
STATES OF JERSEY



BRIDGING LIQUID WASTE STRATEGY 2023-2026 REVIEW (S.R.1/2024): RESPONSE OF THE MINISTER FOR INFRASTRUCTURE

**Presented to the States on 19th March 2024
by the Minister for Infrastructure**

STATES GREFFE

**BRIDGING LIQUID WASTE STRATEGY 2023-2026 REVIEW(S.R.1/2024):
RESPONSE OF THE MINISTER FOR INFRASTRUCTURE**

Ministerial Response to:	S.R.1/2024
Ministerial Response required by:	27th February 2024
Review title:	Bridging Liquid Waste Strategy 2023-2026 Review
Scrutiny Panel:	Environment, Housing and Infrastructure Scrutiny Panel

INTRODUCTION

The Bridging Liquid Waste Strategy 2023-2026 was first issued on 14th September 2022 and presented to the States Assembly on 2nd May 2023. The Scrutiny Panel review has only been issued in January 2024 and I&E have had to progress in the meantime in order to meet the Bridging Island Plan 2022-2025 aspirations.

FINDINGS

	Findings	Comments
1	The sewerage network (made up of 109 sewage pumping stations and rising mains) is at “a critical point” and a number of critical assets are now over 60 years old. It is acknowledged that pumping stations were designed when the Island’s population was a fraction of the current figure, and the network has reached the point where there is no spare capacity in the system.	Agreed
2	To address challenges in the short-term, a number of solutions or ‘emerging projects’ have been identified in the Bridging Liquid Waste Strategy 2023-2026 which consist of network upgrades; rising mains replacements; surface water separation and increasing storage capacity.	Agreed
3	Prioritisation of liquid waste emerging projects is based on a number of factors which are often interrelated. Key factors affecting prioritisation are age and condition of an existing asset;	Agreed but it should be noted that there has been particular pressure arising from the provision of affordable homes as set out in the Bridging Island Plan 2022-2025. This has acted to skew the

	Findings	Comments
	recurring failures or lack of performance; risk to public; provision for climate change; provision for growth; and other strategic drivers such as the Island Plan and Government Plan.	prioritisation since the Bridging Liquid Waste Strategy 2023-2026 was published.
4	The Bridging Liquid Waste Strategy 2023-2026 represents a “coherent plan to address the issues through specific asset-based network interventions.” However, it represents more of an asset management plan, as opposed to a full strategy. Exact needs are not established due to considerable uncertainty of where or when the growth is likely to occur and the absence of information on service failures. Additionally, the lack of potential alternative approaches makes it difficult to assess whether the plan represents the best approach versus alternatives.	<p>As is noted in the Bridging Liquid Waste Strategy 2023-2026, it is not a full long- term strategy. It addresses the period of 2023-26 and particularly the schemes that are required urgently while also identifying the longer term issues that I&E will need to begin to lay the groundwork for within that same period while the 2025-35 Liquid Waste Strategy is prepared (See KF14/17 and REC3).</p> <p>We accept that KF4 acknowledges the lack of certainty in where development and growth will occur, however, waiting for ‘real’ developments to come forward will mean they are still delayed due to lack of capacity. If nothing else, the core of the Bridging Liquid Waste Strategy is to be less reactive and return the system as a whole to a level of robustness that is suitable for the future.</p> <p>We would disagree with the statement that alternative approaches have not been considered. While they may not have been repeatedly reviewed in the context of each Emerging Project, the principals of how the preferred concepts have been arrived at are explained.</p> <p>It should also be noted that every major project will be the subject of a full Feasibility Study. The Bridging Liquid Waste Strategy is not the ‘be all and end all’ of the design selection process, this is discussed further against several other Key Findings and Recommendations.</p> <p>Similarly, the Bridging Liquid Waste Strategy is not intended to be the Business Case upon which funding is approved (See REC 23 response).</p>
5	Despite a number of sites being approved for re-zoning for affordable housing in the Bridging Island Plan 2022- 2025 States’ debate in 2022, sewerage and drainage network	Agreed and this has informed I&E’s prioritisation of schemes in the Bridging Liquid Waste Strategy and these have been continually refined during 2023.

	Findings	Comments
	capacity issues have resulted in delays to delivering the affordable housing delivery targets specified in the Bridging Island Plan 2022-2025.	Not progressing quickly with some schemes will only extend the delay to delivery of affordable homes.
6	It is asserted that 1 in 4 existing homes in Trinity are not connected to the mains sewerage network and there is perception that there is a focus on accommodating and prioritising sewerage and drainage capacity for new development but not for existing homes. Trinity is not identified as a ‘pinch point’ in the Bridging Liquid Waste Strategy 2023-2026, however, it is acknowledged by the Infrastructure and Environment Department that Trinity is at capacity and will need another strategic storage unit in the West Hill area to accommodate the additional flow.	<p>Agreed.</p> <p>Connecting existing homes is the purpose of the Foul Sewer Extension schemes. Unfortunately, Foul Sewer Extension Schemes will always be subject to a cost- benefit analysis in terms of how many properties can be connected to any new section of pipe.</p> <p>The connection of existing properties to an existing sewer is assessed in the same way as new developments and if there is spare capacity they can be connected. The Emerging Projects and other programmes of work will therefore benefit any existing property wishing to do this.</p> <p>Sections 3.4.3 in the Bridging Liquid Waste Strategy discusses Foul Sewer Extension Schemes and the improvement in connected properties since 2013.</p>
7	Data on the number of applications to connect onto the main foul sewerage network is deemed “possibly insufficient”.	<p>All Planning Applications for new developments or extensions to existing properties are recorded and assessed for their impact on the network as part of the Drainage Impact Assessment process. (REC4 also refers).</p> <p>Applications for an existing property to connect to an existing local sewer have been declining in recent years (2021 – 38, 2022 – 30, 2023 – 19). They can be received for various reasons:</p> <ul style="list-style-type: none"> Removal of septic tank. Formalise an existing connection. Failure of the existing connection. Surface water separation. No existing legal right to drain to the public sewer.
8	The exact location and timing of new housing development is uncertain, and the Government of Jersey’s preferred strategy is to complete capacity works within the next 5 years. The Panel’s expert adviser deems that if upsizing is	The intent of completing the capacity works in five years is driven by the Bridging Island Plan’s stated aim to provide 4,000 homes by 2025 and 8,000 by 2030.

