

Total Phosphorus Soil Testing Pilot –Project Report

March 2026

1. Project Background and Partnership

This report summarises the findings from a pilot project exploring total phosphorus within agricultural soils in the Wye catchment. The work was undertaken to improve understanding of legacy phosphorus, that is, phosphorus accumulated in soils over time through historic nutrient inputs but not fully captured through standard agronomic testing. The report should be read as an exploratory assessment designed to support further investigation, on-farm learning and development of future research, rather than as a definitive scientific analysis or as prescriptive agronomic advice.

The Total Phosphorus soil testing pilot was developed in response to increasing recognition that conventional approaches to nutrient management do not fully capture the complexity of phosphorus behaviour within agricultural soils. In the Wye catchment in particular, there is a growing understanding that historic nutrient accumulation continues to influence present-day water quality outcomes. While standard soil testing provides a measure of plant-available phosphorus, it does not account for the total phosphorus reserves held within soils, often built up over decades of fertiliser application and manure use. This pilot was therefore designed to explore whether measuring Total Phosphorus could provide additional insight into these legacy nutrient pools and support more informed, long-term nutrient management.

The project was led by Herefordshire Rural Hub and funded by Herefordshire Council, building on a strong foundation of collaborative working across the county. Delivery was undertaken in partnership with Cobb Agri, who supported coordination of soil sampling and laboratory analysis, alongside sampling undertaken for Lancaster University. Through the REPHOKUS research programme, Lancaster University has been investigating phosphorus dynamics and legacy nutrient behaviour across the Wye catchment for a number of years, supported by Environment Agency funding. The Total Phosphorus pilot combines and extends the Total P soil testing by providing additional farm-scale data from commercial systems, helping to bridge the gap between scientific investigation and practical farm management.

The integration of these datasets is particularly valuable. The REPHOKUS work provides a scientific framework for understanding how phosphorus accumulates, is stored and is mobilised within soils and catchments, while the pilot contributes further real-world evidence on the scale and variability of these processes across working farms. Together, they strengthen the evidence base required to understand legacy phosphorus and its implications for both agricultural productivity and water quality.

The pilot also sits within a wider landscape of innovation and collaboration taking place in Herefordshire. It has been strongly informed by the work of the Herefordshire Agri Group, a

farmer-led knowledge exchange network that has been operating for the past three years. Through regular meetings, on-farm discussions and shared learning, members of the group have been actively exploring how to better understand nutrient loading within their systems and identify practical opportunities to reduce losses to water. This included hosting Defra's Water Quality team in the catchment during 2024 to outline the practical knowledge gaps on the ground between soil management, nutrient dynamics and water quality outcomes. That engagement helped articulate the case for further soil-focused research and contributed to the framework that later developed into the £1m Defra Living Labs soil research opportunity in the Wye. While awaiting the award of that programme, the Herefordshire Agri Group continued to build momentum through this pilot and related work over the following 12–18 months. The Total Phosphorus pilot emerged directly from these conversations, reflecting a farmer-driven appetite to go beyond standard metrics and develop a deeper understanding of the resources held within their soils.

In parallel, the pilot aligns closely with the ambitions of the Wyescapes Landscape Recovery project, which is developing a coordinated, catchment-scale approach to improving water quality, enhancing biodiversity and supporting resilient farm businesses. A key component of Wyescapes is the exploration of new mechanisms to address legacy nutrient issues, including approaches to nutrient drawdown and export that may, in time, be financially supported where they deliver wider public and private benefits. The Total Phosphorus dataset provides a useful evidence base to inform that work, while the forthcoming Defra Living Labs programme creates an opportunity to build on this pilot through more structured on-farm research, monitoring and knowledge exchange.

Looking ahead, the findings from this pilot are highly relevant to the forthcoming Defra Living Labs soil research programme which will launch in the Wye during 2026. The Living Labs initiative aims to support collaborative, on-farm research that integrates scientific expertise with farmer knowledge and practical testing. There is clear potential to integrate Total Phosphorus testing with wider monitoring and experimentation, including soil biology assessments, nutrient balance tracking and hydrological monitoring, to develop a more complete understanding of phosphorus cycling within farming systems.

In this context, the pilot should be seen not as a standalone exercise, but as part of a broader, evolving programme of work across the Wye catchment.

