



Dwr Cymru Welsh Water

Introduction to the Draft Drainage and Wastewater Management Plan 2024

Public Engagement Feedback Form:
Stakeholders and Regulators

July 2022



IN PARTNERSHIP WITH





Dŵr Cymru
Welsh Water
would like
to hear your
thoughts and
feedback
on our
Drainage and
Wastewater
Management
Plan (DWMP)

The DWMP is a long-term planning study which identifies our urban drainage, wastewater and sewerage needs over the next 25 years.

With this plan, Welsh Water combines previous methods of sewerage planning with the latest regulations and outlines how it will meet the requirements of the Welsh and UK governments to respond to the socioeconomic and environmental challenges of population growth, urban creep, and climate change.



A drainage and wastewater management plan (DWMP) will set out how water and wastewater companies intend to extend, improve and maintain a robust and resilient drainage and wastewater system. The plan must take a long-term view ... with a minimum period of 25 years. The framework for DWMPs has been developed in response to the need to improve the approaches taken by the water sector to long-term drainage and wastewater planning with a view to providing greater transparency, robustness and line of sight to investment decisions that lead to cost to customers.

Water UK, September 2021



The DWMP is a framework for developing a shared vision for environmental water quality, drainage, and wastewater management. Ultimately, the DWMP is a plan driven by the water company for the benefit of the environment and customers in Wales and adjacent regions of England.

The DWMP will cover the following:

- How we intend to manage future challenges to the operation of our assets, in response to three principal threats: population growth, urban creep and climate change.
- How we intend to extend, improve, and maintain drainage and wastewater systems across the company area.
- How we will plan for the long-term, with proposals for investment that are relevant to the risks we face over a minimum of 25 years, to 2050.
- How we demonstrate greater transparency, robustness, and line of sight for investment decisions that affect our customers.

The DWMP is a blueprint for achieving the strategic vision which we set out in our Welsh Water 2050 document. This document sets out 18 strategic responses which outline how we intend to respond to future trends that are likely to have a significant impact on the delivery of our service. They cover a range of areas, including wastewater, customers, communities, and the environment. The DWMP is a best practice response to these, based on established processes, such as Water Resources Management Plans (WRMP) and Sustainable Drainage Plans (SDP).

This first version of the DWMP is referred to as 'Cycle 1'. Some key elements of the plan have been developed in this cycle whilst other areas are still being developed. Trials will be conducted during this phase, and best practices will be drawn and then incorporated into future cycles. Those cycles are expected to align with the 5 yearly Price Review (PR) cycle, through which we are funded.





Services Covered by The Plan

DWMPs will examine wastewater networks (foul, combined, and surface water), interconnections with 3rd party and privately owned drainage systems, Wastewater Treatment Works and the effects on the waters we discharge to (i.e., rivers, streams, groundwater, estuaries, and coastal waters).

The DWMP is designed as a single overarching plan for the management of sewerage and drainage. However, these two aspects are distinct and require subtly different consideration.

Sewerage (foul, combined and surface water) – how to collect, transport, treat and return it to the environment.

Drainage – how to manage other drainage networks that impact our wastewater system across a geographical area

To consider both sewerage and drainage elements the DWMP looks at future trends and embeds an approach of working together with others to plan and identify solutions.



Wastewater Affects Everyone

You may be asking yourself how this work may affect you, or why you should read on to find out more; the answer is simply that wastewater affects everyone. One of the most important things that we do to protect public health at Welsh Water is taking away wastewater from homes, business, and communities so it can be treated and safely returned to our rivers and the sea.

We all use water every day to drink, cook, clean, bath and flush the toilet. Many of us enjoy living by the sea, fishing, or relaxing near canals and rivers. Clean water is also important for running businesses; without it, restaurants can't supply food and drinks, hospitals can't perform vital operations or clean equipment and fire services can't put out fires. It's also vital for farming because without it, you can't grow grass and crops or clean and sustain livestock.

Ensuring we have a clean water supply depends heavily on the way we manage drainage and wastewater. As the demand for clean water continues to go up, the amount of untreated sewage from homes and businesses will go up too. The way we manage this is important as it will shape the future well-being of Wales and the environment that we all share. It will also play a key role in meeting growing demand for water and supporting more sustainable industry and farming.