	Findings	Comments
	<p>undertaken well in advance of development, there is a risk that the additional capacity is under-utilised or not utilised at all if new development does not proceed. This will result in a “suboptimal investment plan”.</p>	<p>I&E would concur that upsizing could be under-utilised in the early years, but the lack of existing capacity means that ‘do nothing’ is not an option. Addressing the issues piecemeal, e.g. build enough to meet current demand and then build more later for future growth will be more expensive in the long run. Only addressing current problems will also still delay future development as the necessary capacity will not be available.</p> <p>However, short term phasing of construction (e.g. construct storage as two tanks so that one can be brought online for immediate benefit while the second is built) is being explored as part of the design development.</p> <p>Given the trends of climate change and population growth there is considered to be no risk of any of the proposed assets not being utilised at all. I&E are not in a position to gamble on development not taking place and thereby not delivering the aims of the Bridging Island Plan.</p> <p>The significant time required to assess, design and construct both the new assets and a substantial housing development does not appear to have been considered in this finding.</p>
9	<p>One of the less well addressed aims of the Bridging Liquid Waste Strategy 2023-2026 is surface water management and identifying areas where works are required to reduce flooding risks.</p>	<p>I&E accepts that prioritisation of surface water schemes is limited within the Bridging Liquid Waste Strategy but the reasons for this are discussed in detail in Section 7. In summary part of I&E’s Liquid Waste Strategy is the development of the Surface Water Management Plan, which relies on the collection of actual rainfall data to verify the model and identify appropriate works.</p> <p>Since the Bridging Liquid Waste Strategy was published in 2022 I&E have developed the Surface Water Management Plan during 2023 for areas where data was already available, including flood maps to identify the areas at highest risk. In parallel with this I&E have also completed a programme of installation of monitoring equipment in places that did not already have monitors. Data gathering has now been ongoing for 10-12 months at these sites allowing the next</p>

	Findings	Comments
		phase of the Surface Water Management Plan to be developed in 2024.
10	Emerging approaches to drainage and wastewater management across the UK go beyond asset management and both water and wastewater plans are integrated to identify efficient solutions that address both services such as Sustainable Drainage Systems, rainwater harvesting and reduced consumption.	<p>Sustainable Drainage Systems is a requirement of all new developments as stated in section 7.5 of the Bridging Liquid Waste Strategy. It is not always easy to fit retrospectively and it would then be at GoJ cost, not the developer's cost.</p> <p>We would agree that more Surface Water Separation will help but Sustainable Drainage Systems take up space, see also comments on Surface Water Management Plan above.</p> <p>Making rainwater harvesting a planning policy is not within I&E's remit as part of the Bridging Liquid Waste Strategy. We would of course be happy to support in any initiatives to promote more efficient water usage.</p> <p>These emerging opportunities are discussed in section 5.4 of the Bridging Liquid Waste Strategy.</p>
11	The Isle of Wight successfully trialed the provision of 250 free "leaky" water butts in the village of Havenstreet in summer 2022. The butts store 200 litres of rainwater each of which then slowly releases into the drainage network rather than arriving as a peak flow which would trigger overflows. Nearly 72 per cent of households are using them on one road and the nearby storm overflow, which previously activated 27 times a year when it rained more than 5mm, caused only one spill during a six-month trial. The trial has been extended to a further 1000 homes in a different part of the island.	<p>No issue with this and agree it would help but would note that relying on the public to maintain these items means they cannot be relied on as part of the permanent solution. Supply and installation of this type of initiative will need GoJ funding.</p> <p>On a technical point, leaky water butts used in this way will only help on combined sewer systems. The system in St Helier is largely combined but in the more rural areas the systems are generally separated.</p> <p>Inflow of surface water to foul sewers in rural areas comes from 'slow response' field run off getting into road gullies, manholes and/or infiltration to pipes.</p>
12	Sustainable drainage systems (SuDS) are considered, by the Government of Jersey, as a top priority to get rid of the surface water for new developments, however, the Infrastructure and Environment Department consider that SuDS will not work in all areas, for example, clay soil areas of the Island.	<p>Refer to answers to KF9 and KF10 above re: the Surface Water Management Plan and Sustainable Drainage Systems.</p> <p>Attenuation or separation As discussed in KF11 above, most of the system outside of the larger settlements is already</p>

