

An aerial photograph of a river valley in Wales. The river flows through a lush green landscape, surrounded by dense forests and rolling hills. In the foreground, there are large green fields and a small building. The sky is overcast with grey clouds.

# Reducing Phosphorus in SAC Rivers in Wales



## River Quality Liaison Managers

Jennifer Grubb – South East Wales & Herefordshire

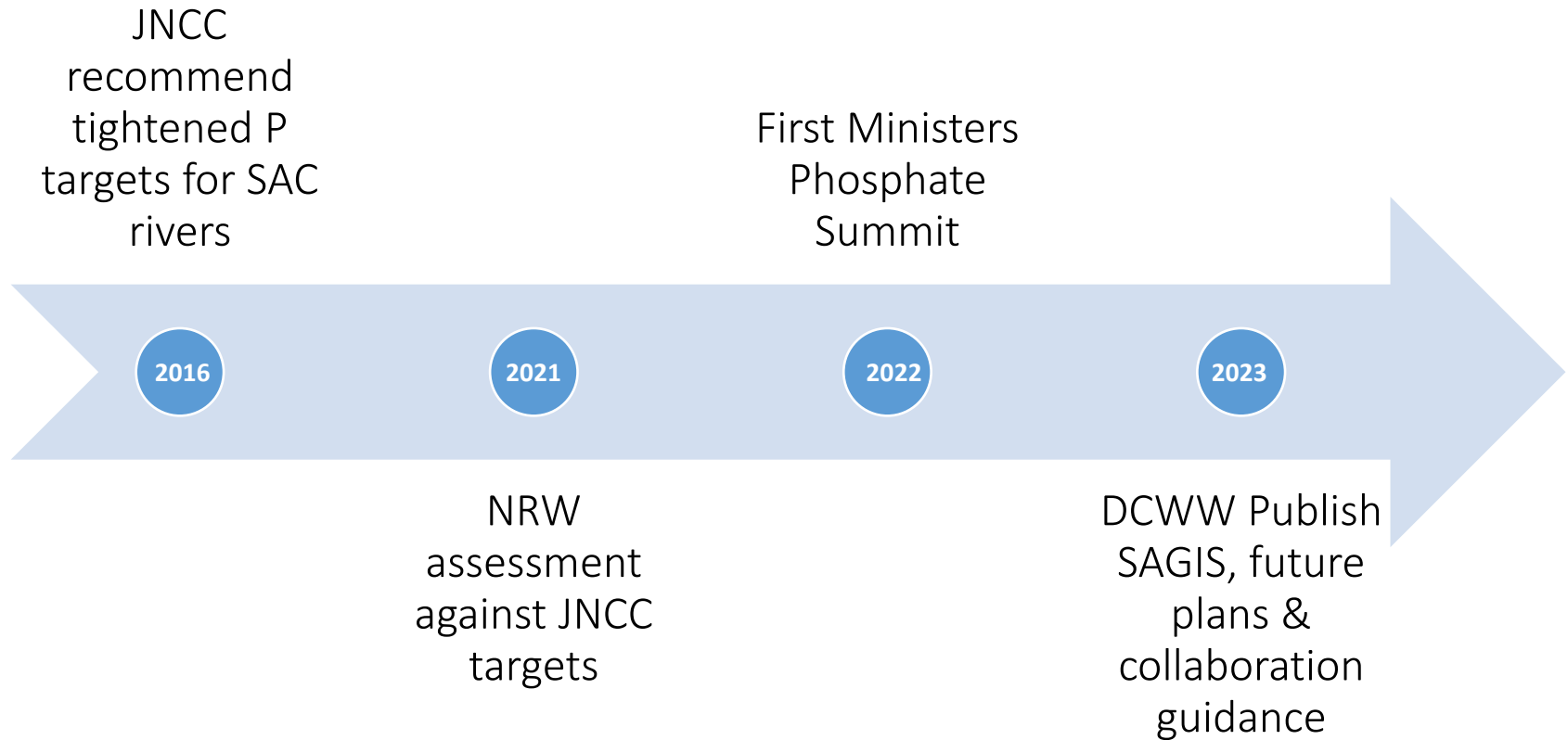
Emily Payne – North Wales

Kelly Jordan – West Wales

## Key Areas

- River Quality
- Wastewater Operations
- Storm Overflows
- Bathing Waters
- Stakeholder engagement
- Nutrients







