Report to the Partnership for South Hampshire Joint Committee

Date: **05 March 2025**

Report of: **Alexander Jolley, PfSH Senior Project Officer**

Subject: **NUTRIENT MITIGATION SUPPLY AND DEMAND UPDATE (SOLENT)**

SUMMARY

The report provides an update on the supply and demand of nutrient mitigation across the Solent.

RECOMMENDATION

It is RECOMMENDED that the Joint Committee NOTES the content of the report.

Background

This paper presents the findings from the most recent supply and demand analysis undertaken in November 2024, on the Solent nutrient mitigation market. The last supply and demand update was presented to the 14 March 2024 Joint Committee.

Nutrient Mitigation Supply and Demand Analysis

Introduction

1. It remains the case that there is a sufficient supply of strategic nitrogen mitigation options to aid the delivery of growth across the Solent region in the short to medium term. There are sixteen strategic mitigation sites listed on the PfSH website to guide developers to potential mitigation schemes. The supply of nutrient mitigation in the Test and Itchen catchment remains constrained against the required demand. For calculations of strategic nutrient demand the figure is based on the receiving wastewater treatment works (WwTW) permit level for developments. The assessment of nutrient demand in all catchments includes the proposed technically achievable limits (TAL) due to take effect in 2030, for WwTWs that meet the threshold for being upgraded but do not currently meet the standard.

2. With each iteration of demand assessment undertaken the dataset becomes more refined. This report has further refined demand assessments for individual authorities and the PfSH SEPO team has again assessed individual allocated sites using the updated Crop Map of England (CROME) 2023 in order to produce anticipated nutrient budgets for each site. The use of individual nutrient budgets for site trajectories increases the accuracy of assessments made for strategic nutrient mitigation.

3. It should be noted that the findings presented in this paper are estimates. The best possible evidence has been used to determine whether sites will require off-site mitigation and therefore, need to be included in the demand figures.

4. An analysis of each catchments' 10-year supply and demand position is presented below. For the Western Streams catchment, the analysis covers only the next 5-years, due to limited availability of longer-term demand data for the catchment. The report also presents an emerging demand and supply analysis for each catchment. For demand, this looks at the projected level for the next 5 years. When looking at supply, a forecast has been made based on the anticipated number of mitigation schemes that are expected to come forward over this period.

5. The information in this report is based on data collected in November 2024. Therefore, a 5-year supply of mitigation is achieved when a catchment has sufficient supply to meet projected demand up until the end of 2028/29.

6. It must be noted that the housing figures used to calculate the nutrient demand for each catchment, are based on the pre-December 2024 National Planning Policy Framework standard method. Therefore, the figures in the report do not consider the recently adopted revised standard method.

7. This has been done due to timing of when the revised standard method was adopted and the demand analysis undertaken, but also to reflect the positions that

several authorities are at the critical Plan preparation stage of submission and examination with Plans based on those previous housing requirements. At this point in time, reflecting the new Standard Method figures in this demand would be counterproductive to those authorities. For the nutrient supply and demand analysis later this year, the revised standard method figures will be used to inform the nutrient budgets.

East Hampshire Catchment (Total Nitrogen) – Current Supply

8. The Local Authorities effected by the East Hampshire catchment are: Fareham Borough Council, Gosport Borough Council, South Downs National Park Authority, Portsmouth City Council, Havant Borough Council, Eastleigh Borough Council, Winchester City Council, and East Hampshire District Council.

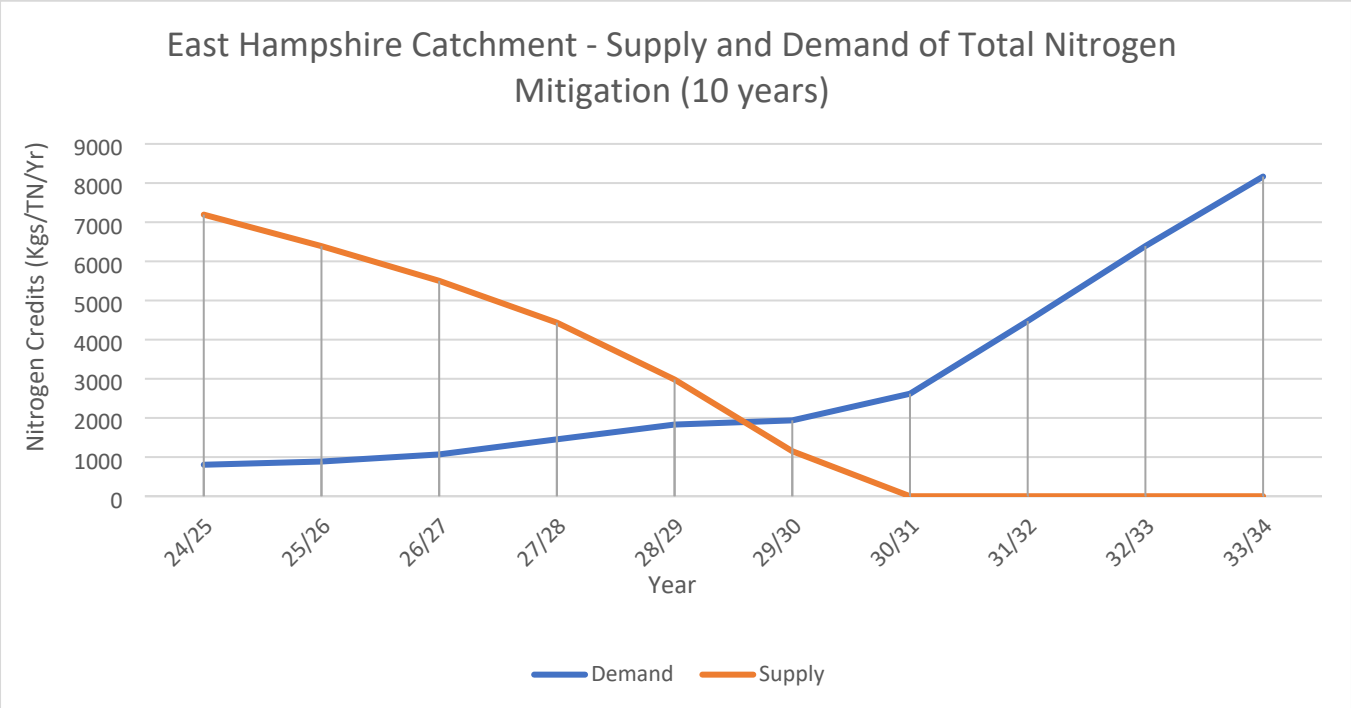

Figure 1 – East Hampshire Catchment Supply and Demand of Total Nitrogen Mitigation (10 years)