	Findings	Comments
	<p>The Panel's expert adviser deems that there are, however, different types of attenuation or separation approaches to SuDS which could be utilised. For example, water harvesting on new development for uses such as flushing toilets, or external use such as watering plants.</p>	<p>separated. We would also note that any separated surface water still has to go somewhere, such as: stored (tank or pond) soakaway discharge to stream or sea</p> <p>Water courses around the island are small and Jersey Water has resisted discharge into reservoir catchments. Similarly, I&E have met resistance from Natural Environment Teams on schemes to discharge surface water to St Aubin's Bay.</p> <p>I&E do not have carte blanche to dictate policy or simply build and/or discharge in any location they may wish. Dealing with surface water 'at source' is therefore not a simple matter of identify a scheme and construct it. Projects can be blocked/delayed by other GoJ departments as well as Jersey Water, so a wider set of priorities has to be established beyond I&E and the Bridging Liquid Waste Strategy.</p> <p>Water Harvesting Agreed, the benefits of this and any other water usage efficiency are clear, but I&E are not in a position to set the planning policy that would be required to enforce this on new developments. As above, I&E are happy to support any initiative in this direction. Other options and opportunities are also discussed in section 5.4 of the Bridging Liquid Waste Strategy.</p> <p>We would also note that rainwater harvesting inevitably creates an extra maintenance liability (pumps etc) for the building/development owner. Ownership of this is clear for commercial developments or blocks of flats where there is a leasehold arrangement. It is more complex for private housing developments unless it is applied individually to each house.</p>
13	<p>The Infrastructure and Environment Department does not have direct access to Jersey Water's testing data and therefore makes the assumption that if streams discharging into St Aubin's Bay contain nutrients then it is likely that Jersey's water sources do.</p>	<p>Agreed.</p>

	Findings	Comments
14	A stakeholder engagement or consultation process did not feed into the preparation of the Bridging Liquid Waste Strategy 2023-2026.	<p>Accepted. The Bridging Liquid Waste Strategy is primarily a response to the Bridging Island Plan and to thereby inform the upcoming (at the time) Government Plan.</p> <p>As noted in other key findings, the Bridging Liquid Waste Strategy was prepared 'blind' of the necessary new population models and housing development programme.</p> <p>Furthermore, the new population models based on the 2021 Census are still awaited as of February 2024.</p>
15	Early engagement with the construction industry on long- term capital works planning is essential for the smooth delivery of large-scale Government of Jersey capital projects.	This has already been recognised by I&E Liquid Waste and in 2023 we began the process of setting up various Contractor Frameworks to streamline procurement and facilitate Early Contractor Involvement (ECI). This initiative was then adopted by I&E as a whole which has delayed the establishment of the Main Contractor Framework for construction but has not affected delivery of the key strategic projects.
16	Failure to engage communities is considered by the Panel's expert adviser to reduce the chance to gain support for more innovative approaches to addressing future wastewater challenges, as well as the expectations of value to be created through these investments. It is advocated that there needs to be improved consultation and engagement with users over priorities, as well as engagement with communities on solutions.	<p>I&E fully agree with this finding but consider that seeking engagement from a very wide audience of stakeholders at too early stage, ie without a considered concept to discuss, can be counter-productive and alarming. Abortive work must be minimised but at the same time we find stakeholders are more forthcoming when they have something to comment on rather than asking them to fill in a blank page of 'what do / don't you want?'.</p> <p>The above is why I&E's approach to the Bridging Liquid Waste Strategy was to address the requirements of the Bridging Island Plan and then progress to detailed stakeholder engagement based on the preliminary concept solutions for each key scheme.</p> <p>Innovation This is understood and I&E Liquid Waste have a track record of being 'early adopters' of technology. Indeed, this was a key part of extending the life of the old Bellozanne STW. However, account must also be taken of the time</p>

	Findings	Comments
		<p>required to identify and test innovative approaches given the Bridging Island Plan's aspirational programme for development (KF8).</p> <p>Engagement It would be our understanding that the Bridging Island Plan is setting the high-level priorities that we need to meet. As above, we firmly believe that the most constructive engagement with communities is based on presenting a concept so the needs are understood and can be explained. This concept can then be adapted to address concerns and feedback.</p>
17	<p>A comparative analysis from other island jurisdictions shows that features of good practice wastewater strategy development are clarity of a strategic direction; engagement with users over priorities; clear options analysis; clarity on the overall size of the challenge; development of long-term objectives and adaptive approaches; and engagement with communities on solutions.</p>	<p>This is absolutely true when the existing assets are not already approaching or at breaking point. The lack of past investment means that rapid reinforcement of the existing network is required now and we cannot wait any longer to begin this process.</p> <p>We believe the Bridging Liquid Waste Strategy clearly describes the scale of the challenge in meeting the short, medium and long-term objectives and priorities of the Island Plan and other policies.</p> <p>Given that the priorities are provision of affordable housing as well as wider development for population growth, the liquid waste system needs to be improved in advance of these being built. We cannot wait to see whether new planning policies or water usage initiatives give the expected benefits before starting.</p> <p>I&E are not seeking to build every project immediately. The reality of funding availability means that this is an extended programme of works and initiatives that have not yet been introduced can be taken account of in later designs. The first schemes to be built are in the areas with most immediate need and we must provide robust solutions to account for the current uncertainty.</p>
18	<p>The nine key characteristics of a Water Strategy are considered by Arup and Indepen UK to be: systems mindset;</p>	<p>We do not disagree with these principles but our response to KF17 applies here equally.</p>