Find out more about the importance of drainage and wastewater to our lives by checking out our e-learning course.



How to Provide Your Feedback

Each survey is classed as one consultation response. If you are completing this form on behalf of another person or group of people, please submit separate feedback forms to help us analyse your feedback.

The consultation will run for 10 weeks starting on 27 July and closing on 7 October 2022 at 4pm.

Complete our consultation feedback questionnaire online at <https://www.dwrcymru.com/en/our-services/wastewater/drainage-and-wastewater-management-plan>

1

Complete the PDF version of the consultation feedback questionnaire below and email it to DWMP@Dwrcymru.com

2

Return a printed version of the consultation feedback questionnaire below by post to **Mr Steve Wilson, Dŵr Cymru Welsh Water, Linea, Fortran Road, St Mellons, Cardiff, CF3 0LT**

3



Finding Out More About The DWMP

As well as the DWMP itself, we have published a number of documents that will provide you with information to help inform your response to the questions below, including:

Virtual exhibition

E-learning course

Customer summary

Technical summary

Non-technical summary

Area summaries

You can view these documents online at <https://www.dwrcymru.com/en/our-services/wastewater/drainage-and-wastewater-management-plan>. If you need a paper copy of the DWMP or of this brochure, please email us at DWMP@dwrcymru.com

Data privacy notice

Welsh Water is committed to protecting your personal information. Whenever you provide such information, we are legally obliged to use it in line with all applicable laws concerning the protection of personal data, including the UK General Data Protection Regulation (GDPR).

How will Welsh Water use the information we collect about you?

We will use your personal data collected via this consultation for a number of purposes, including:

- to analyse your feedback to the consultation
- to produce a Consultation Report, based on our analysis of responses (individuals will not be identified in the Report)
- to write to you with updates about the results of the consultation and other developments
- to keep up-to-date records of our communications with individuals and organisations

Any personal information you include in this form will be handled and used by (or made available to) the following recipients to record, analyse and report on the feedback we receive:

- Welsh Water
- WSP

What rights do I have over my personal data?

Under the terms of the UK GDPR you have certain rights over how your personal data is retained and used by Welsh Water. For more information, see our full data privacy statement on our website.

1. Under GDPR legislation, we cannot accept consultation responses from people under the age of 13.

- Please tick this box to confirm that you are aged 13 or older.

2. Are you responding as a stakeholder, local representative group, customer or regulator? (please tick only one box)

- Stakeholder responding on behalf of an organisation
- Personal response as an informed individual
- Local representative group
- Customer of Welsh Water
- Customer of other water company
- Regulator

Consultation period
(27 July - 7 October 2022)

3. If you are responding on behalf of an organisation or interest group, please write the name of that group below

4. Have you heard of Welsh Water's DWMP before?

- Yes No Don't know

5. If so, how did you hear about it? (tick all that apply)

- Attended presentation
- Received an email
- Visited the website
- Completed the e-learning course
- Other (please specify) _____

6. How often would you like us to engage with you about the DWMP in future cycles?

- At key milestones of the Plan, i.e. as the Risk, Options and Programme Development stages are completed (three updates every five years)
- Annually (five updates every five years)
- Once a cycle (once every five years)



As part of introducing everyone to the first Plan we created summary documents and published them on our website. We have created the 'Strategic Context' document and the 'How and where we want to work with you' document. We plan to continue developing documents for the remaining stages of the Plan; Opportunities, Options and Programme; along with 'What we have developed and when we plan to deliver them'.

7. If you have read these documents, did you find them useful?

- Yes
- No
- I couldn't access them
- Don't know

8. Would you like us to continue using them to update you?

- Yes
- No
- Don't know

9. When we make updates to our documents or website, how would you like to be informed? (please tick all that apply)

- Twitter
- Facebook
- Water bill
- Posters in libraries or supermarkets
- Roadshows in supermarket car parks or town halls



The Stages of the DWMP

There are five stages to the DWMP:

1. Objective setting – Identifying the big issues faced now and in the future, as well as actions to address them.

3. Options development – Outlining the process of developing solutions to address the risks and their degree of uncertainty.