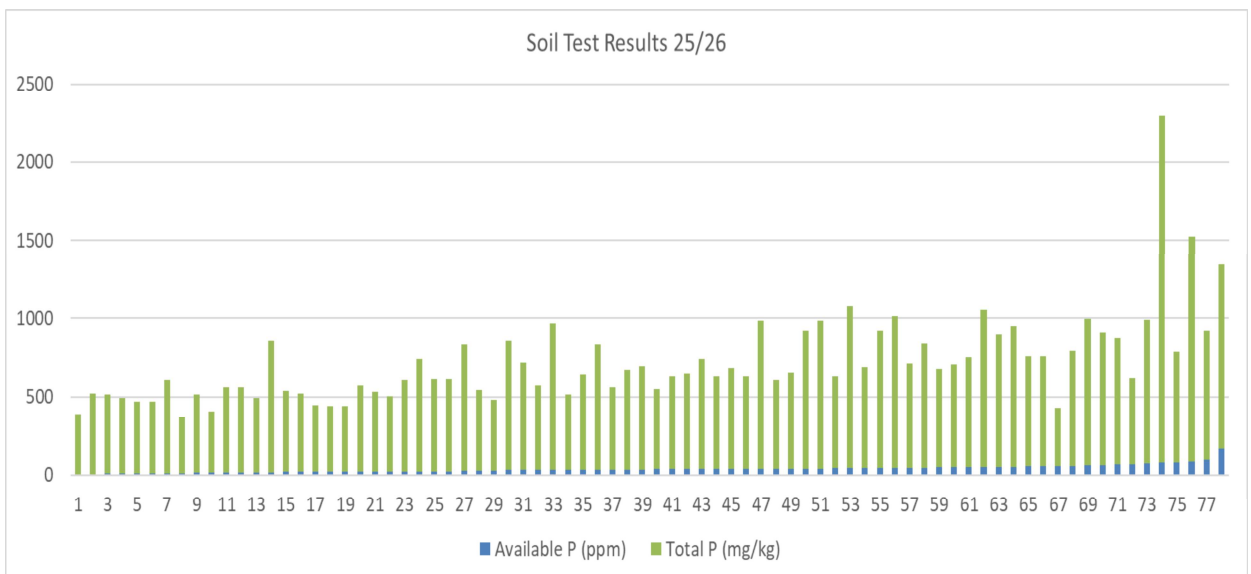
2. Dataset Description

The dataset used in this report represents a combined body of work delivered across multiple partners and funding streams within the Wye catchment. Soil samples were collected by Cobb Agri from a total of 16 participating farm holdings, bringing together analysis undertaken through two complementary initiatives. The first comprises samples collected as part of the Herefordshire Rural Hub-led pilot funded by Herefordshire Council, while the second includes samples collected through Lancaster University's research activity under the REPHOKUS programme, funded by the Environment Agency. The integration of these datasets provides a

broader picture of soil phosphorus status across a range of commercial farming systems within the county.

This collaborative approach has enabled the creation of a dataset that spans different farm types, management systems and soil conditions, while maintaining consistency in sampling and analytical methods. By aligning farmer-led activity with academic research, the dataset provides both practical relevance and a degree of scientific consistency, although it remains limited in size and should not be treated as fully representative of the wider catchment.

Across the dataset, both plant-available phosphorus and total phosphorus were measured, allowing comparison between the immediately accessible nutrient pool and wider phosphorus reserves held within the soil. The average plant-available phosphorus concentration across samples was approximately 36.0 ppm, while mean total phosphorus concentration was 691 mg/kg. The highest observed value exceeded 2219 mg/kg, demonstrating that some soils contain very large phosphorus reserves accumulated through historic nutrient inputs. However, a small number of very high values materially influence averages, and median values, ranges and the shape of the distribution should therefore be considered alongside headline means when interpreting the dataset.



Importantly, the dataset captures not only fields with elevated phosphorus levels, but also those with more moderate or lower concentrations, allowing comparison across a spectrum of nutrient status. This supports a more nuanced understanding of phosphorus dynamics and enables identification of both higher-risk areas and those where nutrient levels appear more balanced. The dataset should therefore be viewed as an initial baseline against which future monitoring, testing and on-farm trials can be developed.