	Findings	Comments
	resilient & adaptive approach; distributed mix of solutions; total value perspective; progressive partnerships; place & community outlook; collaborative citizen & customer base; and a robust social contract.	<p>On the point of a ‘robust social contract’ we would note that this extends beyond the provision of water and wastewater services. Clearly this begins with the aims of the Island Plan (and Bridging Island Plan) and the wider social contract requires infrastructure to be fit for purpose in meeting those aims.</p> <p>The document ‘A future for water’, which these characteristics are taken from, makes reference to moving away from ‘grey assets’ to nature-based solutions. I&E would support this but note that land is at a premium on Jersey and ‘grey assets’, e.g. storage tanks, can have a smaller footprint and be returned to the original use after construction.</p>
19	The total amount of funding required for key liquid waste projects between 2023-2026 is anticipated to be in the region of £39m with a further £13m required in 2027. Although funding has been agreed in the Government Plan 2024-2027 for the years 2024 and 2025, the agreed funding amounts will not cover some of these projects through to completion and therefore this money will need to be ring-fenced and additional funding secured in 2026 for completion of these projects. Other projects will not be able to commence until longer-term certainty of funding approval can be provided from 2026 onwards.	<p>Agreed. I&E will require some level of guarantee of funding at the point of award of multi-year contracts.</p> <p>Investigations and engineering work can be completed in advance so that designs are ‘on the shelf’ for future years but this does not change the fact that construction could take 12-24 months depending on the scale and complexity.</p>
20	There is a need for better longer-term planning and funding of capital projects across Government.	This has been underway between I&E and Treasury throughout 2023 based on the Bridging Liquid Waste Strategy. Initially discussions were for the period to 2027 but this was later extended to 2030 and now to 2050.
21	The Government of Jersey is exploring a sustainable funding mechanism which will include developing ‘user pays’ charges in relation to all aspects of waste charges, including commercial and domestic liquid and solid waste with a view to this being agreed in the	Following on from the response to KF20, sustainable funding mechanisms for long term funding is being explored. Notwithstanding, a Letter of Comfort is under consideration by the Treasury for the funding required in 2026 in order to complete the current liquid waste projects.

	Findings	Comments
	next Proposed Government Plan 2025-2028.	
22	Although the impacts of climate change are already being observed and requiring consideration of investment for adaptation, funding for surface water drainage would not currently sit within the terms of reference for expenditure under the Climate Emergency Fund. If funding was to be drawn from the fund for this purpose it would require a change in the Fund's terms of reference.	Notwithstanding the terms of reference of the Fund, flooding is generally accepted to be worsening due to climate change and is seen around the world to cause disruption and damage to people's lives and livelihoods. Should it be decided to draw funds from the Climate Emergency Fund to carry out construction works we believe it would be difficult to deny the relevance of that expenditure.
23	An amalgamation of Jersey Water is under consideration as a strategic option to addressing the current siloed and inefficient approach of water supply being delivered by an arm's length organisation and drains maintenance and management being delivered internally by the Government of Jersey.	This has been under review at several points in the past and I&E will continue to engage with discussions on this matter. Any initiatives regarding water usage efficiencies and the like will certainly be most effective if jointly presented.
24	There is perceived to be general agreement within the Government of Jersey that development contributions to drainage should be proportionate to the scale of development and that whilst developers should contribute for connection costs onto the mains network, they should not be expected to fund the historic underinvestment in the Island's sewers and drainage.	Agreed. We would further note that if developers of the Bridging Island Plan's rezoned fields for affordable homes are made to pay for network improvements, then the price of the affordable homes will only increase.
25	A comparative analysis of waste strategy business models in other island jurisdictions shows that all comparators have some element of user charging and can access long-term debt to spread the repayment of capital finance over many years. Likewise, all comparators have the additional responsibility for integrating the management of drinking water supply alongside their wastewater and surface water flood risk responsibilities.	Agreed.

	Findings	Comments
26	<p>The Bridging Liquid Waste Strategy 2023-2026 will increase charges significantly per household (£659) and beyond those of comparable island states. The business case presented prefers a potentially suboptimal case by prioritising early investment to manage risk over options to phase investment based on impending need. This results in a higher cost and opportunity cost that the money is not available for other uses.</p>	<p>£659</p> <p>We note that this figure is based on 44,500 properties making a single payment to arrive at ~£30m. Why does this figure not take account of the fact that the project spend is spread across multiple years (2023-26 in the Bridging Liquid Waste Strategy)? It therefore does not take account of using long term financed debt as it is noted that the comparable island states do.</p> <p>Query - Are the comparators based on a like for like position? The other figures appear to be based on their annual spend, albeit in different accounting years.</p> <p>Even if £659 was (simplistically) spread across three years the cost per household is £220/year which compares very well with the other island states and would meet the notional spend profile of £10m/year seen in our developing Capital Delivery Programme.</p> <p>Suboptimal Case See comments on KF8.</p> <p>Risk that “money is not available for other uses” If the projects are not progressed early, the problem of developments being delayed due to lack of capacity will not go away. The proposals in the Bridging Liquid Waste Strategy are an investment in the long-term future of the Island reflecting the Government’s stated aims in the Bridging Island Plan.</p> <p>It should be considered that wastewater management has always been a long-term endeavour – consider the fact that the original Bellozanne STW was built in the 1950's and only replaced in 2023 when population had doubled.</p>
27	<p>Implementation within the Infrastructure and Environment Department is siloed with separate funding and with few incentives for management of the whole system. The approach is considered suboptimal in terms of both investment and</p>	<p>It is not clear if this finding is in relation to Liquid Waste or I&E as a whole?</p> <p>We would disagree that delivery of Liquid Waste Revenue and Capital Projects are entirely siloed in terms of delivery. Funding is necessarily managed separately but, by assessing new projects through</p>

