

## HEARING STATEMENT MATTER 10, NATURAL ENVIRONMENT

This statement follows on from our Statement for Hearing 1 (Habitats/N-Mitigation) and should be considered in parallel.)

As we mentioned in our Hearing Statement and verbal participation for Matter 1 (Habitats and Nitrate Mitigation, 08-03-2022) we have some serious issues regarding the Plan's ability to deliver sustainable housing development without guarantee of protection, even on the balance of probability, of certain marine ecosystems within the Solent European Maritime Site (SEMS) and without guarantee of positively enhancing local commercial fishing businesses.

Although the features and species listed under the Habitats Directive have already been evaluated by the Statutory Consultees, there are clearly some significant assessment oversights and gaps in the evidence base which are of direct relevance and concern to the ecology, local Fishing Industry and also, we would suggest, to the future viability of the Solent Oyster Regeneration Project (Blue Marine Foundation).

As we mentioned in Hearing 1, these assessment oversights mean that the Fareham Plan, if implemented as stands, cannot be guaranteed to mitigate negative environmental effects within the SEMS.

This would apply also for the Welbourne development which will massively add to the wastewater burden and we have asked the Inspector to retrospectively consider in the light of our (new) evidence and rationales.

The Plan fails under section 9, Natural Environment:

Specifically, NE4 Water Quality effects and likely fails under NE1, protection of local ecological network (regarding sandbanks and mudflats and therefore, by extrapolation, shellfish within the SEMS/Southampton Water which inhabit these areas).

The Screening Report for the Plan (Urban Edge) identifies: sandbanks slightly covered by water at all times and mudflats not covered by water at all times (intertidal mudflats).

It is still not clear then, why due consideration has not been given in the Screening Report and the Statutory Guidance to the shellfish ecologies and the fishing industry which depends upon them (and vice versa; since routine harvesting actually enhances long term productivity).

Paragraph 9.16 states: 'Paragraph 174b of the NPPF states that the Plan should promote the conservation and enhancement of priority habitats, ecological networks and the protection and recovery of priority species. Development proposals within the Borough are therefore expected to contribute to achieving this objective.'

Solent native oyster, *ostrea edulis*, is currently a priority species for regeneration (Blue Marine Solent Oyster regeneration project). Nutrient exacerbated growth of mobile, smothering seasonal seaweed masses leads to a significant negative effect upon the spatfall of the native oyster (ref: Warsash Fishermen SEMS paper) and poor water quality can affect the harvestability of shellfish.

As highlighted under Matter 1, mobile seaweed overgrowths are largely peculiar to the Solent Maritime and their seasonal persistence in the shallow bays and seabed contours is highly suggestive of the nature of the SEMS failing to adequately flush tidally.

The Plan also fails to pass the test of soundness, in that there is a question regarding its long-term effectiveness with respect to Nitrogen-Mitigation. As was pointed out to the Inspector by both Warsash Fishermen and Save Warsash Campaign Group,(Hearing 1), this strategy has not been proven.

The Plan fails on the test of soundness because it assumes the Nitrate Mitigation policy will be effective throughout the SEMS. Although the Local Planning Authority (LPA) is aspiring to Nitrate Neutrality, paragraph 9.1 requires designated sites be protected and ENHANCED as well as Strategic Policy NE1. Additionally, Para 9.50 (Policy NE4) confirms: 'Planning permission will be granted where the integrity of the designated sites is maintained, having regard to the effect of nutrients on the designated sites arising from increased wastewater production'. SEMS is a designated site.

The systemic failure here in that NE have not thus far considered the wider environmental issues we have brought to recent attention. These represent 'evidence gaps'. It is the duty of NE and other Statutory Consultees to.. 'provide relevant evidence, where gaps in the evidence base have become available during the Consultation process'.. (NE submission to the Council, 2020).

Para 9.38 through to 9.43 of the Plan indicates that proposals for development should provide a biodiversity net gain (including enhancements). This cannot be guaranteed.

The Plan fails under Para 9.5, under Policy NE4: 'Planning permission will be granted where the integrity of the designated sites is maintained, having regard to the effect of nutrients on the designated sites arising from increased wastewater production'. This implies a definite effect upon eutrophication for designated sites in an unfavourable condition and an effect upon the sub-surface mobile seaweed infestations which routinely occur, the latter which have been ignored by the Statutory Consultees.