9. Figure 1 presents the current supply and demand position for the East Hampshire catchment. Where a supply of credits is indicated in figure 1 this relates to sites that are actively marketing credits to the development sector and have received confirmation from Natural England that the mitigation site is suitable in principle.

10. The graph shows that there is a current availability of 7,193 Kg/TN/Yr in strategic mitigation and it is anticipated that this will be sufficient for the next 5 years of demand. However, with anticipated growth of around 1,200 dwellings per year in the impacted area, the currently available supply would be exhausted mid-way through the 2029/30 financial year. It is anticipated there would be a shortfall in supply of 788 Total Nitrogen (TN) credits in 29/30 should further schemes not come forward as expected.

East Hampshire Catchment (Total Nitrogen) – Emerging Supply

11. There have been several new schemes come to the market in the past year, with an average delivery rate of around 750 Kg/TN/Yr per scheme. One of these schemes was created by the Local Nutrient Mitigation Fund (LNMF) for the purpose of aiding nutrient mitigation supply in the catchment. Due to the difficult in predicting the private mitigation market, figure 2 below takes a precautionary approach and assumes that only LNMF schemes will come forward to satisfy demand.

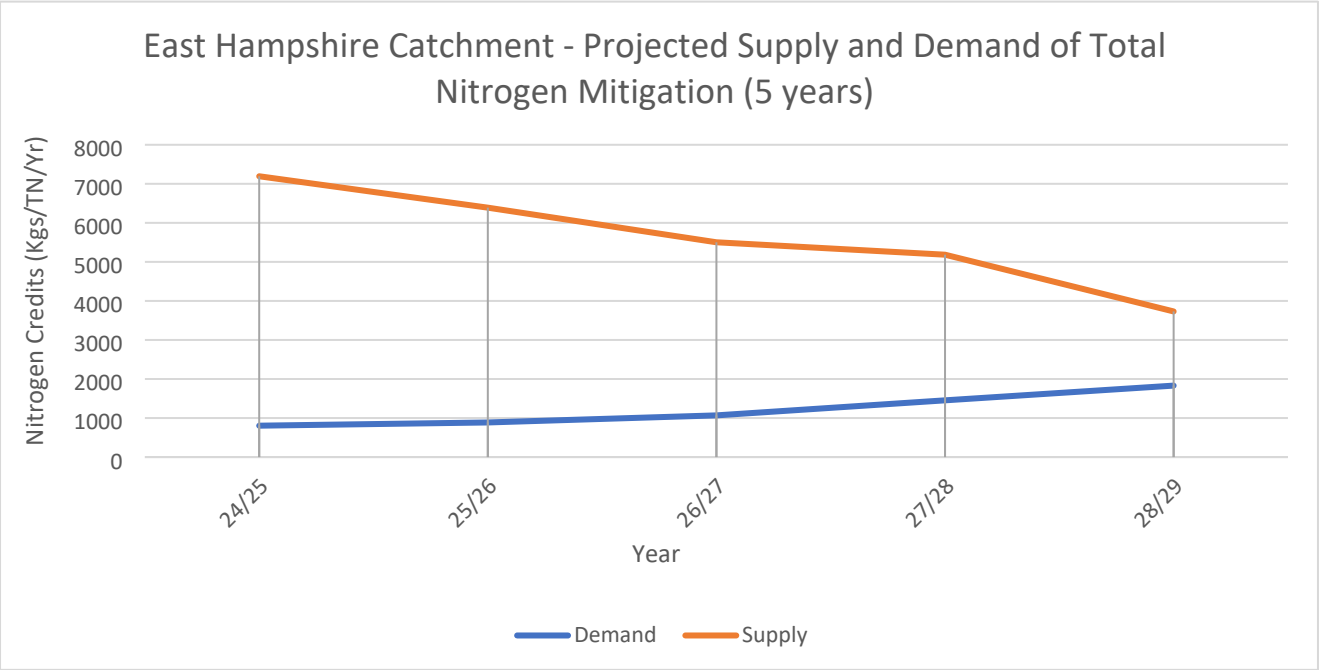

Figure 2 – Projected supply and demand of nutrient mitigation in the East Hampshire catchment (5 years)

12. It is anticipated that the East Hampshire catchment will see at least one new scheme be provided within the next 5 years that has a TN supply of around 750 credits. With the LNMF that is available this is a reasonable assumption. Therefore, based on this assumption, figure 2 above shows that the mitigation supply in the catchment will keep up with demand and the emerging schemes will further strengthen the 5-year supply of strategic mitigation.

Conclusions from East Hampshire Supply and Demand Analysis

13. The current level of supply available in the East Hampshire catchment provides sufficient mitigation to meet the needs of sustainable development for at least the next 5 years.

14. When taking into account the projected supply figures it is anticipated that supply will continue to meet demand in the longer term.

Test and Itchen Catchment (Total Nitrogen) – Current Supply

15. The Local Authorities effected by the Test and Itchen catchment are: Basingstoke and Deane Borough Council, East Hampshire District Council, Eastleigh Borough Council, New Forest District Council, New Forest National Park Authority,

Southampton City Council, Test Valley Borough Council, Winchester City Council, and South Downs National Park Authority.