3. Analytical Approach, Assumptions and Limitations

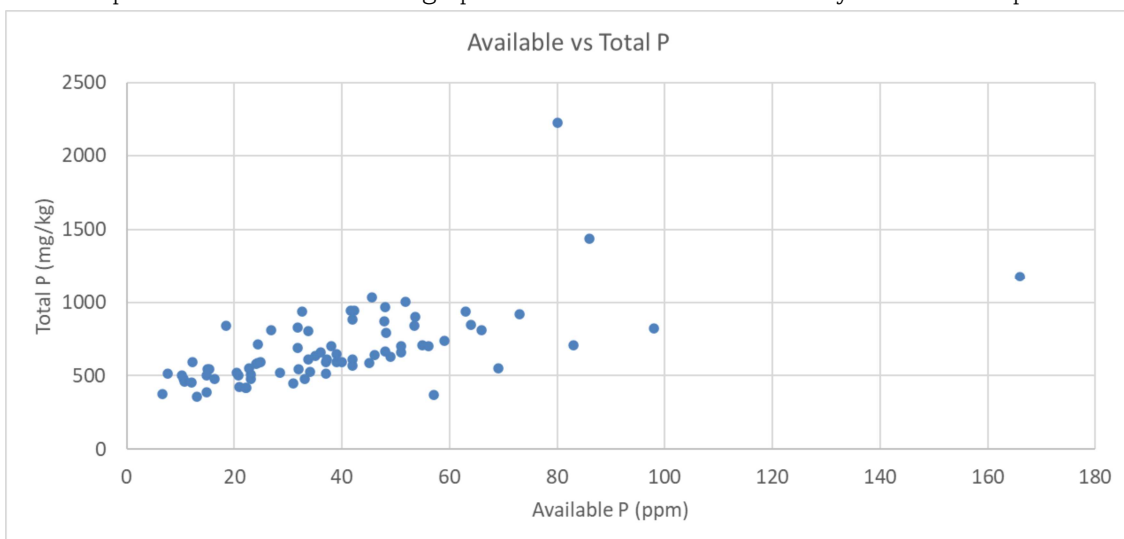
This report uses simple descriptive and exploratory analytical methods to help interpret the dataset. These methods have been selected deliberately to provide proportionate insight from a relatively limited sample, but they also carry important limitations which should be made explicit.

First, the dataset is modest in scale and includes observations from a limited number of holdings. It should therefore not be assumed to be statistically representative of all soils, farm systems or phosphorus conditions across the wider Wye catchment. Secondly, a small number of very high total phosphorus values have a disproportionate influence on averages and on the appearance of trends within the graphs. No formal exclusion of outliers has been undertaken in this report because the available information is insufficient to determine whether such values are analytical anomalies or genuine field conditions; however, their influence should be recognised explicitly when interpreting the findings.

Thirdly, the correlation and regression analyses presented are exploratory rather than predictive. They are useful for visualising the broad relationship between variables within this dataset, but they do not establish causation and should not be relied upon as statistically robust predictive models without further validation, replication and stratification by soil type, land use and management history. Finally, the dataset does not directly measure phosphorus loss pathways to water. Any suggestion of environmental risk should therefore be treated as indicative only and considered alongside hydrology, soil structure, management practice and field connectivity.

4. Correlation Analysis

A correlation analysis was undertaken to explore the relationship between plant-available phosphorus and total phosphorus across the dataset. The analysis indicates a moderate positive relationship, suggesting that, in general, soils with higher total phosphorus tend also to exhibit higher levels of plant-available phosphorus. However, the strength of this relationship is limited, and the spread of values within the graph shows considerable variability between samples.



This variability is a key finding in itself. Soils with similar levels of plant-available phosphorus can contain markedly different total phosphorus reserves, which means that standard agronomic phosphorus measures do not fully explain the wider nutrient status of a field. In practical terms, two fields presenting the same RB209 phosphorus index may still have very different underlying nutrient histories and different longer-term responses to reduced fertiliser inputs.

Given the size and structure of the dataset, the correlation should be interpreted as indicative rather than statistically robust. It is useful for highlighting that a relationship exists, but not for concluding that total phosphorus can be inferred reliably from plant-available phosphorus alone. This supports the wider conclusion that standard soil testing provides only a partial picture where legacy phosphorus is concerned.