5. Consultation period – Public consultation of the draft DWMP, which will involve extensive public consultation with customers, stakeholders and regulators.

2. Risks assessment – Outlining information about drainage and wastewater issues that are already being experienced or have been identified. It will also analyse current and future risks and their causes.

4. Programme appraisal – Combining solutions into a plan that gives the best value to customers, communities, the environment, regulators and government.

10. In terms of the stages of the DWMP when would be the most meaningful time for your organisation to contribute?



Objective Setting

11. If you were willing to help us reduce the amount of rainfall that enters our sewers, would you consider introducing any of the following three measures? (tick all that apply)

- Permeable surfaces for driveways
- Installing water butts to collect and reuse rainwater
- Installing sustainable drainage systems around your home to manage rainwater and natural drainage locally

12. Do you agree that we should deliver customer education campaigns to give advice in local areas prone to blockages caused by items from the list below?

- **Baby wet wipes (flushable)**
- **Cotton pads**
- **Sanitary products**
- **Nappies**
- **Paper towels and tissues**
- **Medication**
- **Oils, fats, and greases**

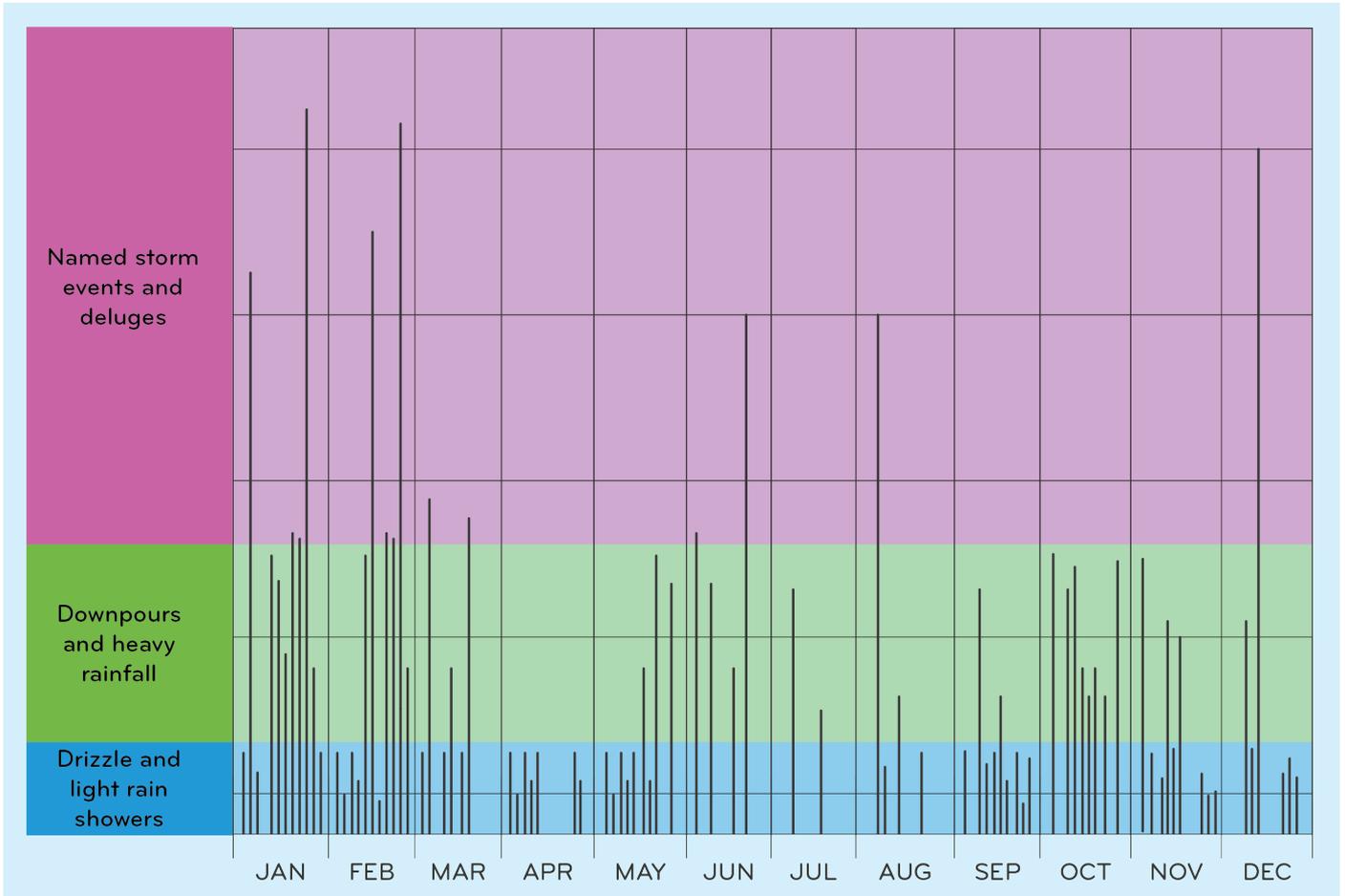
- Yes
- No
- Don't know

As part of the Plan, we have created planning objectives which measure risk across the different areas where we operate, and to feed into the development of options. By options, we mean steps which we will take, both now and in the future, to meet these objectives and address the key challenges we face including climate change and a growing population.

Our objectives are made up of national standards to allow for industry comparison, together with locally focused objectives which are tailored to the needs of stakeholders and customers. Our planning objectives have three key themes: water quality, water quantity and resilience.

The graph below shows three areas of rainfall and a separation of the type of rainfall that occurs in that zone. Our intention is to develop plans for all areas but to set the milestones to be achieved at these rainfall events.

The solutions in each zone can also be very different, for example, in the blue zone it is appropriate to build capacity into the sewer, as this zone refers to containment of sewage with a small amount of rain. In the Green area we assume that sewage is being contained but it's the combined heavy rainfall that needs to be managed by re-routing it back to nature. In the pink area, when there are named storms, these are events that become an emergency, such as Storm Dennis and we need to put in place plans to return to a normal service as soon as possible by working with the emergency services.