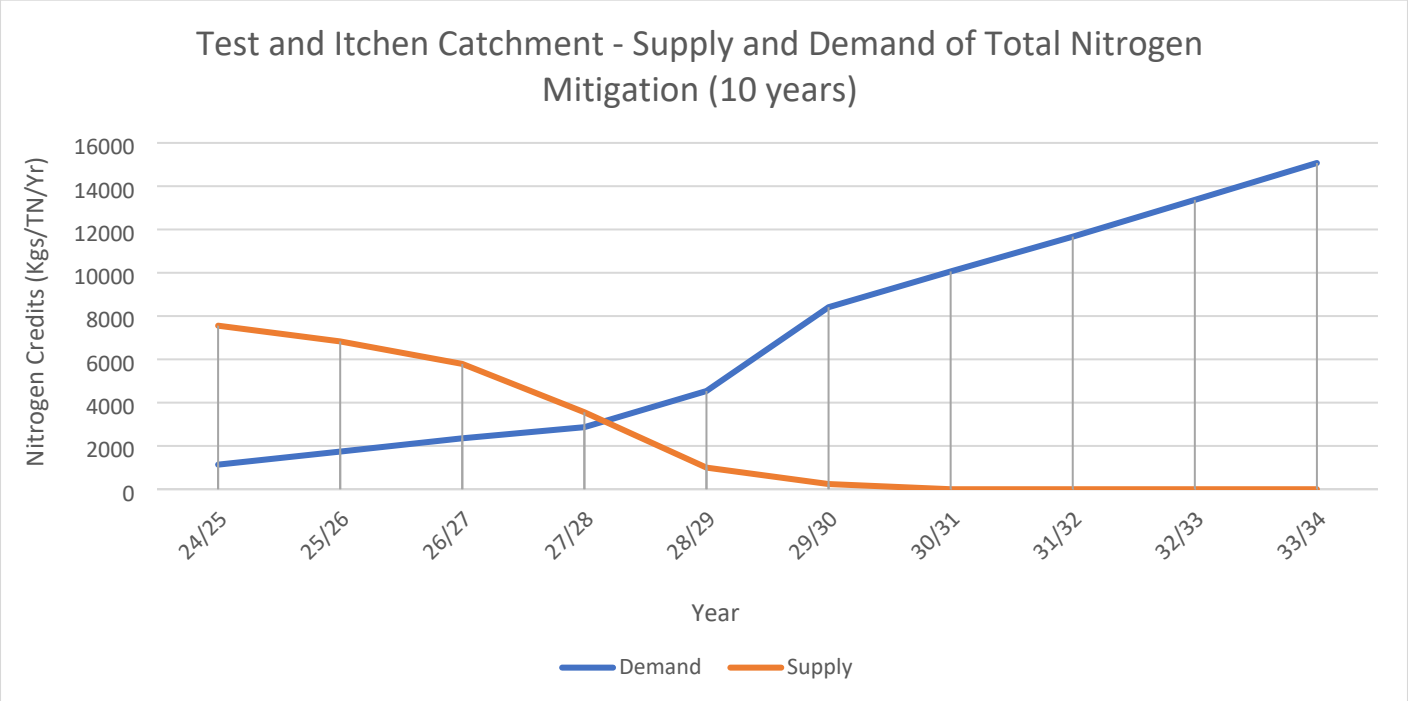

Figure 3 – Test and Itchen Catchment Supply and Demand of Total Nitrogen Mitigation (10 years)

16. Figure 3 presents the current supply and demand position for the Test and Itchen catchment. The catchment is the largest of the five analysed with an average demand of over 2500 Kg/TN per year. This puts significant pressure on the catchment's supply of nutrient mitigation.

17. The graph shows that there is a current availability of 7,555 Kg/TN/Yr in strategic mitigation. With an anticipated growth of around 2500 dwellings per year in the impacted area, the currently available supply would be exhausted mid-way through the 2028/29 financial year. It is anticipated that there would be a shortfall in supply of 3538 Total Nitrogen (TN) credits in 2028/29 should further mitigation schemes not come forward as expected.

Test and Itchen Catchment (Total Nitrogen) – Emerging Supply

18. In the past year there have been three new mitigation schemes within the Test and Itchen catchment that have either started selling to the market or are about to in the next financial year. One of these schemes is funded by the LNMF and is anticipated to provide over 900 Kg/TN/Yr of mitigation over the next five years. As can be seen in figure 3 these new schemes only help reduce the demand burden on supply, and for a 5-year supply of mitigation to be achieved further schemes will need to come forward in the immediate future.

19. Due to the supply shortfall, the Test and Itchen catchment is a priority for the LNMF and therefore, a significant focus will be put on delivering schemes within the catchment.

20. Figure 4 below, assumes that LNMF schemes will come forward over the next 5 years to meet demand but alongside this, there is an emerging public sector scheme that is anticipated to provide a significant amount of mitigation in the immediate future.