Understanding the sources  
of phosphorus



## *Source Apportionment Geographical Information System*

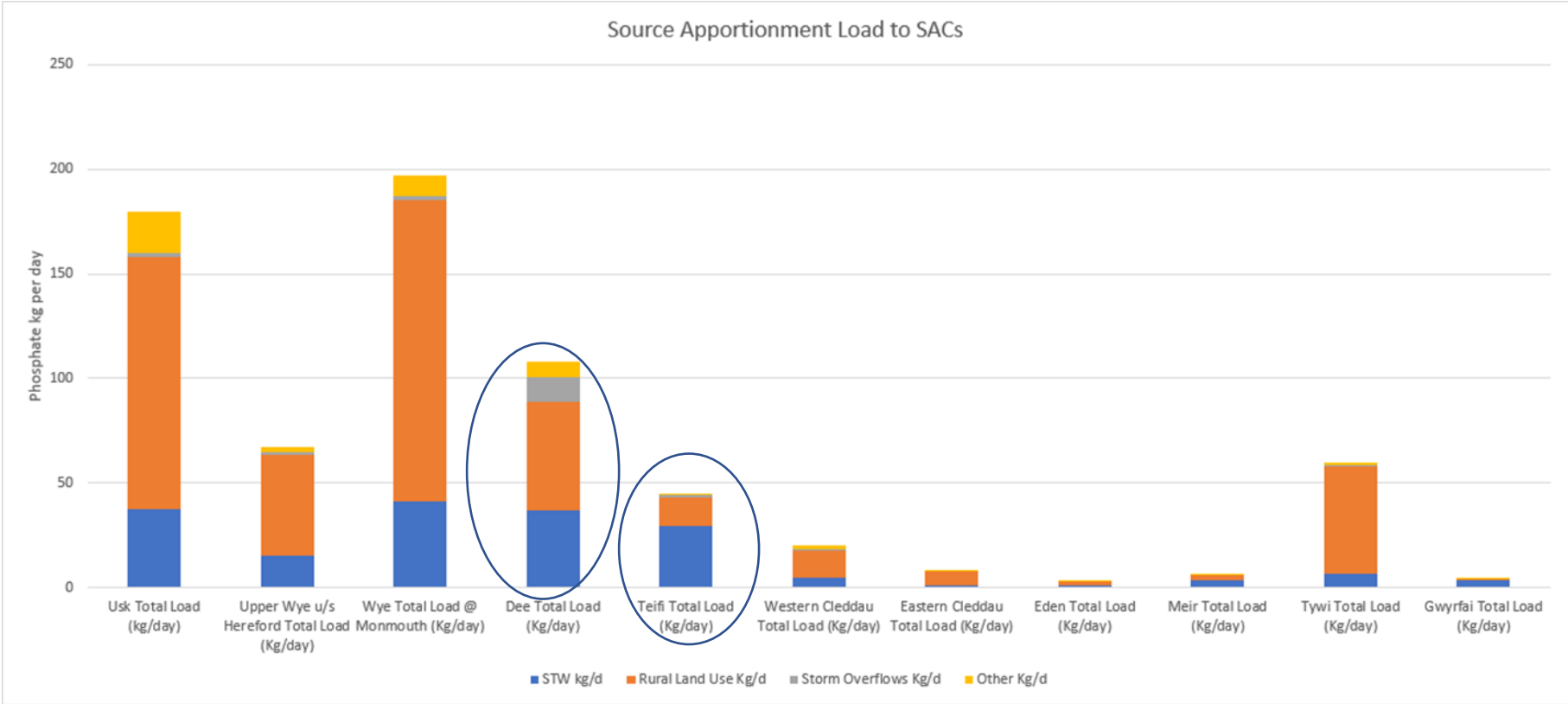
- Industry standard modelling tool used by WaSCs to inform investment needs
- Data sources include measure and estimates;
  - Agriculture census information using PHYSIC model
  - River flow data
  - Phosphorus sample data
  - WwTW flow and quality
  - Estimates of other diffuse and point source contributors
- Calibration process to support confidence & understand accuracy
- NRW commissioned audit process



