NITRATE POLLUTION IN THE SOLENT -
AN OPPORTUNITY FOR THE NEW FOREST

What is nitrate pollution and how could its mitigation benefit the New Forest?

The Solent water environment is one of the most important for wildlife in the United Kingdom. It has various designated habitat sites including Special Protection Areas, Ramsar and the Solent Maritime Special Area of Conservation.

Nitrates (which we'll use as the collective name for nitrates, nitrites and phosphates) make their way into the water from the surrounding land. Agricultural sources, such as the use of fertilisers, account for about half of the total nitrates in the Solent. Other sources include background levels already in the water and, to a smaller extent, waste water from developments. Nitrates cause eutrophication and green algae mats grow depleting oxygen in the water. This upsets the biodiversity and ecosystems of the water environment and the problem has been of concern for some time.

Although the Conservation of Habitats and Species Regulations 2017 already set out systems for the protection of European sites and protected species, further rulings from the European Court of Justice on the subject provoked stricter guidance from Natural England (NE) in June 2019. While termed guidance in reality this was a directive to Planning Authorities.

NE advised all local planning authorities in the Solent that new developments must achieve nutrient neutrality, thus ensuring new developments do not make the situation any worse. The rules apply to new dwellings and new overnight accommodation across the water catchment areas of rivers discharging into the Solent.

NE's advice specified the method for calculating nitrate neutrality. This compares the nitrate difference between the proposed use and the pre-development use. Any additional nitrate loading must be offset **in perpetuity** via mitigation methods

Like a number of other local planning authorities in the Solent catchment, the New Forest National Park Authority ("NPA") requires developers to provide in their application an avoidance and mitigation package the threat of additional nitrates. Where this has not proved possible, (and so far it has been possible for only one applicant in National Park (Fawley Waterside)), NPA imposes a 'Grampian' planning condition. Such a condition prevents occupation until off-site works that provide the mitigation have been completed. At the time of writing the applicant knows neither the cost or timescale of such works.

Nitrate neutrality can be achieved by off-setting the increased nitrate runoff from a development with reduced runoff elsewhere in the same fluvial catchment. (See map below). The offset is usually a change on a nearby farm - some fertiliser-gobbling cropped land is converted to rough pasture or woodland.

The Fawley Waterside development is able to be more inventive and is achieving nitrate neutrality by creating a new nitrate-absorbing wetland of about 2 hectares on a stream draining the arable areas of neighbouring Cadland Estate, and additionally forming a 10 hectare new tidal creek which will absorb nitrates direct from the Solent.

The new guidelines brought house building across the river catchment areas shown to a virtual standstill. Only homes with existing planning permission were built. To facilitate a solution, the Government committed £3.9 million for the development of an on-line 'nitrate trading' auction platform enabling house builders to buy offsetting credits. The credits coming from landowners in the same catchment area who are prepared to convert arable land to pasture and woodland and who could guarantee the change remained in perpetuity.

Many such nitrate-reducing schemes have started or are talked about. NPA and New Forest District Council are exploring a wide range of off-setting options in the New Forest particularly around the wastewater treatment works. Improved efficiency in extracting nitrates within the works and/or the creation of Interceptor wetlands, reed beds or willow thickets on the discharge from sewage works. Such schemes rely on interest from Southern Water and to date no progress has been made.

Hampshire & Isle of Wight Wildlife Trust have purchased an arable farm on the Isle of Wight draining into Wotton Creek and thus the Solent. The Trust will convert the arable land to a nature reserve, and sell the credits to developers elsewhere on the Island. They have hopes of extending the scheme to the mainland.

Portsmouth City Council has developed an off-setting scheme by reducing runoff from existing council owned housing stock, thereby creating 'headroom' for new development in the city. Havant Borough Council and Eastleigh Borough Council have purchased farmland to enable off-setting credits.