	Findings	Comments
	performance and is potentially less resilient. Furthermore, the strategy is based on a cost and risk approach with limited options presented and risks not quantified. This means it does not optimise investment and phasing.	<p>the Island-wide network model, it is easy to identify whether a scheme in one area could cause detriment elsewhere. In many cases network maintenance work is replacing existing assets on a like for like performance basis and no such assessment is required.</p> <p>If the point is aimed at, for example, co-ordination between Transportation and Liquid Waste, then we would note that every effort is made to co-ordinate work. Indeed, the road resurfacing programme is a key driver for the timing of surface water separation works in St Aubin's Road to be completed before the end of 2027.</p>

RECOMMENDATIONS

	Recommendations	To	Accept/Reject	Comments	Target date of action/ completion
1	The Minister for Infrastructure should ensure that service metrics are implemented and used to engage with and inform customers of sewer and drainage utilisation issues in 2024 and beyond. Customers should also be engaged in demand management and action to reduce sewer misuse.	MI NF	Accept	<p>REC1 is accepted in principle and we would welcome a discussion to agree which metrics would be considered most relevant.</p> <p>Existing telemetry data is available to show how often pumping stations run and the flow they deliver. Flow measurement in the gravity sections of the network is not as widely available but the same data that was used to verify the network model is available. The network model also clearly shows future utilisation issues and is the basis of the Bridging Liquid Waste Strategy as a whole.</p> <p>Other metrics mentioned, such as complaints and callouts to blockages or similar could also be gathered in an appropriate format.</p> <p>As stated in the Key Findings above, I&E would be happy to engage in developing any public awareness</p>	

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				programmes in conjunction with Jersey Water and other partners.	
2	The Minister for Infrastructure should review the pass forward strategy from the Island's network to preserve capacity at Bellozanne Sewage Treatment Works (STW) and capacity in the network in urban areas. The attenuation and pass-forward solution for Bonne Nuit STW should be reviewed in light of this. The aim of this would be to avoid the potential for a significant opportunity cost of these approaches.	MI NF	Reject	<p>Preserving capacity at Bellozanne is counter to the provisions of the 2013 WWS whereby Bellozanne was sized for a 2035 Population plus 20% for longer term growth. Taking this approach is also effectively adopting a strategy of under-utilisation which was a concern raised by the Panel in KF8.</p> <p>There is no capacity in the urban networks to be preserved. If capacity is released by diverting flow to new STWs around the Island the feasibility, design, planning approval and construction programme for one or more STWs will be far longer than that required for the proposed projects.</p> <p>For the specific case of Bonne Nuit, the option to upgrade the existing STW was reviewed for the Bridging Liquid Waste Strategy and a subsequent Briefing Note completed. It is viable to refit the existing STW but there is no space to expand its capacity. Without expansion, the proposed Mont Mado Foul Sewer Extension cannot progress. This Foul Sewer Extension scheme will offer up to 67 properties in the Bonne Nuit area an opportunity to connect to mains sewerage which will otherwise never be possible.</p> <p>This would appear to be counter to the intent of KF6?</p>	
3	The Minister for Infrastructure should ensure, ahead of the continued roll out of works, that the programme of liquid waste works identified in	MI NF	Reject	I&E consider that this exercise has already been completed in selecting the first key projects to meet the demands of the affordable homes on rezoned fields and the wider construction of houses in the areas identified by Planning as the preferred locations.	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	the short-term is considered to be 'low or no regret' to address urgent need and that certain aspects of the strategy, where there are currently gaps in the evidence, should be deferred until the longer-term Liquid Waste Strategy 2025-2035.			<p>The key gaps in evidence are the Population Growth Models from Statistics Jersey and confirmed locations for housing development.</p> <p>As discussed elsewhere, it is not viable to wait for absolute certainty and still create the required capacity in a timely way and thus minimise further delays to development of all sizes (KF4, KF14 and KF17 refer).</p>	
4	The Minister for Infrastructure and Minister for the Environment should work together to ensure that the Infrastructure and Environment Department keeps an accurate log of all applications (and refusals) to connect to the network from both existing and new development which would impact on the capacity of the network. This should include applications for planning for redevelopment or extension of impermeable area. This log should be maintained from 2024 so that the demand for new connections is reflected in the longer-term Liquid Waste Strategy 2025-2035.	ME NV / MI NF	Accept	<p>This is accepted insofar as I&E are already carrying out the majority of these actions.</p> <p>Since the Bridging Liquid Waste Strategy was issued, I&E have carried out Drainage and/or Flood Impact Assessments on every planning application for new build, extension or redevelopment of existing property that could impact the sewer network. The current Drainage Impact Assessment register can easily be extended to include the final accept/reject decision.</p> <p>However, to date, applications relating to extension of impermeable area in isolation have not been passed to us for review.</p> <p>A brief review of the Planning Portal indicates that not all new hardstanding requires planning permission and that discharge of rainwater to the highway requires only permission from the Highway Authority with no consideration of the impact of this water on the gullies and sewers.</p> <p>Each Drainage Impact Assessment adds the approved change to the network model and thus the 'take up' of spare capacity is monitored.</p>	