Our Local

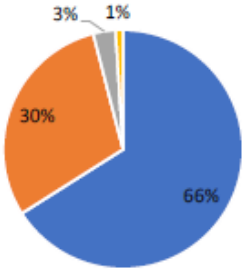
SACs

# Different catchments have different needs

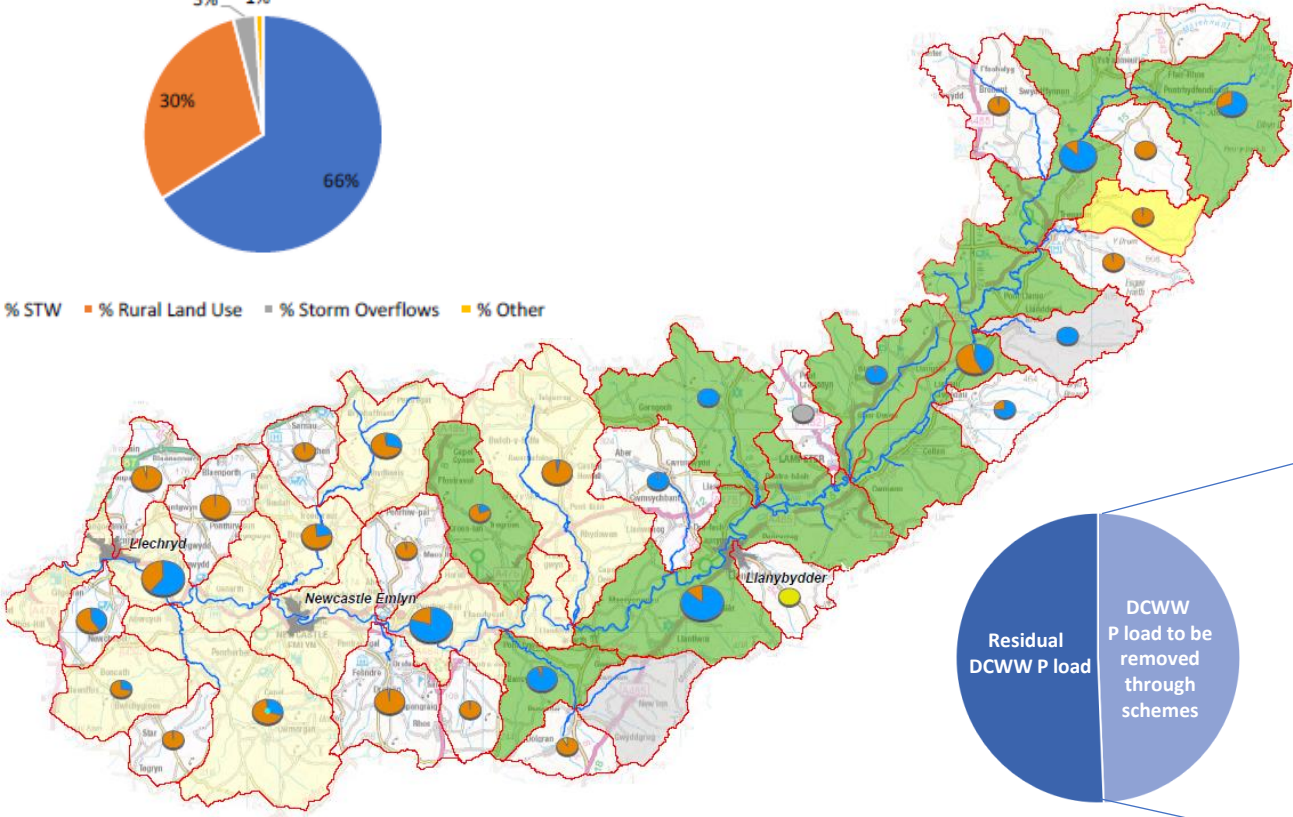


# Different catchments have different needs

Teifi Total Load (kg/day)



■ % STW ■ % Rural Land Use ■ % Storm Overflows ■ % Other



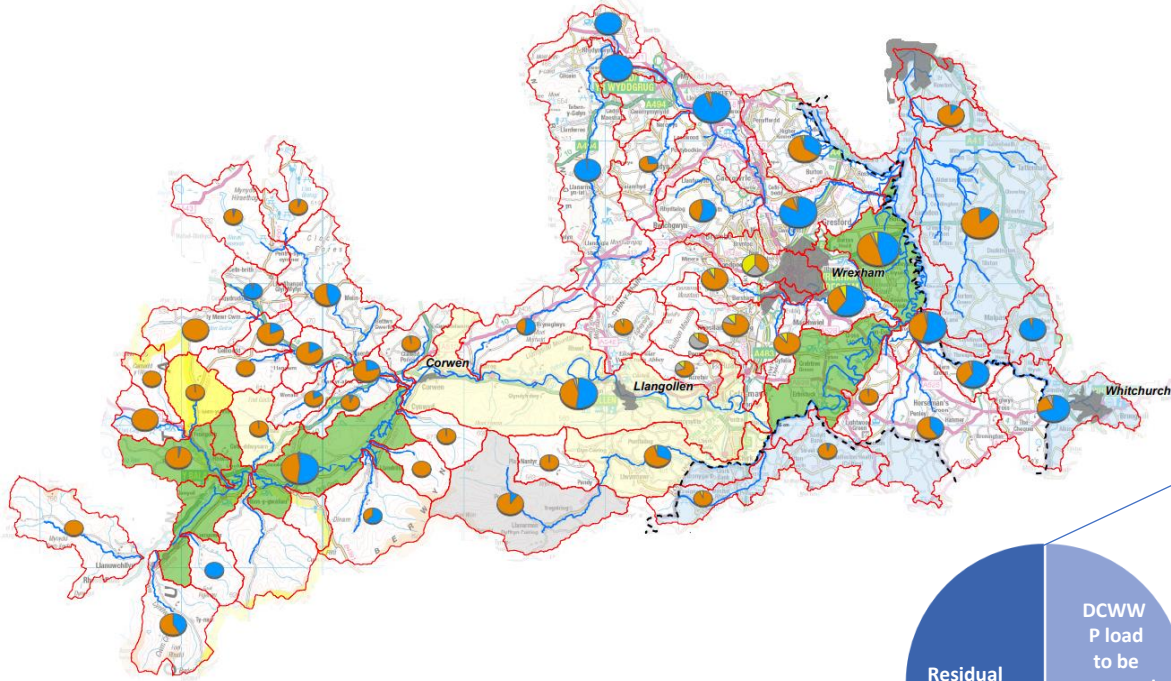
Residual DCWW P load  
DCWW P load to be removed through schemes