13. Do you support the principle of managing wastewater separately to sewerage?

- Yes
 No
 Don't know

14. Do you agree with setting targets for managing sewage and rainfall? i.e. contain sewage and rainfall (the Blue zone), re-route to back to nature rainfall (the Green zone) develop plans to get the service back to normal as fast as possible after a named storm such as Storm Dennis.

- Yes
 No
 Not sure

15. If you would like to make any further comments, please use the box below:



Risk Assessment

After assessing current demand and capacity of the drainage and sewerage network, we can next look at risks which we need to consider throughout the development of the Plan.

Our measures are made up of national standards to allow for industry comparison, together with local measures which are tailored to the needs of stakeholders and customers. Our measures have three key themes: **water quality, water quantity and resilience** as shown below.

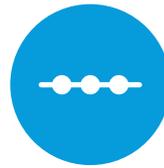


We have looked at a range of different areas as part of an overall assessment of risk:

- **A 'risk screening' process** to identify areas most at risk now and where we need to focus most of our efforts.
- **Baseline Risk and Vulnerability Assessment** - A tool to bring together different elements and help us consider what the key problems are both now and in the future.
- **Characterising problems** which we need to solve in terms of how complex they are.

16. Should we be investing in additional capacity in our sewers to provide time to react when something goes wrong?

- Yes
- No
- Don't know



Options Development

The option development stage of the Plan sets out the scope, cost and likely timing of different options, which could be put in place to help us meet our long-term objectives. It looks at the value of different options - not just in terms of the cost; but also looking at other areas such as the likely impact on flooding and pollution, together with wider benefits which may be delivered for local people and nature.

We have started with a long list of options and, through a series of steps, shortened this down to the best value, preferred options that could address the risks we have identified. Through each step of the option development process, we have gone into more detail and considered more assessment criteria to further shorten the list.

17. Do you agree that we should prioritise customers who experience the most frequent sewer flooding over highway sewer flooding?