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5	The Minister for Infrastructure should consider, before the end of Q2 2024, a new option of progressing design works and identifying land for new infrastructure assets, but deferring investment until housing phasing is known. The aim being to avoid unnecessary tie up of capital that might be better deployed elsewhere.	MI NF	Accept	<p>'Design on the shelf' is already being considered and will be progressed when funding allows.</p> <p>There is a viable option to build significant housing developments in parallel with the construction of the relevant storage tank. Discussions with Developers indicate that they are interested in a parallel approach, for example development of field J1109 has been estimated to take 2.5 years which is comparable to the programme for West Hill.</p> <p>However, there are inherent risks in waiting for confirmed large developments before starting construction:</p> <ol style="list-style-type: none"> 1. Not progressing the key schemes at all will limit/prevent smaller development in the meantime. 2. Only building for the immediate need could sterilise a site by building a 'small' asset when we know a bigger asset is likely to be needed later. We only get one opportunity in each location as everyone recognises there is limited space on Jersey. 	
6	The Minister for Infrastructure should work collaboratively with the Minister for the Environment to review surface water management and identify areas where works are required to reduce flooding risks, making allowance for climate change in the absence of a complete climate	ME NV / MI NF	Accept	<p>This is accepted insofar as I&E are already carrying out these actions. Responses to KF9, KF10 and KF12 refer.</p> <p>Surface Water Management Reviewing flood risk and potential surface water schemes is already underway as part of the Surface Water Management Plan. The Surface Water Management Plan is currently focussed on the areas known to experience</p>	

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	change assessment. These considerations should be factored into a future Liquid Waste Strategy 2025-2035 and other associated strategies such as an Integrated Water Management Plan.			<p>flooding but will expand to the whole Island over time.</p> <p>Allowance for climate change Including for climate change is standard good practise and all projects and Drainage Impact Assessments / Flood Impact Assessments include this provision.</p>	
7	The Minister for the Environment should ensure that consideration is given by the Infrastructure and Environment Department before the end of Q3 2024 to reviewing its storm frequency information and levels of protection in line with the UK where standards of resilience are being extended for storm return periods due to increasing frequency of significant storms.	ME NV	Accept	<p>The first phase of the Surface Water Management Plan was completed in October 2023 and the second phase is expected to be completed by June 2024 on completion of further data collection currently underway.</p> <p>As a result of Event Barn and the Grands Vaux flooding, I&E are already developing rainfall models through discussions with Jersey Met for use with the network model and subsequently to be used in all relevant applications to provide a consistent tool.</p> <p>Once complete I&E will review how best to formalise and publish the conclusions with or through Jersey Met.</p>	
8	The Minister for the Environment should work collaboratively with the Minister for Infrastructure and key stakeholders to consider further options and bring forward proposals before the end of 2024 to incentivise developers to maximise water efficiency and rainwater harvesting with the aim of minimising impact on downstream sewers.	ME NV/ MI NF	Accept	<p>I&E are supportive of this recommendation in principle and await contact as a key stakeholder. I&E are already collaborating with Planning with a view to minimising the flows to the drainage network.</p> <p>We would note that Sustainable Drainage Systems is already mandatory for new development and that incentivisation is perhaps best done through Planning Policy and conditions.</p> <p>The measures referred could be included in the New Healthcare Facilities Project either in full or as a trial.</p>	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
9	The Minister for the Environment and Minister for Infrastructure should, before the end of Q3 2024, jointly consider the merits of implementing a trial scheme offering free 'leaky' water butts to residents in flood catchments areas with a view to funding being proposed for inclusion in the next Government Plan 2025-2028. The aim of the scheme being to slow down the flow of rainwater into the drainage network during periods of heavy rainfall.	ME NV / MI NF	Accept	<p>Accepted with the caveats outlined in KF11. I&E will review the new flood maps and consult the Operations team to identify a suitable catchment for a trial. We assume funding will be provided separately.</p> <p>Yorkshire Water and Northumbrian Water have network modelled similar proposals and reviewed benefits in the past. In those studies there was found to be a benefit but, in all cases, it was not considered reliable enough to be a permanent solution given that the public must maintain their own installation.</p> <p>Note that this will only benefit load at Bellozanne through combined systems which are limited outside of St Helier.</p>	
10	The Minister for the Environment should seek to establish a data sharing agreement between the Government of Jersey and Jersey Water to share information relating to Jersey Water's testing and consumption data before the end of 2024. This should specifically include water quality and water abstraction data to enable greater understanding of the water quality in the environment; and household water consumption data that will provide return to sewer data on predicted load.	ME NV	Accept	<p>A data sharing agreement between I&E's Environmental and Consumer Protection section and I&E's Land Resource Management section already exists. This will be reviewed and broadened as appropriate.</p> <p>Water quality and quantity data is routinely shared between these parties so as to minimise the duplication of monitoring and to combine data to enable a better understanding of the resource.</p> <p>Consumption data is published annually by Jersey Water in their annual reports.</p>	
11	The Minister for the Environment should	ME NV	Accept	This was proposed in the Bridging Liquid Waste Strategy as part of a	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	ensure that a partnered approach is taken with the Minister for Infrastructure and Jersey Water to implementing an Integrated Water Management Plan by the end of 2025.			holistic approach to water resources, consumption and waste management. It can only start after REC10 has been resolved. In 2023, available funding was used to establish the scope of the Integrated Water Management Plan. A business case to fund the development of this Plan was submitted to Treasury for the Government Plan 2024-2027, but was not received. The funding request will be resubmitted in 2024 for consideration. The MENV will also ensure integration with the development of the Island Plan (including Statistics Jersey outputs).	
12	The Minister for the Environment, in conjunction with the Minister for Sustainable Economic Development should consider, before the end of 2024, environmental land management payments to landowners for ecosystem services – particularly for water storage and retention or ground water management, as well as nutrient balancing.	ME NV	Accept	The availability of incentives to landowners to create flood plain is anticipated to facilitate finding sites but does not guarantee it.	
13	The Minister for Infrastructure should ensure that the Infrastructure and Environment Department facilitates early engagement with the construction industry on a programme of planned infrastructure capital works, so that industry are able to forecast and	MI NF	Accept	This is accepted insofar as I&E are already carrying out these actions. Response to KF15 refers.	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	resource themselves with more certainty and so they are able to deliver what is needed from them.				
14	The Minister for Infrastructure should ensure that there is improved consultation on the aims of a Liquid Waste Strategy through development of a strategic direction ahead of the Liquid Waste Strategy 2025-2035. The purpose being to ensure that a 'robust social contract' is formed to create shared responsibility and common purpose through co-creation of the strategy by engaging communities in the development of an Island Integrated Water Management Plan and other associated strategies such as the 2025-2035 Liquid Waste Strategy.	MI NF	Accept	<p>This is agreed but will need the recommendations of REC10 and REC11 to be in place complete.</p> <p>The development of a 'robust social contract' and any Integrated Water Management Plan must also be compatible with the provisions of the forthcoming Island Plan.</p> <p>This may require that planning policies are amended such that proposals to discharge surface water to sea or watercourse will be supported by default rather than objected to under Natural Environment policies.</p>	
15	The Minister for Infrastructure should ensure that the next longer-term Liquid Waste Strategy 2025-2035 encompasses the following best practice features: clarity of a strategic direction; engagement with users over priorities; clear options analysis; clarity on the overall size of the	MI NF	Accept	<p>Agreed but bearing in mind responses to KF17, KF18 and REC23 below.</p> <p>We note that the ability to fully satisfy all of these aspects will require the equivalent full Island Plan to be available or to have key points agreed to ensure consistency.</p> <p>It should be noted that the ultimate 'size of the challenge' is driven by growth and not the current conditions so a consistent</p>	

