

# Roundtable on River Water Quality

22 May 2023





# Session 1 - PR24

# Outline

- Overview
- Process for PR24
- Why phosphorus?
- Specifics of the performance commitments (PCs)



Investment to deliver WINEP/NEP. We will track any specific requirements that are significant.

## River water quality

River water quality (phosphorus) PC

Discharge permit compliance PC

Pollution incidents (total and serious) PCs

Storm overflows PC

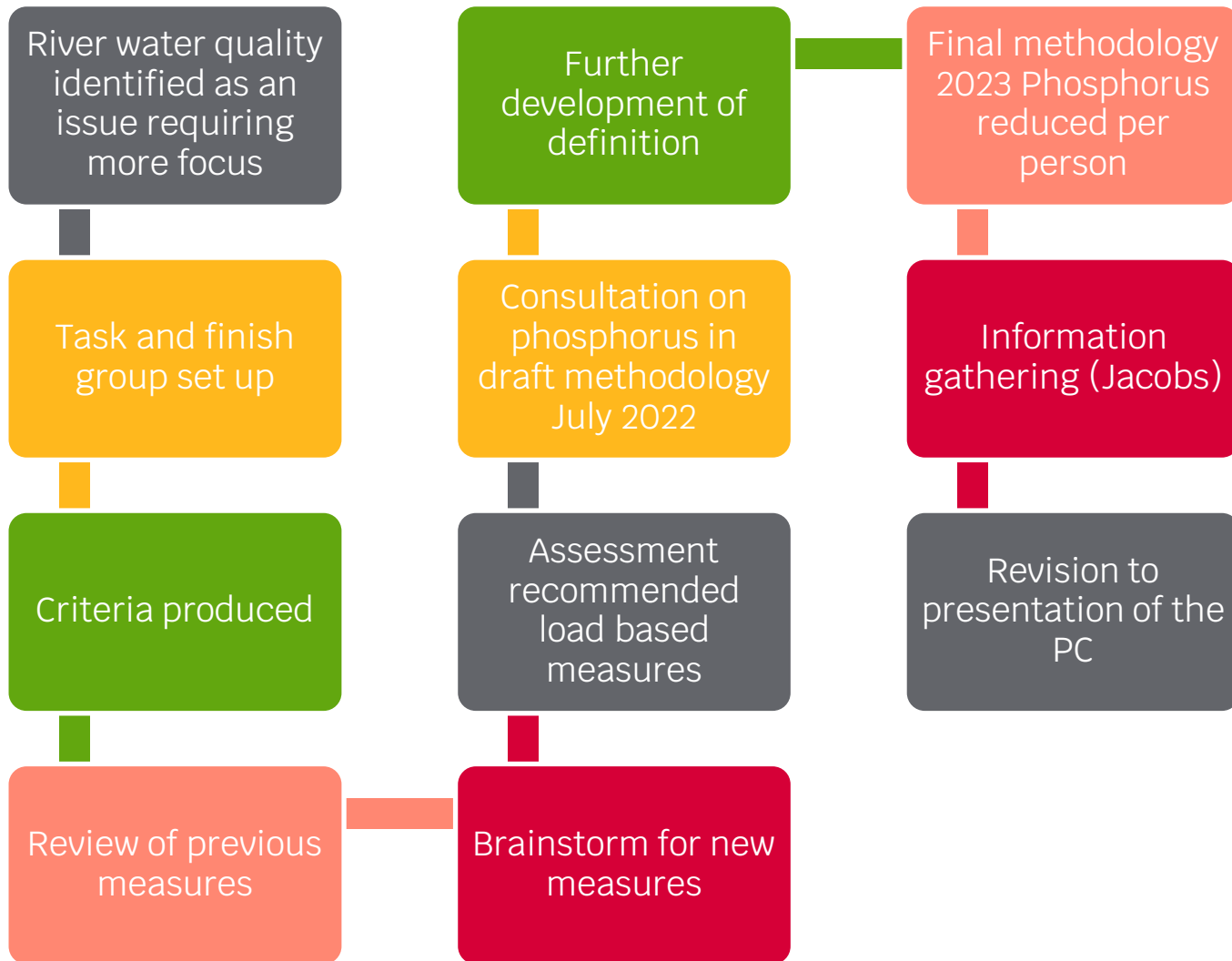
Greenhouse Gas Emissions PC

Bathing water quality PC

Biodiversity PC

Monitoring and reporting

# Process for PR24



## Why focus on phosphorus

**In term of good status, phosphorus is the most common reason why a water body fails to be classified as having good status in England.**

[Defra, 'State of the water environment indicator B3: supporting evidence', October 2022]

**In Wales, in over 60% of special areas of conservation rivers do not meet desirable phosphorus levels. Wastewater treatment is a source of phosphorus in all these catchments and the main source in some.**

[Welsh Government, 'Tackling Phosphorus Pollution in Wales' Special Area of Conservation Rivers Information & Evidence Pack', July 2022, p. 5 and p. 20.]