- Yes
- No
- Don't know

18. Do you agree that we should prioritise the most environmentally sensitive areas over bathing waters?

- Yes
- No
- Don't know

Growth, urban creep and climate change are creating added pressures on our network. All these pressures are happening at different speeds across the whole operating area, which means that we need to carry out improvements and investments in more places, more often. We need to choose if we should make more small interventions in a wider area, or fewer interventions with greater benefit in a smaller number of areas.

Storm Overflows

Storm overflows, or combined storm overflows (CSOs), are designed to operate when it's raining, or shortly after, to help the sewerage system cope. They provide pressure relief and protect customers from flooding by allowing the excess rainfall and sewage spill to go to the nearest water course. They typically have a limited environmental impact, but some are now operating regularly throughout the year, not just during heavy rainfall events as they were initially designed for.

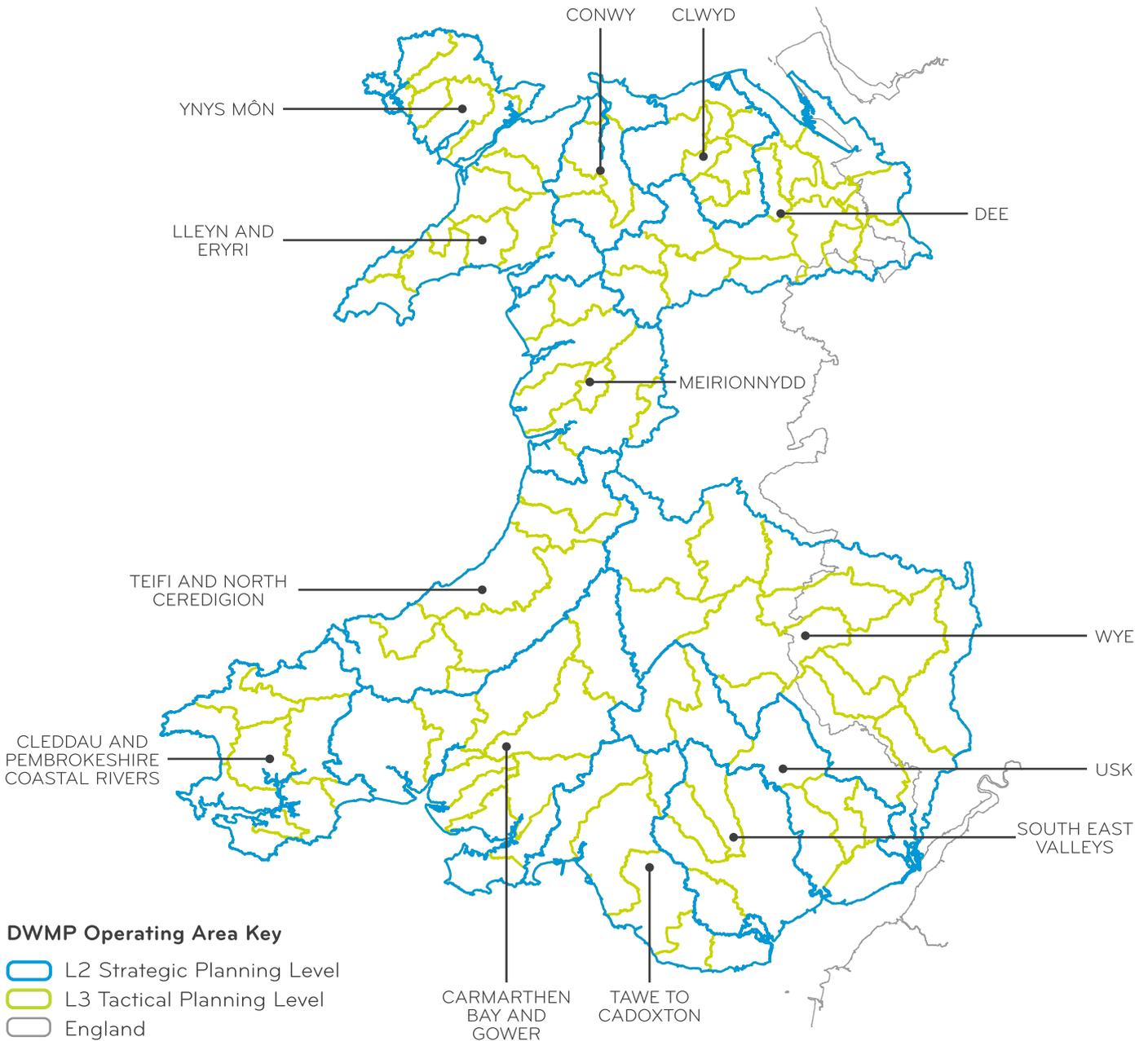
This highlights the need to review how storm overflows currently work, their impact on the environment and whether they meet the needs of today and tomorrow. This is considered as part of the Plan.