The LPA's approach therefore cannot be proven to support the Habitats Directive, because the NE solutions are entirely untested, rely entirely on hypothetical modelling and fail to consider wider mobile seaweed overgrowth issues specific to the fishing industry and exacerbated by excessive nutrient loadings into Solent waters.

According to the Statutory scientific advice, the SEMS is already in an unfavourable condition with respect to localized seasonal macroalgal aggregations. Southampton Water also receives frequent unfavourable shellfish classifications (Port Health Authority) due to direct sewage overflows after heavy rain. Both significantly affect the local fishing fleet. (see published paper, Warsash Fishermen SEMS)

As per advice from Natural England, it is the responsibility of the LPA to fulfil its legal obligations and satisfy themselves beyond scientific doubt, that adverse effects on the designated SAC, SPA and RAMSAR sites, from harmful nutrients generated by new residential development, has been effectively mitigated (rather than just compensated for). There is no evidence the N-Mitigation Plan will be effective throughout all areas of the SEMS and parts affected by mobile, subsurface seaweed overgrowths.

We are of the opinion that the Fareham Plan fails badly in that respect.

If implemented as stands, the Plan is unlikely to:

- 1) ensure that red/green floating seaweed overgrowth within the wider SEMS (which already seriously restricts Commercial Fishing Activity within the SEMS) is not further exacerbated by

increasing nutrient loadings directly into Solent waters, especially with respect to the Solent sewage outfall pipe serving Peel common effluent and its immediate marine environs.

2) ensure that water quality with respect to undesirable bacterial and viral contamination of shellfish beds in Southampton Water and the wider SEMS is not further exacerbated. (by post-rain/ storm waste-water overflows)

3) ensure that intertidal algal mats (seaweed overgrowth /deposition on mudflats) do not increase and that the integrity of eel grass beds improves.

### Raw Sewage Overflows

The Plan fails to include the likely increase in bacterial contamination of shellfish (within sand-gravel bank seabed features) from increased sewage overflows. These potential overflow events are not mentioned in the supporting evidence advice for the Plan.

The submissions for the Consultation and the paper we enclosed for that Consultation (outlining the effects of seaweed overgrowths on the Solent fishing industry) were dealt with under Matter 1 and also raised the issue of wastewater overflows after heavy rain which can subsequently lead to shellfish beds becoming contaminated by E-coli and viral agents.

There is no indication in the Sustainability Appraisal, the screening reports from Urban Edge or the Statutory Consultees advice for this Plan that these ecologies/fisheries have been duly considered. Indeed, they are not even mentioned specifically, either as an inclusion for the HRA's or the wider natural environment. The only reference which comes close is the inclusion of sandbanks/mudflats, but shellfish are not specifically referred to.

This therefore represents a massive oversight for which we suggest the Inspector must intervene, since ecological features like clam beds are intrinsically linked to fisheries and should have been considered.

There is no indication in the Fareham Plan that wastewater contamination events will not increase and there is no indication from the EA or Southern Water advice with respect to that point either.

FBC are supposed to consider the scope/relevance of the evidence before proceeding and clearly this has not happened in the case of shellfish.

Recently, it was reported in the local media that Langstone Harbour had received many days of raw sewage discharge. Therefore, the Solent watershed and sewer system is already unable to cope with further capacity. Langstone contains eelgrass beds and clam fisheries.

This last winter, several raw sewage spills have been reported to the Warsash Fishermen exiting the Chilling overflow pipe, south of Warsash and adjacent to one of our clam fisheries. This rarely has occurred in past decades, so therefore there are already signs that the system is under strain. Further housing in the Solent watershed will almost certainly exacerbate the issue, unless there are drastic changes to the Plan under wastewater infrastructure.

Increasing overflows and associated proliferation of unsatisfactory shellfish sanitary surveys and loss of fishing potential/revenue will no longer be tolerated by the fishing industry.

Shellfish Beds in the SEMS and Southampton Water are reciprocally linked due to the tidal flows. Therefore, a raw sewage overflow in either has the potential to adversely affect the other.

