

FAREHAM

BOROUGH COUNCIL

Report to the Executive for Decision

03 August 2020

Portfolio:

Housing

Subject:

Nitrate Credits for Fareham Housing Schemes

Report of:

The Deputy Chief Executive Officer

Corporate Priorities:

Providing Housing Choices

Purpose:

For the Executive to note the approach being used in order to achieve nitrate neutrality for Fareham Housing schemes.

Executive summary:

The report explains how water use efficiency measures will be installed on some existing Fareham Housing properties in order to provide 'nitrate credits' which can then be used to offset water use/nitrate generation on Fareham Housing new build projects.

The approach, which has been found acceptable by Natural England, should ensure the nitrate issue does not prevent planning consent from being granted on Fareham Housing new build schemes. Thereby allowing the programme for the provision of new affordable homes to continue.

Recommendation:

It is recommended that the Executive notes the content of the report and the approach to nitrate neutrality for Fareham Housing developments.

Reason:

To ensure the Executive are aware of the nitrate neutrality approach for Fareham Housing schemes.

Cost of proposals:

The costs of installing the water efficiency measures all fall within existing budgets of the Housing Revenue Account.

Appendices:**Appendix A:** Nitrate Credit Calculations & Details

Background papers: Executive Report dated 02 September 2019 on 'Interim Nitrogen Mitigation Solution'

Reference papers: Affordable Housing Strategy (2019)

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Executive Briefing Paper

Date:	03 August 2020
Subject:	Nitrate Credits for Fareham Housing Schemes
Briefing by:	The Deputy Chief Executive Officer
Portfolio:	Housing

INTRODUCTION

1. The 'Interim Nitrogen Mitigation Solution' report to the Council's Executive on the 02 September 2019 outlined the background information on the environmental impact from raised nitrate levels in the Solent and the resulting impact on the Council's ability to issue planning consents unless the applicant could demonstrate nitrate neutrality either on-site or via suitable off-site mitigation.
2. The nitrate issue had the potential to detrimentally affect the delivery of new affordable homes to be provided by Fareham Housing. This included projects such as the sheltered housing flats at Station Road in Portchester, shared ownership homes at Stubbington Lane and the future redevelopment of Assheton Court. The need for more affordable homes in the borough, and the role of Fareham Housing in directly providing more affordable homes, is recognised in the Council's adopted Affordable Housing Strategy (2019).
3. The September 2019 Executive report outlined a suite of potential measures that might be needed to achieve nitrate neutrality. Water efficiency upgrades in existing FBC housing stock was one of the potential measures identified.
4. This report explains the water efficiency upgrades (i.e. retrofitting) approach and how this will be used to provide 'nitrate credits'. The 'nitrate credits' can then be used to offset the delivery of new Fareham Housing projects for at least two years.
5. It is important to note that Natural England (NE) currently only find the retrofitting approach acceptable for Council owned homes as this gives NE the necessary reassurance that the measures will be put in place, and retained thereafter, by a responsible public body. This is therefore not a large-scale solution to the way nitrate levels are affecting how planning applications are determined.

WATER EFFICIENCY MEASURES TO FBC STOCK

6. Some wastewater treatment works, like the one that serves Fareham, operate on a permissible amount of nitrogen per litre of water, reducing the number of litres

discharged from the works also reduces the amount of nitrogen going into the Solent.

7. The Council own and manage approximately 2,400 homes (made up of general purpose and sheltered properties). NE has accepted the principle that water efficiency savings made at these properties can be used to provide 'nitrate credits' to offset new home delivery elsewhere in Fareham Borough.
8. The most effective and practical water efficiency upgrades that can be made include:-
 - Low flush toilet installation
 - Shower over bath installation (when not already in situ)
 - Low flow basin tap installation or flow restrictors (not normally to apply to bath or kitchen sink taps)
9. Any retrofit/upgrade works required for mitigating and allowing new development will be undertaken as part of Fareham Housing's existing works to properties. This means it will be incorporated as part of the Council's 'void' process (i.e. turning around empty properties for re-let), responsive repairs (i.e. rather than just fix an old leaking cistern seek to replace it with a water efficient one) and planned maintenance (e.g. planned bathroom replacements).
10. This will ensure that the costs are manageable and can largely be as per existing budgets. It will also ensure that minimal disruption occurs to existing tenants and that it remains manageable within existing staff resource.
11. Detailed background data has been compiled, and calculations have been made, to understand the water efficiency savings expected to be achieved from the three upgrade measures identified above. Further information relating to this and the approach to maintain a 'Nitrate Credit Record' are available in Appendix A.
12. The water savings calculations have been based on established flow rates (old vs. new) and typical usage per day to give a litres per person per day (lpppd) saving. This then allows the water efficiency achieved per retrofit to be calculated and accumulated in order to build up credits. A broad overview of the water savings per upgrade is provided below (and detailed further in Appendix A): -

Type of Upgrade	Litres Per Person Per Day (lpppd) Saving	Explanation / Further Info.
Toilet Upgrade	10.59	A modern toilet uses 6 litres per flush as opposed to a typical 8 litre per flush (or 13 litres for pre-1992 toilets). The lpppd saving is based against typical day usage and assumes replacement of a post 1992 cistern/toilet (i.e. 8 litre flush replacement). Any replacement of older toilets will be appropriately recorded and deliver a greater saving.
Shower Installation	40	Only applicable where no shower previously present. Uses established data on comparison between water use for a shower vs. a bath.