Incremental steps to the 'Final Environmental Destination'

- A short summer rainstorm with CSOs in compliance and no flooding internally or externally
- A drizzle with CSOs in compliance and no flooding internally or externally
- A downpour with CSOs in compliance and no flooding internally or externally
- A deluge with the CSOs in compliance (our legal requirement) and no flooding (internal or external)
- A named storm with only emergency spills or floods.

(Please note we are limiting the assessment in this cycle of all of the above to 60 minute storms only)

Complete our e-learning module to find out more about the possible impact of growth, urban creep and climate change in the next 25 years



Given that Welsh Water has 106 Level 3 areas, each with varying degrees of risk related to storms, we recognise that to achieve a greater resilience to worst case storms will cost more money than achieving a lower resilience to average storms. By choosing a lower resilience we can make an improvement in more areas. And once we've completed this incremental improvement we will be moving on to the next incremental improvement – through the blue, green and pink zone, i.e. storms with less and less likelihood of occurrence.

19. In your opinion, which should we prioritise?

- Protecting a wide area against the impact of storms in an average year
- Protecting a smaller number of areas against the impact of a less frequent, but more severe storm



Added Value

We have looked at the least cost options first. We then compared this list with the environmental and social benefits that the different options bring over both a 5- and 25-year plan period.

We have created both a traditional and a sustainable solution. We have compared the benefits from each and chosen a sustainable solution where it is either least cost or close to the least cost traditional solution. Where the sustainable solution is not close to the traditional solution in cost, we have chosen the traditional solution.

BY ENVIRONMENTAL BENEFITS we mean anything that relates to the environment – this could include rivers, coastlines, and natural habitats. By social benefits we mean anything that relates to people and people's activities – this could include preventing flooding of homes and businesses.

The most environmental harm takes place when rivers and streams are at their lowest levels, usually in the summer. This is also when the weather is dry so people are more likely to be walking, fishing, swimming or kayaking near the water and the amenity importance of the river or stream is at its greatest.

By least cost we mean the list of solutions that when compared to each other are ranked in order of their cost. Versus an Environmental and Social Cost we mean the list of solutions that when compared to each other are ranked in order of the environmental and social benefit.

20. Do you agree with our approach to prioritise the most beneficial and sustainable options unless the costs are excessive?

Yes No Other (please specify)



Programme Appraisal

As part of the Plan, each area that we cover has a list of drainage and wastewater solutions that we could introduce to improve the service in that area.

These lists are brought together to form the overall programme.

We then evaluate the programme as a whole, to produce a prioritised list of solutions in an order of greatest cost benefit.

21. We have chosen our best value schemes and have ranked these schemes by environmental benefit. Do you agree with this approach?