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	challenge; development of long-term objectives and adaptive approaches; and engagement with communities on solutions.			<p>set of data to be used by all parts of GoJ is essential.</p> <p>While opinions will vary to a degree in different communities, the feedback from Stakeholders on the initial strategic projects is expected to provide a solid baseline position.</p>	
16	The Minister for Infrastructure and Minister for the Environment should work collaboratively to ensure that a future Water Strategy is delivered before the end of 2025 and should encompass the key characteristics as outlined further in Arup and Indepen’s model of ‘A new future for water’ .	ME NV / MI NF	Accept	Accepted with the caveats discussed in preceding points that this will require collaboration with Jersey Water and the Island Plan to ensure consistency.	
17	The Minister for the Environment and the Minister for Infrastructure should, within the timescale of the current Bridging Liquid Waste Strategy 2023-2026, work collaboratively to deliver a Strategic Direction describing, subject to consultation, how new approaches might take shape in the Island Plan, an Integrated Water Management Plan and other strategies such as the Liquid Waste Strategy 2025-35. Government should review and consult on a wider range of water management options to	ME NV / MI NF	Accept	<p>Accepted with the exception of the proposed programme, please can clarification of the intent be provided as below.</p> <p>Noting the requirements of REC10, REC11, REC14, REC15 and REC16 which must all inform a Strategic Direction, the proposed programme is considered unachievable if publication by the end of Q3 2024 includes a period of consultation.</p> <p>However, if the document is to be issued at end Q3 2024 for consultation to take place then the programme is ambitious but achievable.</p> <p>We would note that I&E retain the position that the preparation of such a document cannot be allowed to delay our early and ongoing projects that will</p>	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	give an adaptive long-term resilience plan. The Strategic Direction should be consulted on during 2024 and published on the Government of Jersey website by the end of Q3 2024.			address immediate issues and the provision of affordable homes. It should also be noted that the Planning Applications for the Key Infrastructure Projects, including the immediate requirement for the Strategic Storage Projects, should be considered as critical and be given special consideration to fast track the delivery of these schemes to ensure that the progress of the Affordable Homes projects are not impeded.	
18	The Minister for Treasury and Resources should work with the Minister for Infrastructure to facilitate a longer-term approach to the planning and funding of key infrastructure capital projects and to deliver a solution prior to next Government Plan 2025-2028.	MT R / MI NF	Accept	This is accepted insofar as I&E are already carrying out these actions. Response to KF20 refers.	
19	The Minister for Treasury and Resources and the Minister for Infrastructure should work collaboratively to ensure that stakeholder engagement, both at a domestic and commercial level, be facilitated from the outset of scoping any future funding proposals on 'user-pays' charges in relation to waste charges. Stakeholder consultation should be undertaken in early 2024 to ensure that proposals can be brought forward in time for the	MT R / MI NF	Accept	This is accepted insofar as I&E have already been party to discussions on Liquid Waste charges and will continue to engage and support the Minister for Treasury and Resources on this matter. I&E note that this subject will be provocative and controversial so the timescale for achieving Stakeholder consensus seems unrealistic.	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	next Government Plan 2025-2028.				
20	The Council of Ministers should discount bringing forward any potential proposals to varying the terms of the Climate Emergency Fund at this time. Alternative options and solutions should instead be explored for funding surface water drainage projects to enable adaptation to climate change scenarios such as more frequent extremes of weather until such time as a long-term funding solution has been identified to increase revenue into the Climate Emergency Fund. At this point, the terms of the Fund should then be revisited.	Co M	Accept	<p>I&E note that the reasoning behind this recommendation is that Panel consider that the Climate Emergency Fund should remain focussed on addressing carbon reduction.</p> <p>This is clearly a matter for the Council of Ministers but I&E would note that flooding is a problem now and if funding is not available from elsewhere then projects to address an immediate issue that directly affects the communities and economy of Jersey will be delayed. If the intent is to derive funding from ‘user pays’ charging then it may be some time until a long-term funding solution is in place.</p>	
21	In consideration of a long-term funding solution, the Minister for Treasury and Resources and the wider Council of Ministers, should ensure that developers’ contributions for new development are considered in the mix of solutions for funding network reinforcement comparative to the additional load the new development will generate into the sewerage and drainage system and to ensure that customers (i.e. taxpayers)	MT R / Co M	Accept	<p>Upgrades to nearby sewer network assets, e.g. larger pumps, are already charged to developers as part of the approval process.</p> <p>As the Panel note in KF24, Developers should not be expected to fund the historic underinvestment in the Island’s sewers and drainage and it can be difficult to clearly distinguish where this stops and where their responsibility begins.</p> <p>It is absolutely right that the taxpayer should not subsidise development but this discussion must also consider how to prevent new affordable homes becoming unaffordable due to the cost of infrastructure upgrades being imposed on the Developer.</p>	