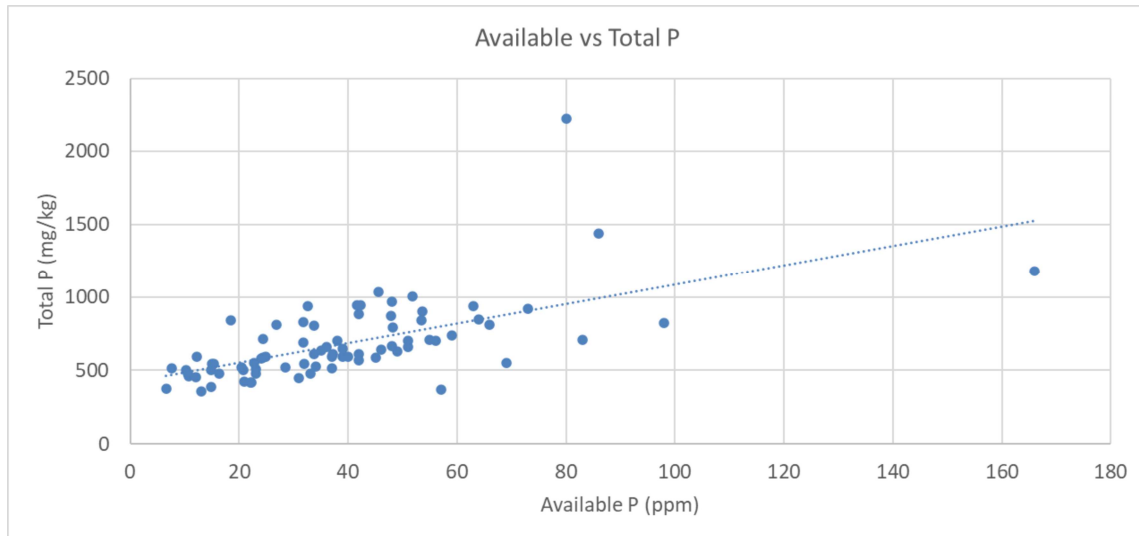
In the context of the Wye catchment, this finding is particularly relevant. It suggests that reliance on plant-available phosphorus alone when planning nutrient requirements on farm may not fully capture the scale of nutrient loading within soils, nor the potential for future phosphorus mobilisation. The results therefore support the need for a more integrated approach to nutrient assessment, combining standard soil tests with a broader understanding of legacy phosphorus reserves.

5. Regression Analysis

To explore the relationship further, a simple regression line was plotted between plant-available phosphorus and total phosphorus. The trend line confirms an overall positive relationship between the two variables; however, the degree of scatter around that line is substantial. This means that while total phosphorus tends to increase as plant-available phosphorus increases, the regression is weak as a predictive tool and should not be interpreted as a robust forecasting model.

The spread of data points reflects the influence of historic management and site-specific conditions. Fields with similar plant-available phosphorus levels can sit on very different points along the regression line, likely reflecting differences in fertiliser history, manure inputs, soil chemistry, soil type and the extent to which phosphorus has been fixed into less available forms. The graph is therefore best used as a visual aid to demonstrate complexity rather than as evidence of a simple linear rule.

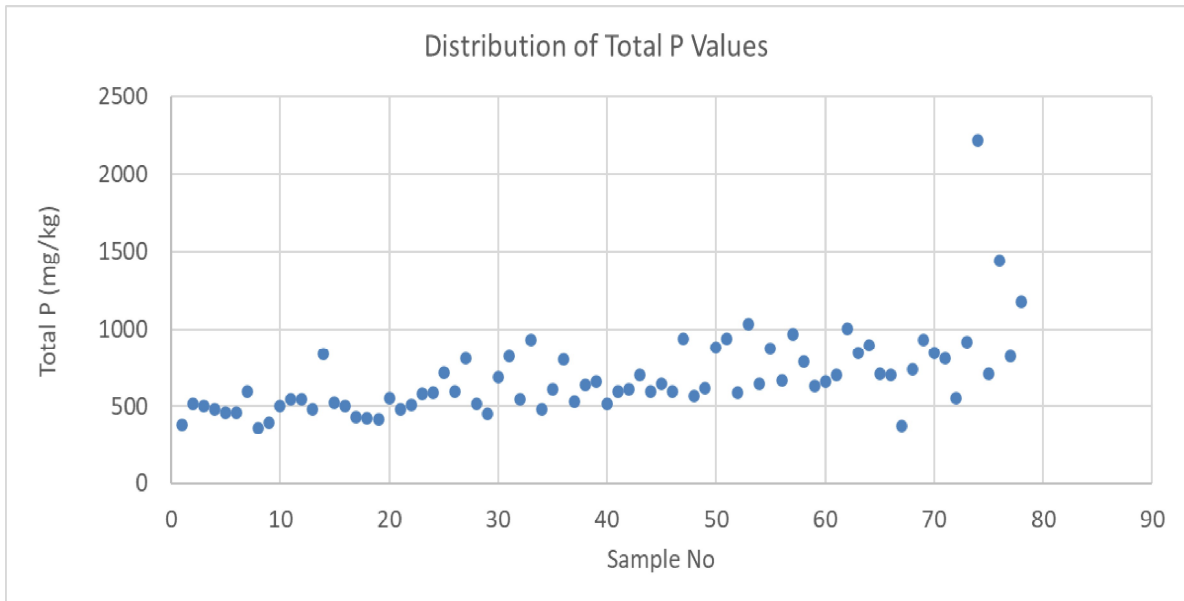
For this reason, any decisions arising from the report should avoid assuming that one measure can be converted directly into the other. Instead, the regression reinforces the case for further field-based investigation, repeat sampling and more detailed stratified research through future programmes of work.