There are many different shellfish types in the area. Oysters, clams, cockles, whelks, winkles and scallops. All of these can be fished under fishing license and are very sensitive to water quality, especially the bi-valve varieties like clams and oysters.

The classification of shellfish is carried out regularly and reported in a UK wide Sanitary Survey. The Southampton Water is regularly tested for E-coli by the Food standards Agency in Southampton and a shellfish will only be designated if the species in question is tested. Once that occurs a designation will result; class A, B or C.

For many years now, Manila clams, hard-shell clams and pelourdes clams in the upper Southampton Water have regularly received a class C designation or the areas have been closed completely due to high E-coli levels, making the shellfish unfit for human consumption. Therefore, fishing activity is severely affected.

Thankfully the lower estuary is currently cleaner, with a class B designation, but the risk of lower sanitary classifications is increasing in proportion to population density.

Fishermen locally have had enough of the situation. There has been at least 15 years of lost potential revenue from the fishery in the mid to upper estuary. If we configure on the basis of a lower estimate of just ten fishers, working in the winter fishery and assuming lost revenue for these areas to be around a very conservative £10,000 per fisher, then already this represents an estimated gross loss to the fishing industry of around £1.5 million.

This situation has gone on for many years to the detriment of the local fishing industry. No schemes are in place to compensate fishermen for the yearly loss of potential earnings. Furthermore, the longer the beds remain unharvestable, the less the shellfish will benefit from regular turning which can lead to the terminal decline in quality of the beds.

The recent upgrade to the sewage treatment works at Woolston will theoretically lower the E-coli/viral loadings from the effluent which is a positive development. However, with increasing pressure on the sewage system infrastructure due to an expanding population density in Southampton, it is questionable as to whether there will be any change in the shellfish quality as sewage overflows after heavy rain will still likely occur, (our assumption). The population of Southampton grew by around 18 percent between 2001 and 2011; it is even higher now.

Any increasing sewage burden arising from this Plan will therefore re-enforce these effects as the SEMS and the Southampton Water are tidally linked.

This is further re-enforced by the fact that climate change models predict far more frequent torrential downpours, leading to the increased risk of sewage overflow events (CSO's).

As to the wider Solent: Like most of the UK coastal waters, current shellfish classification is taken to be Class B (which means the shellfish must be tanked for a short period with UV filtering in place, before it can enter the food chain).

Any lowering of the SEMS/Southampton Water water quality due to increasing sewage overflows will be a severe negative for the local fishing industry.

Our conclusions are:

- nitrogen/nutrient delivery directly into the SEMS is already unsustainable evidenced by the poor state of the SEMS. This nitrogen is being delivered directly into the SEMS in concentrated form via a pipeline pathway and therefore is in no way comparable to leached

nitrogen which enters via the ground based pathways or finds its way slowly into the SEMS via watercourses. The nitrate offsetting calculations are therefore configured upon flawed methodology from the outset and the assumption that discharge at sea is effective (which it is not, as we made clear in Matter 1).

- Natural England has not taken into account the seasonal infestations of sub-surface seaweed which impact the fishing industry and seabed ecology, unique to SEMS and has made questionable assumptions that the N-mitigation offsetting will be practically effective. This amounts to a risky gamble on the ecological integrity of the SEMS which is already failing.
- NE's and FBC's Sustainability Assessment, the Urban Edge Report and the screening advice for this Plan fails to consider the potential for increasing raw sewage overflows likely resultant from the Plan (and retrospectively, for Welbourne also) and fails to consider the effects upon the natural environment with respect to shellfish beds in the SEMS and tidally linked-effects to the Southampton water shellfisheries.
- Unless the Inspector recommends the required sewage holding tank capacity to accommodate new housing burden for the Solent watershed, then it is likely that raw sewage overflows after heavy rain will continue, risking the future viability of shell fisheries (bacterial/viral) and the ecological integrity of the protected areas (intertidal zones, saltmarsh and eelgrass) which will receive nitrogen directly bound up with raw faecal matter entering into the watershed as well as the increasing concentrated nitrate load exiting from the Peel Common outfall pipe directly into the SEMS .

Warsash Inshore Fishermen's Group

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