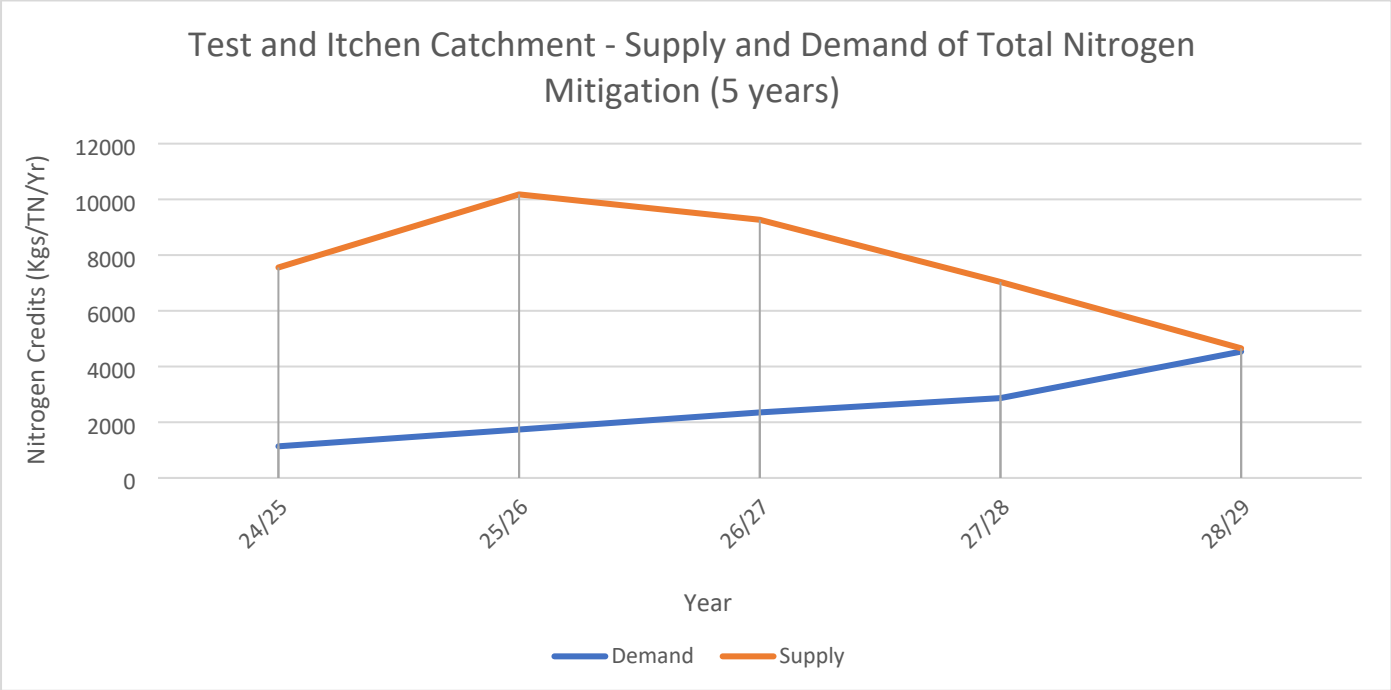

Figure 4 – Projected supply and demand of nutrient mitigation in the Test and Itchen Catchment (5 years)

21. The emergence of the public sector scheme alongside LNMF schemes that are currently in development, could see over 3600 Kg/TN/Yr brought to the market which would eradicate the shortfall seen in figure 3. This would mean that the supply shortfall in 2028/29 would become a surplus of around 100 TN credits. As the catchment is a priority for the LNMF and with the existing funds available, it can be reasonably assumed that even in a worst-case scenario where no private schemes come forward, the LNMF should be able to ensure that the catchment's existing supply shortfall can be met to ensure a 5-year supply of mitigation.

Conclusions from Test and Itchen Supply and Demand Analysis

22. There is currently an estimated shortfall of 3538 TN credits in 2028/29 which will need to be met to ensure a 5-year supply of mitigation.

23. The projected supply figures presented in figure 4 show that a 5-year supply of mitigation can be achieved but this will require an average of 708 Kg/TN credits per year to be brought to the market. Due to the LNMF that is available and the emergence of another public sector scheme in the catchment, this is deemed a realistic assumption.

Itchen Catchment (Total Phosphorus) – Current Supply

24. The Local Authorities effected by the Itchen catchment are: Basingstoke and Deane Borough Council, East Hampshire District Council, Winchester City Council, South Downs National Park Authority, Test Valley Borough Council, and Eastleigh Borough Council.

25. Due to the way in which development impacts phosphorus levels in the Itchen, and the need to deliver mitigation upstream of the development impact, two assessments have been made in relation to supply and demand. An assessment has been made in relation to Chickenhall WwTW in Eastleigh, with a separate assessment made of supply and demand for phosphorus mitigation for remaining WwTWs in the catchment.

Itchen Catchment – Current supply for development draining to Chickenhall as the receiving wastewater treatment works

26. The Local Authorities that have development draining to Chickenhall WwTW are those located in the lower Itchen. These are: Test Valley Borough Council, Winchester City Council, and Eastleigh Borough Council.