6. Identification of High-Phosphorus Outliers

Analysis of the dataset reveals a number of very high total phosphorus results that stand apart from the majority of observations. In some cases, values exceed 2000 mg/kg, indicating exceptionally large phosphorus reserves within the topsoil. These observations are highly material to interpretation because they have a disproportionate influence on summary statistics such as the mean and can visually dominate trend analyses.

At present, these high values have not been removed from the dataset because there is insufficient evidence to classify them confidently as analytical anomalies. They may represent genuine field conditions associated with historic nutrient loading, such as repeated manure applications, livestock handling areas or other long-term concentration of inputs. They may have been contaminated during sampling and showing erroneous results. Nevertheless, they should be treated cautiously until further field verification is undertaken, including review of sampling history, land use and repeat sampling where appropriate.



From a reporting perspective, these high-phosphorus observations are best understood as higher-priority fields for follow-up rather than as definitive evidence of wider catchment conditions. They are useful for identifying where further investigation may be justified, but should not be used on their own to generalise about all soils or farming systems represented within the report.

7. Data Insights

The findings from this pilot provide useful insight into the behaviour of phosphorus within agricultural soils and reinforce a growing body of evidence that standard agronomic measures capture only part of the wider nutrient picture. In many cases, plant-available phosphorus appears to represent only a fraction of the total phosphorus held within the soil, supporting the concept of legacy phosphorus.

This aligns with the wider direction of Lancaster University's REPHOKUS research, which has been investigating phosphorus dynamics across the Wye catchment and has highlighted the significance of historic nutrient accumulation and the role of soils as both sinks and potential sources of phosphorus. The farm-scale dataset presented here complements that work by providing practical evidence from commercial farming systems. However, it should be recognised that this report is not a scientific research paper and does not attempt to test hypotheses to the standard required for definitive academic conclusions.

Looking ahead, the dataset offers a strong foundation for the Defra Living Labs soil research planned in the Wye during 2026. The value of this pilot lies not in proving a final answer, but in helping define the right questions for more structured collaborative research. These include how legacy phosphorus behaves under different management regimes, how quickly it may be drawn upon by crops, and under what circumstances high-phosphorus soils may contribute to actual losses to water. In that sense, the pilot is most valuable as a baseline and as a bridge between farmer experience, advisory evidence and future scientific research.

8. Potential Nutrient Rundown Strategies

The findings from the Total Phosphorus pilot highlight that many soils across the dataset contain substantial legacy phosphorus reserves, often accumulated over decades of fertiliser use and manure applications. While these reserves can support crop production, they also represent a long-term environmental risk where soils are saturated or where pathways for phosphorus loss to water exist. As such, there is a clear opportunity to move beyond static nutrient management and towards more active strategies that gradually rundown these accumulated nutrient loads over time.

A key emerging approach within the county is being developed through the Wyescapes Landscape Recovery project. This initiative is exploring how targeted land management changes, supported by blended public and private finance, can deliver environmental improvements while maintaining viable farm businesses. Within this framework, a particularly innovative concept is the financial incentivisation of nutrient offtake, whereby farmers are supported to actively remove phosphorus from soils through biomass production and export.

This approach recognises that legacy phosphorus cannot be addressed solely through reducing inputs; in many cases, there is a need to actively rundown nutrients from the system. Wyescapes is therefore trialing and developing models where farmers are rewarded for adopting management practices that increase nutrient removal, particularly in fields identified as having high Total Phosphorus levels and elevated risk of runoff or leaching.

In practical terms, this may include increased silage cutting frequency, with forage removed from the field and utilised elsewhere, either within the farm system or exported off-farm. Similarly, in arable systems, there is potential to optimise crop rotations and harvest strategies to maximise nutrient removal through grain and straw. In some cases, more targeted approaches may be appropriate, such as establishing temporary high biomass crops specifically designed to draw

down soil nutrient levels over a defined period. These could include forage crops, herbal leys or other deep-rooting species capable of accessing and mobilising phosphorus within the soil profile.