Basin Tap upgrade	45	Normal basin taps have a flow of 10 litres per minute. Low flow taps or restricted taps typically have 5 litres per minute flow. Lpppd saving based on typical basin use a day (handwashing, toothbrushing etc.).
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Table 1: Overview of typical water savings expected per household upgrade

13. A ‘Nitrate Credit Record’ has been established to record the qualifying upgrade works. In some instances, properties may have all three upgrade measures installed and in other instances only one or two may be possible or appropriate. The actual works will be recorded on an ongoing basis. In addition to recording the ongoing/future upgrades any qualifying water efficiency upgrades undertaken since 01 January 2019 will also be included on the ‘Nitrate Credit Record’.
14. Any demolition of Fareham Housing stock will be reflected in the ‘Nitrate Credit Record’. The water use saving can then contribute to the ‘nitrate credits’ and be utilised elsewhere. This will be relevant when Assheton Court in Portchester is demolished (credits gained) and subsequently redeveloped (credits used).

USING THE NITRATE CREDITS

15. The litres per person per day (lpppd) saving will be accumulated in the ‘Nitrate Credit Record’. The relevant amount of credits will then be used to offset the new Fareham Housing projects. This will have to be detailed/explained alongside the individual planning application for each site, as has already been done to support the planning applications (and subsequent planning approvals) for the Station Road and Stubbington Lane sites.
16. When the credits are used the calculation will be based on understanding (a) the typical or maximum occupancy of homes (e.g. 2.4 persons for general purpose homes and a maximum of 2 persons for sheltered accommodation); (b) a water use of 110 litres per person per day (expected water use on modern developments); and (c) applying a 20% buffer to the expected water use figures (as required by Natural England).
17. This has been the approach agreed by NE and it echoes the approach of similar nitrate credit systems proposed/used by Portsmouth City Council and Gosport Borough Council.
18. As an example, the development at Station Road for 16 new sheltered housing flats will require the following nitrate credits to offset the proposed development: -

16 (flats proposed) x 2 persons (maximum occupancy per sheltered housing flat) = 32 persons

32 persons x 110 litres per person per day (lpppd) = 3,520 litres per day

3,520 (litres per day) x 1.2 (to provide 20% buffer) = **4,224 litres per day**

19. The proposed development at Station Road in Portchester for 16 sheltered flats will therefore be expected to have a maximum water consumption (when occupied) of 4,224 litres per day. With the water efficiency measures/upgrades to existing stock now being underway and recorded officers fully expect there to be more than sufficient credits to offset this development once it is constructed and first occupied. Demonstrating this is a pre-occupation condition to the planning consent.

20. It is not possible to be specific as to how many Council properties will need to have upgrades made in order to compensate new development, as this can depend on how many of the three upgrades (e.g. toilet, shower and/or basin taps) can be made to each existing property upgraded. As an approximate guide it is likely that 4 or 5 properties will need to be upgraded to allow for one new dwelling.

PROJECTED CREDIT AVAILABILITY

21. An estimate of the number of upgrades that will be made each year on existing properties (based on past trends of works on Council owned homes) suggests that the rate of upgrades should support the delivery of between 40-70 new homes per year until at least the end of 2022. After this point it will need to be reviewed as inevitably over time there will be fewer existing properties suitable for upgrades (i.e. as the overall water efficiency of FBC stock is improved), so fewer nitrate credits are likely to be generated.
22. Nitrate credits to allow for an average of 40-70 new homes per year is enough to support the current envisaged programme of Fareham Housing new builds. At this stage there cannot be certainty on (a) the number of credits accumulated through upgrades; or (b) what further new Fareham Housing projects might be identified. For this reason, it is unlikely that there will be the opportunity to sell on surplus credits for other housebuilders to use.
23. If this were to change, and surplus nitrate credits were available, then any purchaser will be expected to cover the costs of the relevant amount of retrofit works undertaken (parts & labour) and a report would be brought back to the Council's Executive to consider an appropriate way to prioritise the sale of any surplus nitrate credits.

PLANNING PROCESS

24. In order to ensure that this approach was acceptable to both NE and the Council (in its role as Local Planning Authority) a Nutrient Neutrality Statement was produced for the Fareham Housing proposals at Station Road and Stubbington Lane. Both proposals were subject to planning applications in the latter part of 2019 and were required to demonstrate nitrate neutrality before an Appropriate Assessment could be undertaken and planning consent be granted.
25. Following consultation with NE on the submitted Nutrient Neutrality Statements in early 2020, and the subsequent Appropriate Assessment process, the proposed approach to nitrate neutrality was found acceptable by NE. Planning permission was subsequently granted for both sites.

OTHER MATTERS

26. Fareham Housing officers will monitor and maintain the Nitrate Credit Record to ensure it is kept up to date. This will mean it can be submitted as and when required to the Planning Department and/or NE for them to be satisfied appropriate credits are being built up and appropriately deducted for Fareham Housing developments.
27. In addition, officers will consider ways in which monitoring might take place to understand if the water efficiency upgrades/retrofits truly reduce water consumption.
28. An additional benefit of improving the water efficiency of some Fareham Housing stock is that those residents who are on a water meter could see savings to their water bills.

CONCLUSION

29. Fareham Housing officers will continue to utilise this successful approach to achieve Nitrate Neutrality and thus allow the Fareham Housing new build programme to continue.

Enquiries:

For further information on this report please contact Robyn Lyons (Ext 4305)