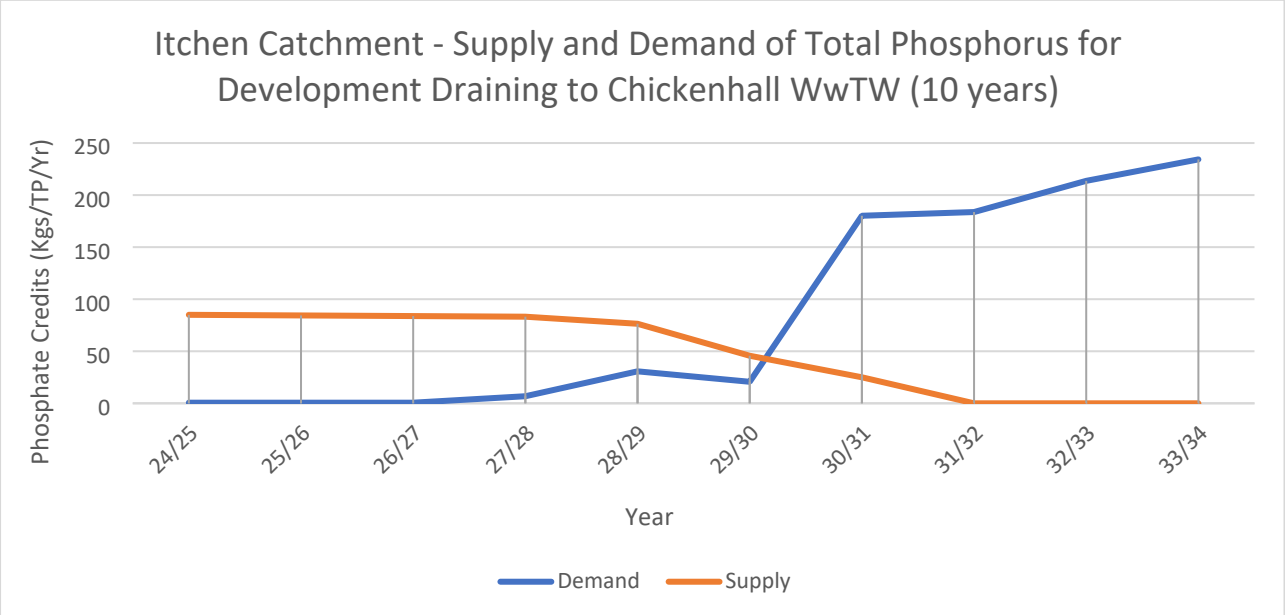

Figure 5 – Itchen Catchment Supply and Demand of Total Phosphorus Chickenhall only (10 years)

27. Figure 5 presents the current supply and demand position for the lower Itchen catchment. The graph shows that there is a current availability of 85 Kg/TP/Yr in strategic phosphorus mitigation and it is anticipated that this will be sufficient for the next 5 years of demand. Based on the current trajectory the currently available supply would be exhausted in 2030/31 with a shortfall in supply of 155 TP credits should further schemes not come forward as expected.

Itchen Catchment (Total Phosphorus) – Emerging supply for development draining to Chickenhall as the receiving wastewater treatment works

28. It is anticipated that the lower Itchen catchment will see at least one new scheme come to the market within the next 5 years. With the LNMF that is available this is a reasonable assumption. Therefore, based on this assumption, figure 6 below shows that the mitigation supply in the catchment will keep up with demand and the emerging schemes will further strengthen the 5-year supply of strategic mitigation.

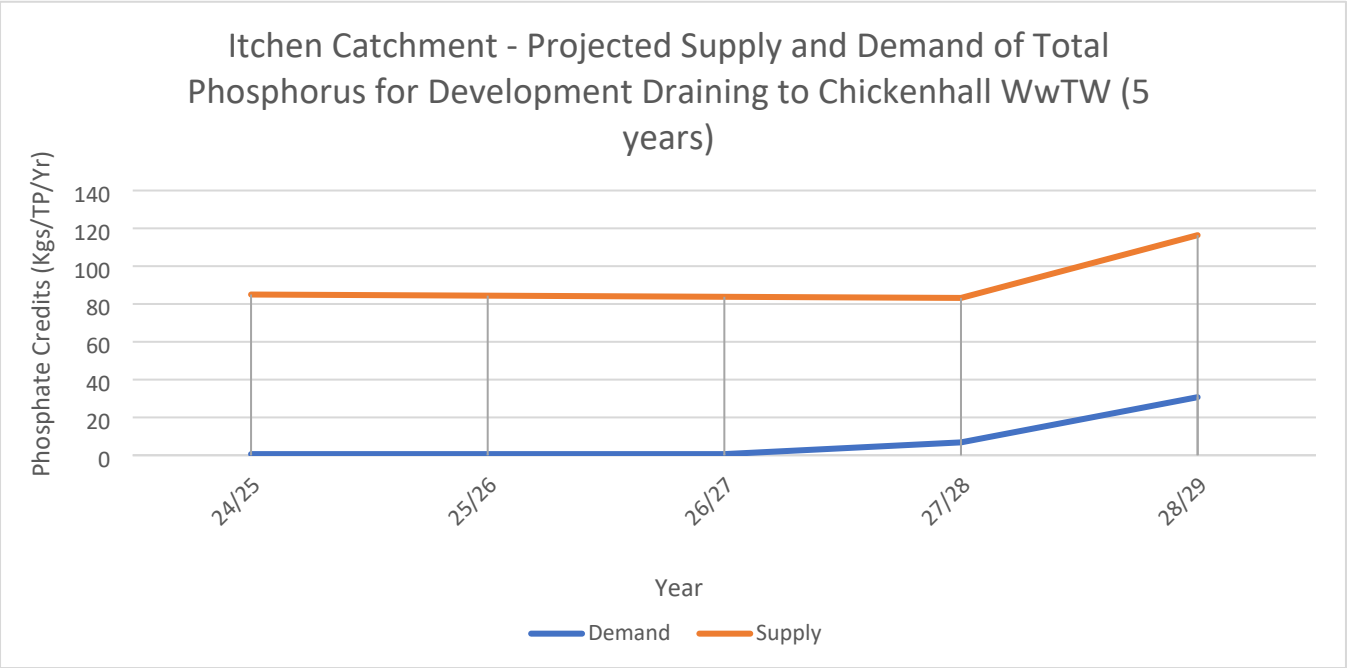

Figure 6 – Projected Itchen Catchment Supply and Demand of Total Phosphorus Chickenhall only (5 years)

Itchen Catchment – Current supply for development draining to remaining wastewater treatment works

29. The Local Authorities that have development draining to the remaining wastewater treatment works in the Itchen catchment are: Basingstoke and Deane Borough Council, East Hampshire District Council, Winchester City Council, and South Downs National Park Authority.