What distinguishes the Wyescapes approach is the integration of these practices within a financial framework that recognises and rewards nutrient rundown as an environmental service. Rather than placing the burden of change solely on farmers, the model seeks to create new income streams linked to improved water quality outcomes, flood resilience and broader ecosystem benefits. This is particularly important given that nutrient drawdown is often a medium- to long-term process, and the financial returns from reduced fertiliser use alone may not be sufficient to incentivise early adoption.

The Total Phosphorus dataset generated through this pilot provides a critical evidence base to support this approach. By identifying fields with the highest legacy phosphorus loads, it becomes possible to target interventions more effectively and to prioritise areas where nutrient rundown is likely to deliver the greatest environmental benefit. In this way, Total Phosphorus testing acts as a diagnostic tool, enabling a more strategic and spatially targeted approach to land management.

There is significant potential for this model to act as a blueprint for the wider county. If scaled effectively, a coordinated programme of nutrient rundown could contribute to a measurable reduction in phosphorus losses at a catchment level, complementing existing regulatory and advisory approaches. Importantly, it also offers a pathway for farmers to engage positively with environmental objectives, positioning them as active contributors to solutions rather than passive recipients of regulation.

To achieve this, further work will be required to refine the mechanisms through which nutrient rundown is quantified, verified and rewarded. This includes developing robust methodologies for measuring crop offtake, linking soil phosphorus data to nutrient removal rates, and ensuring that monitoring and reporting requirements remain proportionate and practical. There is also an opportunity to align this work with existing initiatives such as FarmGate nutrient balances and emerging private markets for environmental services, creating a more integrated and coherent framework for delivery.

9. Communication Recommendations

Effective communication of the findings from the Total Phosphorus pilot is critical to ensuring that the insights generated are interpreted accurately and used constructively. The results highlight complex soil nutrient dynamics and should therefore be communicated in ways that are tailored to different audiences, recognising varying levels of understanding, confidence and readiness to act.

9.1 Participating Farmers:

For those farmers who participated in the testing pilot and have already demonstrated a high level of engagement, the engagement focus for this group in the next 6 months will move from baselining to focus on enabling action. These farms are ideally positioned to act as early

adopters and demonstration sites, where the implications of Total Phosphorus testing can be explored in a practical and evidence-based way. The presence of elevated Total Phosphorus levels indicates that many soils already contain substantial nutrient reserves, and that there may be scope to reduce reliance on imported fertilisers without negatively affecting productivity.

The next phase of work with these farms should therefore focus on structured tests and trials. This could include the establishment of side-by-side comparisons where phosphorus applications are reduced or removed entirely, allowing the impact on crop yield, forage production and overall system performance to be monitored over time. Alongside this, monitoring of crop offtake—both for forage and arable systems—would provide valuable insight into the quantity of phosphorus being exported from the field each season. When combined with existing FarmGate nutrient balance work, this would enable a much clearer understanding of whole-farm phosphorus dynamics and the rate at which legacy phosphorus reserves may be drawn down.

There is also a strong opportunity to integrate environmental monitoring into these trials. In particular, targeted monitoring of land drains and field-edge runoff on selected high-risk fields would help to determine whether elevated Total Phosphorus levels are translating into actual phosphorus losses to water. This is a critical evidence gap within current catchment management approaches. By linking soil phosphorus data with real-world loss pathways, participating farms could play a pivotal role in strengthening the evidence base for both local and national nutrient management policy.

Over time, repeat soil testing will also be important. Annual measurement of plant-available phosphorus, combined with periodic reassessment of Total Phosphorus, would allow changes in soil nutrient status to be tracked and would help to demonstrate the buffering capacity of soils. This would provide valuable insight into how quickly soils respond to reduced inputs and whether legacy phosphorus reserves can sustain crop production over the medium term. Collectively, these activities would position participating farmers as leaders within the catchment, generating practical evidence that can be shared more widely and helping to build confidence across the sector. Alignment of this work with the Defra “Living Labs” soil research which is due to start later this year will be key as could provide the successful deliverer a spring board for that program.

9.2 Wider Farming Community:

For the broader farming community, communication should take a different approach. The priority here is to raise awareness and understanding, while avoiding unnecessary complexity or concern. The key message is that many soils contain more phosphorus than standard tests alone would suggest, and that this represents an opportunity. Total Phosphorus testing provides an additional layer of insight that can help farmers make more informed decisions about nutrient management, particularly in the context of rising input costs and increasing environmental scrutiny.