- Agree
- Disagree
- Don't know

22. If you disagree, how would you prefer us to create the programme, e.g. least cost?



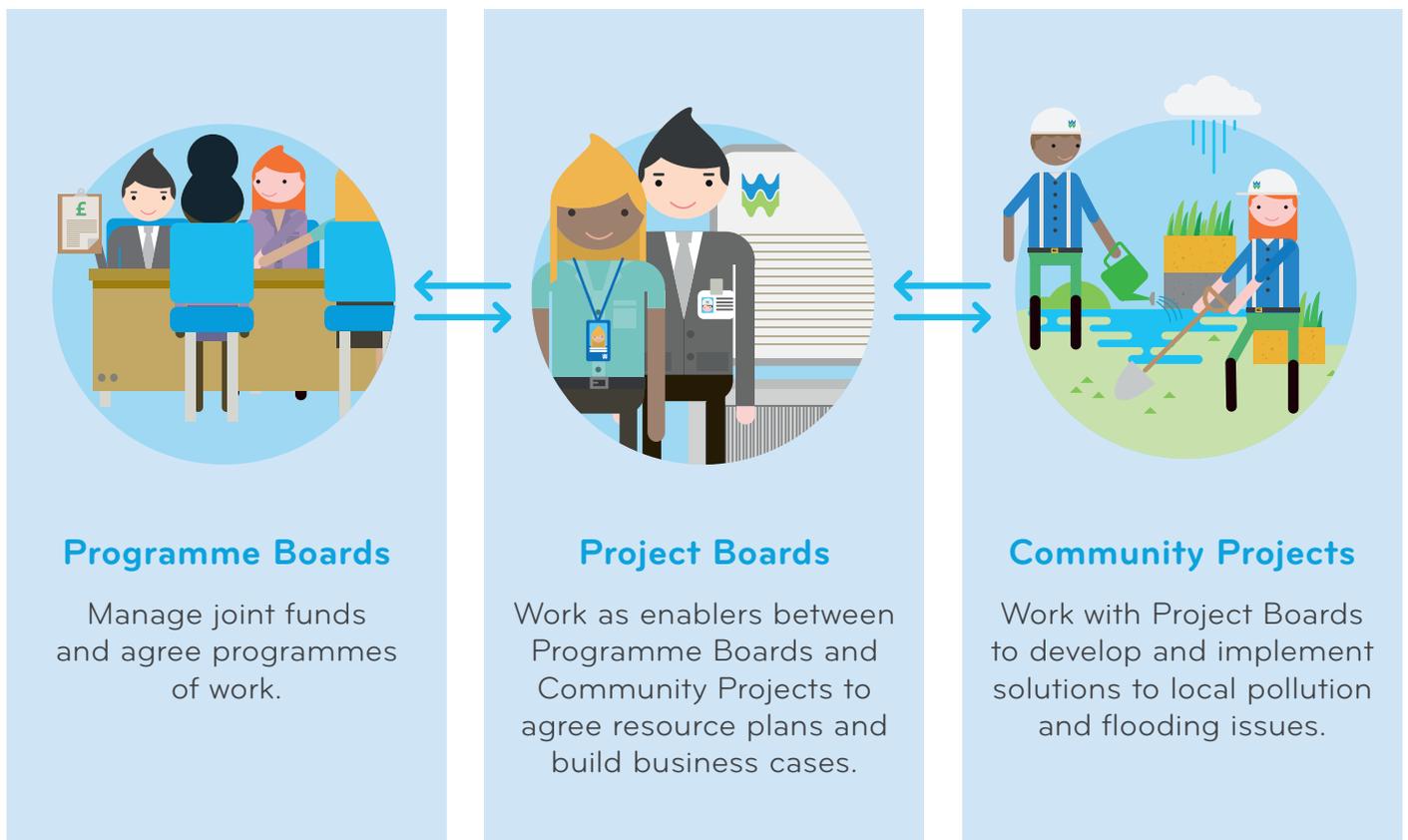




Engagement

The Plan will only reach its full potential in delivering a robust and resilient drainage and wastewater service if we work together with key stakeholders both nationally and locally. By working with others, we can help raise awareness of the plan with customers and stakeholders. We can also work across different organisations to deliver improved, and more sustainable, drainage and flood management.

Our aim is to set up 13 Project Boards to work as enablers between Programme Boards and Community projects to agree resources plans and build business cases.



23. We are interested in talking to the community about flooding and pollution. If you are interested in one of our team coming to speak at your community group, please put the name and contact details of the group in the space below.



24. Would you like us to trial the following initiatives in Cycle 2? (tick all that apply)

- Community project
- Talks to community groups
- Community Project Management Group
- Citizen Science Project
- Other _____
- None of the above

25. Do you agree with our recommendation to set up a community Board trial in each of the river catchment areas?

- Agree
- Disagree
- Don't know

26. If you disagree, how do you think community Boards should be set up?



Proposal for Cycle 2

The current approach to planning is based on cost benefit and planning trajectories, where we have a large number of conflicting objectives that are competing for funds.