	Recommendations	To	Accept/ Reject	Comments	Target date of action/ completion
	are not left subsidising developers.			House building is part of the Bridging Island Plan with the intent of easing pressure on the housing market.	
22	The Minister for Infrastructure should consider an approach to phasing some sewerage and drainage network upgrades over a longer period. Options, such as (but not limited to) the replacement of Bonne Nuit Sewage Treatment Works with a pumping station, should be reviewed in the longer-term Liquid Waste Strategy 2025-2035 to determine whether there is an alternative solution offering better value for money through an Integrated Water Management Plan, including rainwater retention approaches such as Sustainable Drainage Systems.	MI NF	Reject	<p>Further extending the programme will potentially: Delay housing developments. Mean flooding keeps happening. Increase frequency of failure of life expired assets resulting in disruption and loss of service. Increase maintenance/repair costs.</p> <p>On the specific of Bonne Nuit STW, there is major maintenance / asset replacement required now. If this is carried out then I&E will effectively be committed to the Bonne Nuit STW solution for at least 15 years until those new assets also expire.</p> <p>As noted in our response to REC2, retaining the STW will prevent nearby houses being connected to main sewerage through the proposed Mont Mado Foul Sewer Extension because there is no space to expand the Bonne Nuit STW to almost double the current capacity to treat the additional flow.</p> <p>Furthermore, the Bonne Nuit catchment is already a separate system and therefore Sustainable Drainage Systems/rainwater retention schemes will have minimal benefit to the flow reaching the Bonne Nuit STW.</p>	
23	The Minister for Infrastructure should ensure that the Infrastructure and Environment Department reviews its risk tools and metrics to enable finer tuning of its investment	MI NF	Reject	<p>Risk Tools</p> <p>It should be noted that data like the population models are still unavailable. The housing development location and programme are also in a state of flux and outside our control. Under these circumstances, changing the tool is unlikely to have an impact. It is</p>	

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	<p>priorities. Furthermore, future strategic outline business cases should adopt approaches recommended by the HM Treasury Green Book which sets out an approach to investment to meet societal, economy and environment outcomes to create greater value. In addition, a wider set of options should be considered in the business case – specifically, deferring investment to match development, carrying out design work in advance and identifying land for infrastructure assets in the next Island Plan</p>			<p>imperative that I&E make good timely provision that allows essential growth to progress in the short term.</p> <p>Use of Green Book The Bridging Liquid Waste Strategy (and any future Liquid Waste Strategy) is not, and never will be, intended as a Strategic Outline Case or Business Case for the projects identified therein. While the Bridging Liquid waste Strategy considers the overall drivers, costs, risks and benefits of a scheme, it only supports the Green Book process without replacing it.</p> <p>Each project or programme of works has its own Business Case prepared in line with the Public Finance Manual. This is based on a Feasibility Study, or equivalent, and goes through all of the proper approval stages. Consideration of a 'Do Nothing' option is a mandatory part of the process.</p> <p>The risks associated with deferring investment until development is confirmed are covered in our responses to REC3 and REC5.</p>	

CONCLUSION

The Ministers for Infrastructure and Environment would like to thank the Panel for its work and look forward to progressing the Bridging Liquid Waste Strategy with the support of Scrutiny and to the benefit of Islanders.