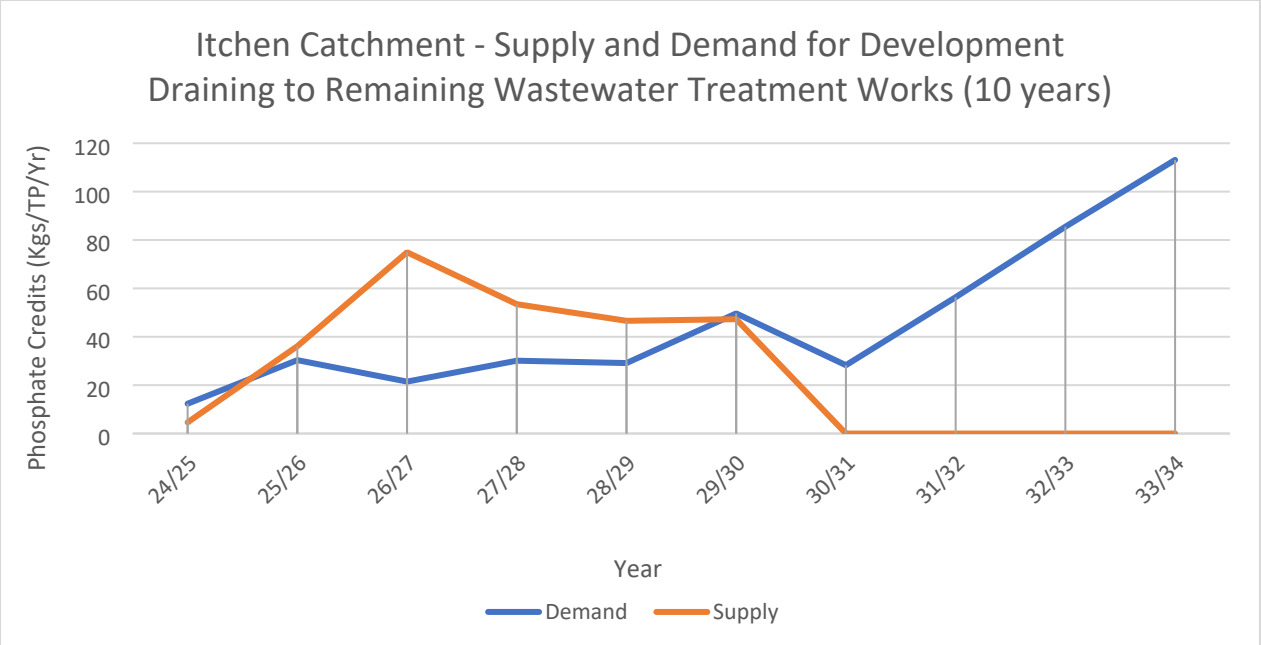

Figure 7 – Itchen Catchment Supply and Demand of Total Phosphorus remaining WwTWs (10 years)

30. Figure 7 presents the supply and demand postion for development draining to the remaining wastewater treatment works in the catchment. The graph shows that there is a current availability of only 4.6 Kg/TP/Yr in strategic mitigation. This is currently not sufficient enough to meet demand in 2024/25 and this has created a backlog of planning applications needing to secure mitigation. Reducing the shortfall in mitigation has been a priority of the LNMF and Winchester City Council, with two new mitigation schemes due to come to the market in 2025/26. These schemes will ensure that there is sufficient supply of mitigation for the next 5 years and will also reduce the current backlog of applications needing mitigation.

31. With these new schemes on the market, supply would not be exhausted until late 2029/30. However, it is anticipated that the shortfall in the 2029/30 financial year could be as small as 2.3 TP credits. This also is assuming that further schemes will not come forward as expected.

32. It must be noted, that although it is estimated that the Itchen catchment will have a 5 year supply of mitigation, this does not apply to a small area around Medstead and Ropley within the East Hampshire District boundary. These areas are at the headwaters of the River Itchen and there are currently no mitigation schemes that meet the requirements of being upstream of the development area and can therefore, provide a supply of mitigation. The LNMF is aware of the issue and is in the process of exploring potential mitigation solutions.

Itchen Catchment – Emerging supply for development draining to remaining wastewater treatment works

33. Further to the two new schemes provided by Winchester City Council and the LNMF that are due to come to the market in 2025/26, there are further LNMF

mitigation schemes in development that are expected to come to the market in the medium term. These schemes would further boost supply and will ensure that the 5 year supply of mitigation in the upper Itchen catchment is further strenghtend, as can be seen in figure 8 below.

