1	0	3	0	0	0
Stage 3b: Outline Project Appraisal (G70)	5	1	2	1	0	0
Stage 4: Project Appraisal for Commitment (G80/90)	5	2	2	0	2	2

### Projects reforecast by 12 months

In line with the dynamic programme a small number of projects have been reforecast by >12 months since the baseline forecast in April 2022. These are listed in Table 3 with the known consequences explained.

**Table 3: Projects reforecast by >12 months**

Project	Name	PIA Stage	Original stage forecast dates (Sept-22)	Current stage dates (Jul-23)	Reason for the movement	Implications
505579 0000	SR21 Roberto n WTW	Stage 2	August '22	May '24	Plan-Prepare site – re-prioritised to allow delivery of appraisals for sites under enforcement by required dates.	No impact on SR21 investment, WQ risk lower than others now prioritised for appraisal.
509438 0000	SR21 Milngavie WTW	Stage 2	October '22	May '25	Plan only site, accelerated for appraisal following issues with Leopold filter floor failures. Technical appraisal work to date has concluded repair and maintenance of floors should continue with appraisal of longer-term water quality risks de-prioritised to allow focus on higher priority sites.	No impact on SR21 investment, WQ risk lower than others now prioritised for appraisal.
510139 0000	SR21 Glendevon WTW	Stage 3a	July '22	October '23	Site added to programme following two WQ incidents, appraisal to date has identified interim controls that have been delivered on site have reduced immediate risk and allowing de-prioritisation and focus on higher priority sites.	No impact on SR21 investment, WQ risk lower than others now prioritised for appraisal.
511832 0000	SR21 Lomond Hills WTW	Stage 2	Sept 23	Feb 24	Plan-Prepare site - re-prioritised to allow delivery of appraisals for sites under enforcement by required dates. May be re-prioritised following Leopold floor filter failures to appraise long term options.	No impact on SR21 investment, WQ risk being reviewed following repair of filter floors.
506510 0000	SR21 Stornoway WTW	Stage 3a	March '22	April '24	Plan-Prepare site – re-prioritised to allow delivery of appraisals for sites under enforcement by required dates.	No impact on SR21 investment – higher priority to restart after Enforcement sites due to asset condition.
504557 0000	SR21 ES Torra WTW	Stage 3b	September '22	November '23	Delivery team have been appraising technical choice of membrane (ceramic/spiral NF/tubular NF) close costs, carbon and benefits has taken longer to test rigorously.	No impact on SR21 investment, links to delivery of Crathie WTW replacement project (514067), which will reuse the temporary NF treatment unit at Torra.

					Now complete stage 3B expected in next Quarter.	
507254 0000	SR21 Eela Water WTW	Stage 3b	September '22	September '23	Delivery team have been appraising technical choice of upgraded WTW against strategic replacement follow cost movements. Work complete option Stage 3b expected in next quarter.	No impact on SR21 investment, WQ risks associated with operation of clarifier being mitigated with interim controls, medium term risk from clarifier and TWST structural condition should be manageable within timescales.
502916 0000	EFOS – Riverside Road Galson	Stage3a	July '22	October '23	New information on a nearby flooding cluster which required further investigation - additional properties investigated to be added to the At-Risk Register (ARR).	Additional customer interviews, surveys undertaken to establish At Risk Register (ARR) risk and reworking of the preferred solution required including additional modelling.
502762 0000	Eastern Stirling Villages - Growth	Stage 3a	June '22	August '23	Further Optioneering -	Short to medium term growth is being accommodated by optimisations at Plean and temporary treatment at Cowie – delivered under a sub project.  Costs are being re-assessed to understand when the right time is to invest in a centralised WwTW vs. continual refurbishment of existing assets. The key growth development, Durieshill, has shown no progress over the past year. Engagement with developer to establish likely build out / timescales is ongoing.
503212 0000	Skellyton WwTW – Growth	Stage 3a	June '22	February '25	Further Optioneering – RCA required and confirmation of Formula A from SEPA. Variation licence may be suitable.	Opportunity for solution to be a no build if licence variation is accepted by SEPA.

## Forecast for 23/24

The forecast for 23/24 is shown below (Table 4).

**Table 4:** Forecast of project appraisals at each gateway to be delivered during the following quarters of 23/24

2023/2024	Q1	Q2	Q3	Q4
Stage 2 Strategic Options Review (G40)	1-3	4-8	3-6	6-11
Stage 3a Outline Investment Appraisal (G50)	2-4	5-10	5-10	6-12
Stage 3b Outline Project Appraisal (G70)	0-1	6-11	7-14	8-15
Stage 4 Project Appraisal for Commitment (G80)	1-2	5-9	3-6	5-10

## 5. Summary

The IPPDG members are asked to:

- Note the developing maturity of the current Investment forecast.
- Note that the Q1 Progress to Committed List (PCL) was 112.3%, indicating that the rate of overall progress is more than sufficient to achieve planned investment levels.
- Note the progress and learning on project investment appraisals.



© Crown copyright 2023

**OGL**

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](https://nationalarchives.gov.uk/doc/open-government-licence/version/3) or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at [www.gov.scot](http://www.gov.scot)

Any enquiries regarding this publication should be sent to us at

The Scottish Government  
St Andrew's House  
Edinburgh  
EH1 3DG

ISBN: 978-1-83521-579-1 (web only)

Published by The Scottish Government, November 2023

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA  
PPDAS1380794 (11/23)

**W W W . g o v . s c o t**