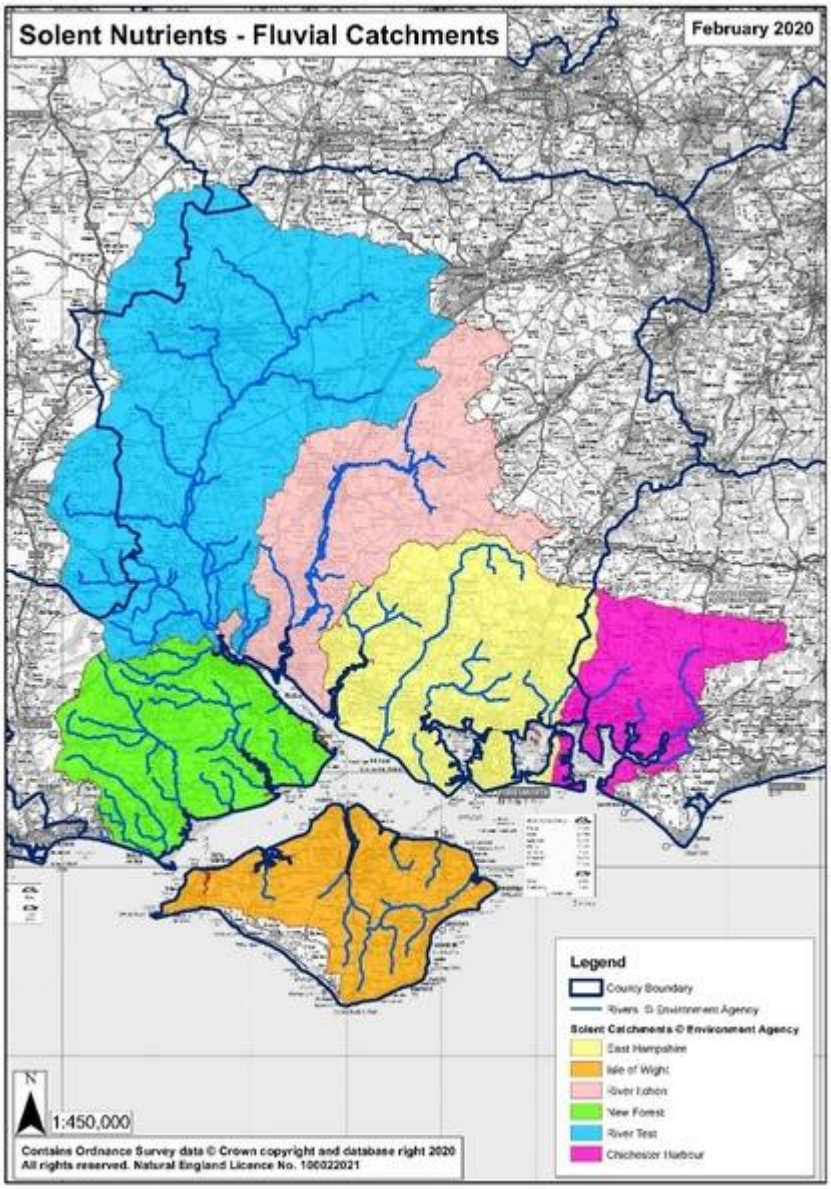
Test Valley DC have purchased £1 million worth of credits from Roke Manor Farm to the west of Romsey to sell on to smaller developers. Larger developers will go direct to Roke Manor. The quote from Natural England is encouraging suggesting eventual public access - *We support the work Test Valley Borough Council has done to secure the credits from the Roke Manor site to protect the Solent from increases in nitrates. We are excited to see it develop into a wonderful place for wildlife and a great environmental asset for the borough and its residents*." Roke Manor Farm could thus

become an alternative visitor attraction relieving pressure on the Crown lands of the New Forest.

Nitrate credits, where they exist, are typically costing £3,000 to £4,500 per credit (equals 1kg of nitrate offset p.a). The absence of permit limits on most sewage treatment works in the National Park mean a single new dwelling in the National Park would generate circa 2.5kg of nitrate pa. Less within most of NFDC, but with circa 6,000 planned new dwellings planned more than £30 million could change hands in the wider New Forest catchment areas.

Friends of Brockenhurst believes the nitrate situation, coupled with the radical changes to farm subsidies, is a wonderful opportunity to finance the creation of "Nature Parks" around the open Forest. Whilst these areas would exist primarily to create nitrate credits, they could also be designed to provide wildlife habitats and attract visitors otherwise destined for an over-burdened and deteriorating New Forest.

Friends of Brockenhurst will urge NFDC and the New Forest NPA to champion such schemes.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