**Most of the phosphorus in the water environment comes from wastewater companies.**

[For example Defra, Water targets Detailed Evidence report.pdf (defra.gov.uk), May 2022, p. 36 and Natural Resources Wales, 'Western Wales River Basin Management Plan 2021 – 2027 Summary', May 2021, p. 25.]



# Specifics of the PC

In the final methodology we set out a PC based on phosphorus per person. On further reflection following work by Jacobs this may be difficult to understand and compare companies. We therefore are now proposing to present the PC as a percentage reduction.

## Reduction in phosphorus =

Phosphorus reduced from emissions at treatment works since 2020

+

Phosphorus prevented from entering rivers from partnership working in the year in addition to 2020

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Population of the company

The baseline load of total phosphorus discharged from treatment works in 2020

The company will use the volume of wastewater receiving treatment at sewage treatment works. Where the phosphorus concentration of the discharge is not known the company will assume a concentration of 5mg/l.

The denominator will stay constant each year. This will avoid the PC being impacted by year on year changes in average flow at treatment works without a phosphorus consent.

Similar to the Environment Act Target for England but

- The PC applies to companies in Wales that is not subject to the Act.
- The PC takes into account work with third parties that reduces phosphorus in rivers that is not at sewage treatment works in order to promote collaborative working.
- Companies will not all achieve the same percentage reduction.

# Safeguards

- **To target locations reducing phosphorus is important:** Only measured at treatment works that include a phosphorus limit in the environmental permit.
- **To avoid companies reducing phosphorus beyond what is needed:** For the purposes of reporting this performance commitment the phosphorus discharged from treatment works across a catchment will not be less than that expected by the appropriate agency in the long term. If it is less, the higher load expected by the appropriate agency will be used instead.
- **To make sure that companies focus on overall best value:**
  - The company must only report reductions in phosphorus that result from plans that represent the best value long-term approach for customers and the environment. This should take into account a wide range of factors including the long-term resilience of the supply chain.
  - We will measure and incentivise reducing green house gas emissions including the embedded emissions of chemicals used in wastewater treatment.
  - We will measure and incentivise increasing biodiversity to encourage nature based solutions.





- Do you have any views on the presentation of the performance commitment? Do you agree with it being specified as a percentage reduction?
- How can we work with eNGOs in promoting knowledge of the PR24 incentives to encourage partnership working including catchment and nature based solutions?



# Future Development

# Approach to measuring and setting incentives

We want to focus incentives where possible on **outcomes**

- Outcomes are the things that are important to customers, communities and the environment.
- Outputs are specific things that the companies deliver to help to achieve those outcomes.
- Inputs are the resources the companies use to deliver those outputs.

In terms of choosing performance commitments (PCs)

- **Clear link** between metric and outcome. Changes in the metric, over time, are sufficient to indicate an impact in the outcome being measured;
- the metric is **objectively measurable** and can be verified by others;
- it should **not significantly overlap** with other financial PCs which could lead to double counting, we should choose to measure the highest level outcome that fulfils the remaining criteria when there is a choice;
- companies have an appropriate **degree of influence** over the outcome so that it limits the impact of external events on companies' financial exposure - although it does not need to be fully in company control for it to be worth incentivising company action; and
- we can **set a PC level** that reflects stretching performance for an efficient company, with reasonable confidence.

Where we can't set a PC we can still provide investment to deliver outputs and can measure that these are delivered (price control deliverables or PCDs) or otherwise claw back the funding from companies.

**How should approach adapting incentives for PR29?**

- Is the scope of the current water quality PC sufficient? What does horizon scanning tell us? What are the biggest future threats to water quality? What does good water quality look like?
- What is the right engagement model with eNGO's for developing the PC at PR29? Who else should we be talking to?