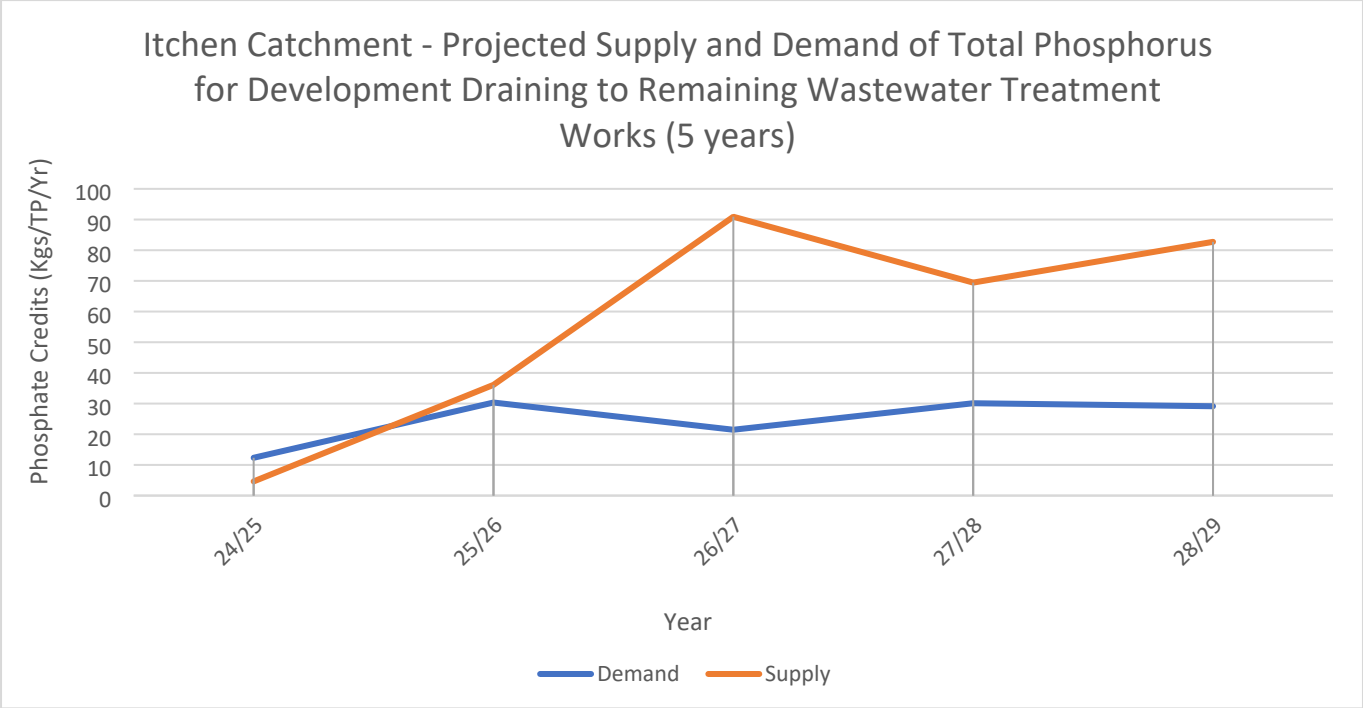

Figure 8 – Projected Itchen Catchment Supply and Demand of Total Phosphorus remaining WwTWs (5 years)

Conclusions from Itchen Catchment (Total Phosphorus) Supply and Demand Analysis

34. The Itchen catchment for development draining to Chickenhall WwTW has a sufficient supply of nutrient mitigation to meet the needs of sustainable development for the next 5 years.

35. The two new mitigation schemes provided by Winchester City Council and the LNMF in the Itchen catchment for development draining to the remaining WwTWs, will reduce the backlog of planning applications needing mitigation, as well as, providing a sufficient supply of mitigation for the next 5 years.

New Forest Rivers Catchment (Total Nitrogen) – Current Supply

36. The Local Authorities effected by the New Forest Rivers catchment are: New Forest District Council, and New Forest National Park Authority.

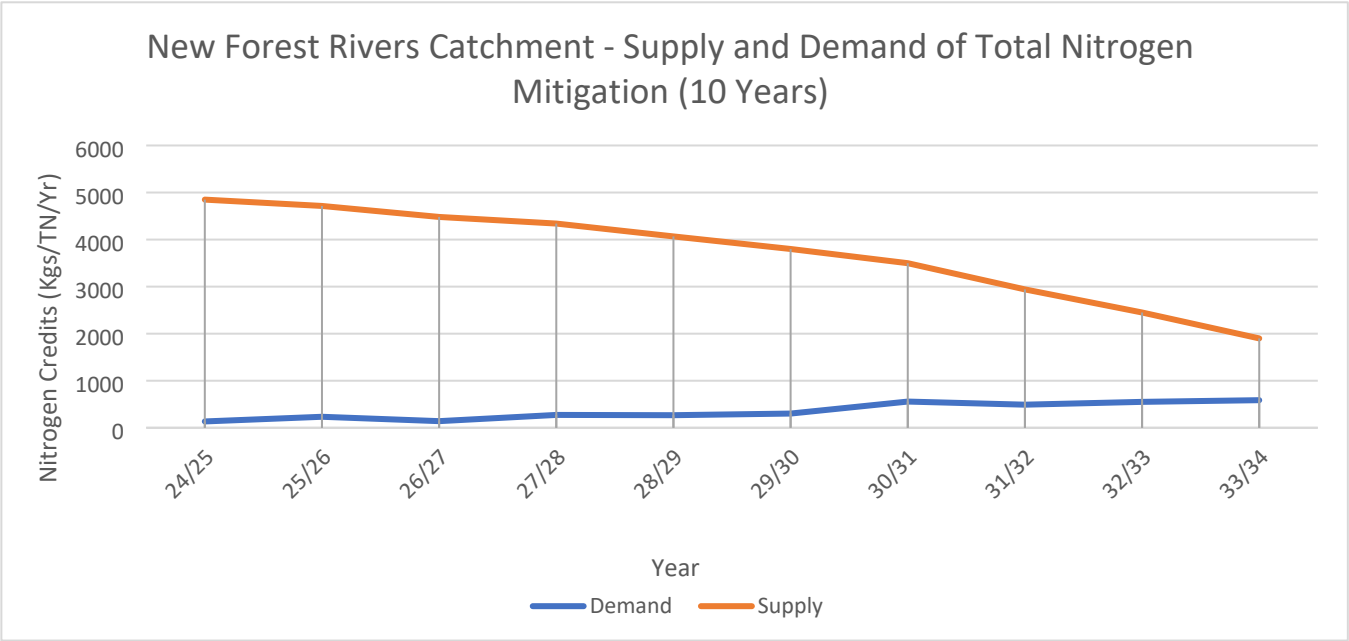

Figure 9 – New Forest Rivers Catchment Supply and Demand of Total Nitrogen Mitigation (10 years)

37. Figure 9 presents the current supply and demand position for the New Forest Rivers catchment. The graph shows that there is a current availability of 4,849 Kg/TN/Yr in strategic mitigation and it is anticipated that this will be sufficient for at least the next 10 years. The increase in mitigation supply is a result of a major New Forest catchment private mitigation scheme coming to the market in 2024/25.

New Forest Rivers Catchment (Total Nitrogen) – Emerging Supply

38. Due to the significant level of supply that is currently available, the catchment is not currently a priority of the LNMF. Therefore, for the New Forest Rivers catchment there are no emerging supply projections for the immediate term.

Conclusions from New Forest Rivers Supply and Demand Analysis

39. The current level of supply available in the New Forest Rivers catchment provides sufficient mitigation for at least the next 5 years, and based on projections current supply could meet the needs of sustainable development for the next 10 years and beyond.