It is important that this message is communicated in a clear and practical way. Rather than focusing on the technical aspects of soil chemistry, communication should draw on real farm examples and demonstrate what the findings mean in practice. Case studies from participating farms will be particularly powerful in this regard, especially where they can show that reductions in phosphorus inputs have been achieved without compromising productivity. This peer-to-peer approach is likely to be far more effective than top-down messaging and will help to build trust and confidence among farmers who may be less familiar with the concept of Total Phosphorus.

The financial dimension should also be emphasised. For many farm businesses, the ability to reduce nutrient inputs without affecting output represents a significant opportunity to improve margins and reduce exposure to volatile input prices. At the same time, improved phosphorus management can contribute to reduced risk of nutrient loss to water, supporting compliance with existing regulations and positioning farms more favourably in the context of future policy developments. In this way, Total Phosphorus testing can be framed not only as an environmental tool, but as a means of improving business resilience.

Across both tiers, there is a clear opportunity to link the findings of this pilot to wider catchment-scale objectives. By supporting a group of engaged farmers to test and demonstrate new approaches, and by communicating these findings effectively to the wider farming community, Herefordshire Rural Hub aims to translate this complex scientific data into practical, farm-level action. This approach aligns closely with our existing work on FarmGate nutrient balances and with the broader ambition to improve water quality within the Wye catchment.

9.3 Wider Stakeholders:

In addition to engagement with farmers, there is a clear need to communicate the findings of the Total Phosphorus pilot appropriately to wider stakeholders operating at a catchment and strategic level. This includes forums such as the Nutrient Management Board, the Wye Catchment Partnership, local authorities, regulators and water companies, all of whom contribute to shaping policy, investment and delivery across the catchment.

For this audience, it is important that the findings are presented in a balanced and contextualised way. The dataset provides useful additional evidence to support understanding of phosphorus within agricultural soils, particularly in relation to the presence of legacy nutrient stores. It highlights that a proportion of phosphorus within soils is held in forms that are not immediately plant-available, and that this may influence longer-term nutrient behaviour. However, it should be recognised that the dataset represents a snapshot in time and should be considered alongside other sources of evidence when drawing conclusions at a catchment scale.

Communication should therefore focus on positioning the dataset as a complementary contribution to ongoing research and monitoring, including work undertaken through the REPHOKUS programme and other catchment initiatives. The alignment between these strands of work is helpful in building a more complete understanding of phosphorus dynamics, but care should be taken to avoid overgeneralisation from a relatively limited sample set. The value of the

pilot lies in its ability to provide real-world, farm-scale insight that can inform and refine wider discussions, rather than to serve as a definitive assessment in isolation.

It is also important to present the findings in a way that recognises both the complexity and variability of agricultural systems. The data demonstrates that phosphorus levels vary considerably between fields and holdings, reflecting differences in soil type, management history and farming practice. As such, it supports a more differentiated approach to nutrient management, where interventions are informed by local conditions rather than applied uniformly across the landscape.

The findings also have relevance in the context of emerging delivery approaches, such as those being explored through the Wyescapes Landscape Recovery project. In this case, the dataset can help to inform where targeted management changes or trial activities may be most appropriate. When presented alongside practical examples of on-farm testing and innovation, it contributes to a broader narrative around collaborative, farmer-led approaches to addressing nutrient challenges.

Looking ahead, there is a clear opportunity for this work to inform future research and policy development, particularly through programmes such as the Defra Living Labs initiative. The pilot demonstrates the value of integrating farmer participation with scientific investigation and provides a useful baseline for further study. Sharing the findings through established catchment forums will help to ensure that this work is understood within the appropriate context and can contribute constructively to ongoing discussions.

10. Conclusions

The Total Phosphorus soil testing pilot has provided a valuable and timely contribution to understanding nutrient dynamics within agricultural soils in Herefordshire. By combining farmer-led sampling with advisory support and alignment to academic research, the project has generated an evidence base that offers new insight into the scale and variability of phosphorus held within soils, beyond that captured through standard agronomic testing.

At the same time, the report must be read in line with its limitations. The dataset is exploratory in nature, includes a limited number of holdings, and contains some very high values that materially affect averages and trends. The analysis presented here is intentionally proportionate and transparent rather than definitive. It helps identify useful patterns, questions and priorities for future work, but does not in itself provide conclusive scientific proof or prescriptive recommendations.

The most appropriate next step is therefore not to over-interpret the current findings, but to build on them through structured follow-up activity. This should include on-farm tests and trials on selected holdings, particularly where farmers are motivated to explore reduced phosphorus inputs, crop offtake monitoring and repeat soil testing over time. There is also a clear case for

targeted monitoring on selected higher-interest fields, including where appropriate land drain or runoff monitoring, to improve understanding of how soil phosphorus status relates to actual loss pathways.