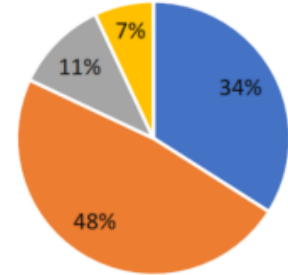
- TREGARON WWTW
- PONTRHYDFENDIGAID WwTW
- PENCADER STW
- NEWCHAPEL STW
- LLANYBYDDER WWTW
- LLANDEWI BREFI WWTW
- LAMPETER WwTW
- CRIBYN WwTW
- CAPEL IWAN STW
- BEULAH WWTW



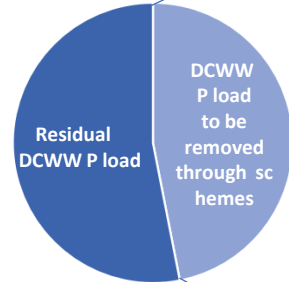
# The Dee Catchment



Dee Total load kg/day



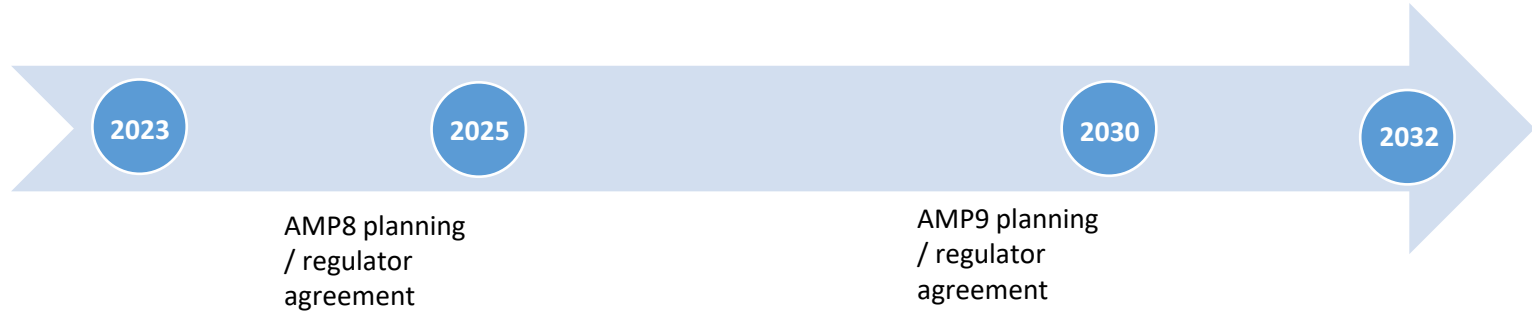
■ % STW ■ % Rural Land Use ■ % Storm Overflows ■ % Other



- PENLEY STW
- GLYNCEIRIOG STW
- Five fords STW
- DOLYWERN STW
- CORWEN WWTW FINAL EFFLUENT
- CERRIGYDRUDION STW
- BALA WWTW



Looking ahead



At P Summit announced 8 schemes accelerated into AMP 7 now totalling over 20 schemes

Full proposed programme available on DCWW website

SAC river catchment	Number of new and tightening phosphorus permit conditions within the SAC catchment	Number of new backstop phosphorus permit conditions
Cleddou	11	3
Dee	11	22
Teifi	14	14
Usk	10	16
Wye	17	14

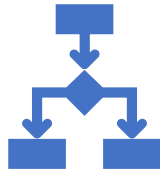
## Phosphorus Reduction Benefit

- Consideration to river compliance & supporting housing development
- DCWW looking to local NMB to govern allocation of benefit
- Continue to support NMBs & developing group structure(s)
- Team Wales approach



Working together

# What does working together look like?



Defined  
collaboration  
categories



Political  
engagement (at  
Wales & UK level)



Effective  
stakeholder  
relationships



Prescreened  
sites identified  
for NMBs



Any questions?

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