As an example, internal sewer flooding has a company target that Ofwat is willing to fund to achieve but that's in conflict with another objective which says you need to reduce spills from storm overflows, which in turn is in conflict with another target that states we need to protect customers from a severe storm.

This approach works for short-term business planning but is very complicated and costly to carry out for plans over 25 years.

Our preferred approach is based on improving the minimum level of service using a customer and environmental destination combined, i.e. to reduce pollution and flooding.

Customer destination is a time in the future when customers will no longer have flooding from sewage inside their homes that is due to a lack of capacity in the sewer network.

Environmental destination is a time in the future when our rivers and seas receive treated flows from our sewerage system at a quality that is protective of for biodiversity and ecology.

Our intention is to establish the level of service of each river and community in terms of the four levels of service below. We then plan to incrementally improve each river and community through the levels.

- 1 We can contain sewage in the pipework consistently on days when there is no rainfall
- 2 We can contain sewage in the pipework consistently on days when there is a short, sharp rain shower during the summer
- 3 We can contain sewage in the pipework consistently on days when there is a number of hours of drizzle
- 4 We can contain sewage in the pipework consistently on days when there is a heavy rainfall for a couple of hours

27. Do you agree with this incremental approach to improvements?

- Yes
 No
 Don't know
 Not applicable

We've presented two choices, which are:

- 1** Our preferred approach is to progressively reduce risk in the following way:
 - A. Gradually improve all areas slowly over time by increasing overall capacity in the network (pipes).
 - B. Tackle smaller 'worst risk' areas first to achieve future government policy in those areas one step. Other areas with better performance would not be improved until later.
- 2** To carry on the way we have been doing with tackling discrete problems in isolation.

28. Which of the two choices listed above do you prefer?

- Choice 1: Incremental (preferred approach)
- Choice 2: Standard approach



Anything Else?

29. Do you have any further comments about our proposals that you wish to provide?



About You

30. If you are responding from an organisation, please let us know which organisation you are representing

We would be grateful if you could please provide your details so that the age range and diversity of respondents can be captured as part of our consultation.

We will use the information we receive to help understand whether our consultation has been useful to people of different backgrounds and requirements.

We may publish a summary of the results, but no information about an individual would be revealed.

The answers you provide to these questions are defined as 'special category data'. If you agree to provide Inclusion and Diversity Information, you can withdraw your permission at any time. To withdraw your details, **please contact us via email at DWMP@dwrwymru.com or write to us at Mr Steve Wilson, Dŵr Cymru Welsh Water, Linea, Fortran Road, St Mellons, Cardiff, CF3 0LT**

If you are a customer, please answer the following three questions.

31. Age group (please tick):

- | | |
|--------------------------------|--|
| <input type="checkbox"/> 13-17 | <input type="checkbox"/> 18-24 |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 35-44 |
| <input type="checkbox"/> 45-54 | <input type="checkbox"/> 55-64 |
| <input type="checkbox"/> 65-74 | <input type="checkbox"/> 75-84 |
| <input type="checkbox"/> 85+ | <input type="checkbox"/> Prefer not to say |

32. What is your gender?

- Male
- Female
- Non-binary
- Prefer not to say

33. What is your ethnic group?

- Asian or Asian British includes Indian, Pakistani, Bangladeshi, Chinese or any other Asian background
- Black, Black British, Caribbean or African includes Black British, Caribbean, African or any other Black background
- Mixed or Multiple ethnic groups includes White and Black Caribbean, White and Black African, White and Asian or any other Mixed or Multiple background
- White includes British, Northern Irish, Irish, Gypsy, Irish Traveller, Roma or any other White background
- Other ethnic group includes Arab or any other ethnic group



If you have any difficulties completing this feedback form or accessing the consultation documents, or require the documents in an alternative format, please contact the project team via the contact details below.



Dŵr Cymru
Welsh Water



DWMP@dwrcymru.com



www.dwrcymru.com/dwmp