Western Streams Catchment (Total Nitrogen) – Current Supply

40. The Local Authorities effected by the Western Streams catchment are: Havant Borough Council, Chichester District Council, and South Downs National Park Authority.

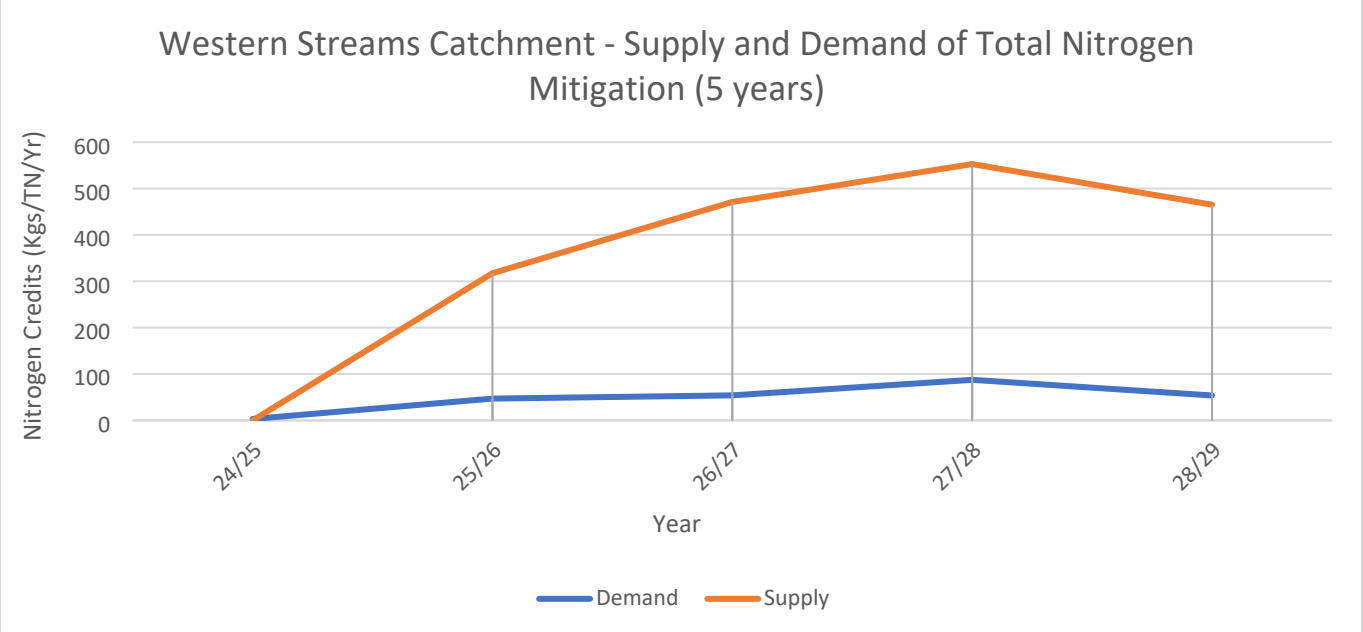

Figure 10 – Western Streams Catchment Supply and Demand of Total Nitrogen Mitigation (5 years)

41. Figure 10 presents the current supply and demand position for the Western Streams catchment. The graph shows that there is currently no availability of strategic mitigation, however, there is a private scheme that will start providing a supply of mitigation from 2025/26. The supply is anticipated to be sufficient to ensure at least a 5-year supply of mitigation in the catchment.

Western Streams Catchment (Total Nitrogen) – Emerging Supply

42. As the Western Streams is currently reliant on one private mitigation scheme for nutrient mitigation, there is at least one other private scheme that is in development and that is likely to come forward in the short-term. Alongside this, the LNMF is also looking at the Western Streams as one of its priority catchments to ensure that there is a sufficient supply of nutrient mitigation for the short to medium term.

Conclusions from Western Streams Supply and Demand Analysis

43. The current projected supply of mitigation in the catchment is sufficient to satisfy sustainable development for at least the next 5 years.

44. To further solidify the catchment's mitigation position at least one more scheme is likely to come forward as emerging supply within the next 5 years.

Summary

45. The report has presented an analysis of each catchments' supply and demand position for nutrient mitigation in the Solent. Table 1 below presents a summary of each catchments' nutrient mitigation position and whether based on the current availability of supply, there is a 5-year supply of strategic mitigation.

Table 1: Overview of Supply and Demand Position by Catchment (December 24/25)

Catchment	5 Year supply currently achieved	Emerging supply required to achieve 5 year supply	Emerging supply already in progress to meet shortfall
East Hampshire (TN)	Yes	N/A	N/A
Test and Itchen (TN)	No	3538	3655
Itchen - Chickenhall only (TP)	Yes	N/A	N/A
Itchen - remaining WwTWs (TP)	Yes	N/A	N/A
New Forest Rivers (TN)	Yes	N/A	N/A
Western Streams (TN)	Yes	N/A	N/A

46. It can be seen in table 1 that all catchments except for the Test and Itchen, have a 5-year supply of mitigation based on the current level of supply. It is anticipated that the supply of mitigation in the Test and Itchen catchment will be exhausted mid-way through 2028/29 with a shortfall of 3538 Kg/TN/Yr if no further schemes come forward.

47. However, as can be seen in table 1 there is already an emerging supply of around 3655 TN credits in the Test and Itchen catchment which would eradicate the predicted shortfall. Further to this, the catchment is a priority for the LNMF and therefore, further projects will come forward to meet the shortfall and ensure there is a 5-year supply of mitigation in the catchment. There is also the possibility that further private mitigation schemes will come forward over this period, however, these are harder to predict.

RECOMMENDATION

It is RECOMMENDED that the Joint Committee NOTES the content of the report

ENQUIRIES:

For further information on this report please contact:-

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