Continued support for farmer knowledge exchange will be equally important. The Herefordshire Agri Group has provided the forum through which many of these questions first emerged, and it remains well placed to support peer learning, interpretation of results and practical discussion of trial findings. Sharing results carefully and proportionately with wider stakeholders, including catchment forums and research partners, will also help ensure that the work contributes constructively to the wider evidence base without being overstated.

There is clear value in aligning the next phase of work with Wyescapes, REPHOKUS and the forthcoming Defra Living Labs programme so that future monitoring and research build on the baseline now established. In this way, the pilot can play an important role in moving from initial indication to more rigorous understanding, while keeping farmers centrally involved in shaping the next stage of inquiry.

11. Next Steps and Key Actions

11.1. On-Farm Tests and Trials

A priority for the next phase is the development of structured on-farm tests and trials with participating farmers. These should focus on building practical evidence around the management of legacy phosphorus and the implications for both productivity and environmental outcomes.

Key areas of focus should include:

- Trials to assess the impact of reduced or ceased phosphorus fertiliser applications on crop yield and quality
- Monitoring of crop offtake for both forage and arable systems to quantify nutrient removal
- Integration of soil testing over time to track changes in plant-available phosphorus in response to management changes
- Targeted monitoring of higher-risk fields, including consideration of drainage and runoff pathways, to better understand potential links between soil phosphorus status and nutrient loss

These activities will be critical in moving from data collection to actionable insight, and in building confidence among farmers that changes in nutrient management can be made without compromising system performance. This approach could be progressed through both the Defra Living Labs soil research and the proposed Defra Farmer Collaboration fund. Ensuring alignment between these initiatives will help to maximise the value of the pilot and avoid duplication of effort.

11.2. Support for Farmer Knowledge Exchange

The Herefordshire Agri Group provides a strong foundation for continued knowledge exchange and could play a central role in the next phase of delivery. Ongoing facilitation of this group will be essential to:

- Share emerging findings from on-farm learning
- Enable peer-to-peer knowledge exchange and discussion
- Explore practical challenges and opportunities associated with nutrient management changes
- Support farmers in interpreting their own soil data and making informed decisions

There is also an opportunity to expand engagement beyond the initial group, using participating farmers as demonstration hosts and case study examples to support wider learning across the county. It is anticipated that this element can be enabled through support from Dwr Cymru’s collaboration funding and Defra’s new Farmer Collaboration Fund launching later in 2026.

11.3. Targeted Communication and Dissemination

The findings from the pilot should be communicated in a way that is appropriate to different audiences, ensuring clarity, accuracy and proportionality in messaging.

For farmers, communication should focus on practical implications, including opportunities to reduce inputs, improve efficiency and manage risk. For wider stakeholders, including catchment partnerships and policy forums, the emphasis should be on how the dataset contributes to a broader evidence base and supports more targeted and informed approaches to nutrient management.

In all cases, it will be important to present the findings within their appropriate context, recognising both the value of the dataset and its limitations, and avoiding overgeneralisation.

12. Delivery Cost

Description	Hours	Cost
Farmer Recruitment and Coordination with Cobb Agri	6	159.96
Herefordshire Agri Group meeting preparation & attendance	9	239.94
Data analysis & Liaison with Lancaster University	6.5	173.29
Prepare Project Report & Disseminate Findings	16	426.56
Organisational Overheads @ 20% of staff time		199.95
Soil Testing Costs		£3,090
Total		£4,289.70

13. Disclaimer

This report has been prepared by Herefordshire Rural Hub to provide an initial exploration of total phosphorus within agricultural soils in the Wye catchment. The primary purpose of this work is to initiate a process of gaining further insight into the scale and behaviour of legacy phosphorus in soils, using available data and proportionate analysis. The findings presented are based on a basic assessment of the dataset and are intended to support discussion, learning and the development of future work. They should not be interpreted as definitive scientific analysis, nor as prescriptive agronomic or environmental recommendations.

The intended recipient of this report is Herefordshire Council. While the findings may be of wider interest, any further distribution or use of this report should be agreed in advance with Herefordshire Rural Hub to help ensure that the content is interpreted appropriately and within its intended context.

All data included within this report has been anonymised. Individual farm identities, locations and specific field details have been removed to protect the confidentiality of participating businesses. The results should therefore be considered in aggregate and not attributed to any specific holding or location.