Report to inform a Habitats Regulations Assessment

Torpoint Neighbourhood Plan

Torpoint Town Council

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Quality information

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1. Introduction

Background to the Project

1.1 AECOM has been appointed by Torpoint Town Council to assist in producing a report to inform the competent authority, Cornwall Council, with their Habitats Regulations Assessment (HRA) of potential effects of Torpoint Neighbourhood Plan on European sites. The objectives of the assessment are to:

- Identify any aspect of the Neighbourhood Plan that would cause an adverse effect on the integrity of internationally important nature conservation sites, otherwise known as European sites[1] (Special areas of Conservation (SAC), Special Protection Areas (SPA), and as a matter of Government policy Ramsar sites), either alone or in-combination with other plans and projects.
- Advise on appropriate policy mechanisms for delivering mitigation where such effects were identified.

1.2 The HRA of the Torpoint Neighbourhood Plan is required to determine if there is any realistic linking pathways present between a European site and the Neighbourhood Plan and where Likely Significant Effects cannot be screened out, an analysis to inform Appropriate Assessment to be undertaken to determine if adverse effects on the integrity of the European sites will occur as a result of the Neighbourhood Plan either alone or in-combination.

Legislative Context

1.3 The United Kingdom (UK) left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). The Withdrawal Act retains the body of existing EU-derived law within our domestic law. The most recent amendments to the Habitats Regulations – the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – make it clear that the need for HRA continues post-Brexit.

1.4 The HRA process applies the 'Precautionary Principle'[2] to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Over-riding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

1.5 The need for Appropriate Assessment (AA) is set out in the Conservation of Habitats and Species Regulations 2017 (as amended).

Conservation of Habitats and Species Regulations 2017 (As Amended)

With specific reference to Neighbourhood Plans, Regulation 106(1) states that:

"A qualifying body which submits a proposal for a neighbourhood development plan must provide such information as the competent authority [the Local Planning Authority] may reasonably require for the purpose of the assessment under regulation 105… [which sets out the formal process for determination of 'likely significant effects' and the appropriate assessment']."

Plate 1: The legislative basis for Appropriate Assessment.

[1] The term European sites also extends to include possible SACs (pSAC), candidate SACs (cSAC), and potential SPAs (pSPA)
[2] The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm* [to the environment] *that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".*

1.6 Therefore, it is important to note that this report has two purposes:

- To assist the Qualifying Body (Torpoint Town Council) in preparing their plan by recommending (where necessary) any adjustments required to protect European sites, thus making it more likely their plan will be deemed compliant with the Conservation of Habitats and Species Regulations 2017 (as amended); and
- On behalf of the Qualifying Body, to assist the Local Planning Authority (Cornwall Council) to discharge their duty under Regulation 105 (in their role as 'plan-making authority' within the meaning of that regulation) and Regulation 106 (in their role as 'competent authority') and reach the formal HRA decision.

1.7 As Competent Authority, the legal responsibility for ensuring that a decision of LSEs is made, an AA (where required) is undertaken, and Natural England are consulted, falls on the Local Planning Authority. However, they are entitled to request from the Qualifying Body the necessary information on which to base their judgment and that is the key purpose of this report.

1.8 Over the years, the term HRA has come into wide currency to describe the overall process set out in the Habitats Regulations, from LSEs screening through to identification of IROPI. This has been established to distinguish the overall process from the individual stage of AA. Throughout this report the term HRA is used for the overall process and the use of AA is restricted to the specific stage of that name.

1.9 In spring 2018 the 'Sweetman' European Court of Justice ruling[3] clarified that 'mitigation' (i.e., measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise) should **not** be taken into account when forming a view on LSEs. Mitigation should instead only be considered at the AA stage. This HRA has been cognisant of that ruling.

Scope of the HRA

1.10 There are no standard criteria for determining the ultimate physical scope of an HRA of a Plan document. Therefore, in determining the physical scope of the assessment, we were guided primarily by the identified impact pathways (called the source-pathway-receptor model) rather than by arbitrary 'zones'. Current guidance suggests that the following European sites should be included in the scope of assessment:

- All sites within the boundary of Torpoint; and,
- Other sites shown to be linked to development within the parish boundary through a known impact 'pathway' (discussed below).

1.11 Briefly defined, impact pathways are routes by which the implementation of a policy within a Neighbourhood Plan document can lead to an effect upon a European site. An example of this would be new residential development resulting in an increased local population and, therefore, increased demand for recreational spaces. This may increase recreational pressure in designated sites, which could then result in significant disturbance to wintering or breeding birds.

1.12 Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) states that the HRA should be '*proportionate to the geographical scope of the [plan policy]*' and that '*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*' (MHCLG, 2006, p.6). More recently, the Court of Appeal ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. In this case the High Court ruled that for '*a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations.*'

The Layout of this Report

1.13 **Chapter 2** of this report explains the methodology by which this HRA has been carried out, including the three essential tasks that form part of HRA. **Chapter 3** provides details of the relevant European sites,

[3] People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

including Conservation Objectives and current pressures and threats. **Chapter 4** provides detailed background on the main impact pathways identified in relation to the Torpoint Neighbourhood Plan and the relevant European sites. **Chapter 5** undertakes the screening assessment of LSEs of the Plan policies and sites potentially proposed for allocation. The AA is undertaken in **Chapter 6**. The conclusions and recommendations arising from the HRA process are provided in **Chapter 7**.

Quality Assurance

1.14 This report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2015 and 14001:2015, ISO 44001:2017 and ISO 45001:2018. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.

1.15 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2017).

2. Methodology

Introduction to HRA Methodology

2.1 The HRA will be carried out with reference to the general EC guidance on HRA[4] and that of the UK government[5].

2.2 Plate 2 below outlines the stages of HRA. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the Plan until no significant adverse effects remain.

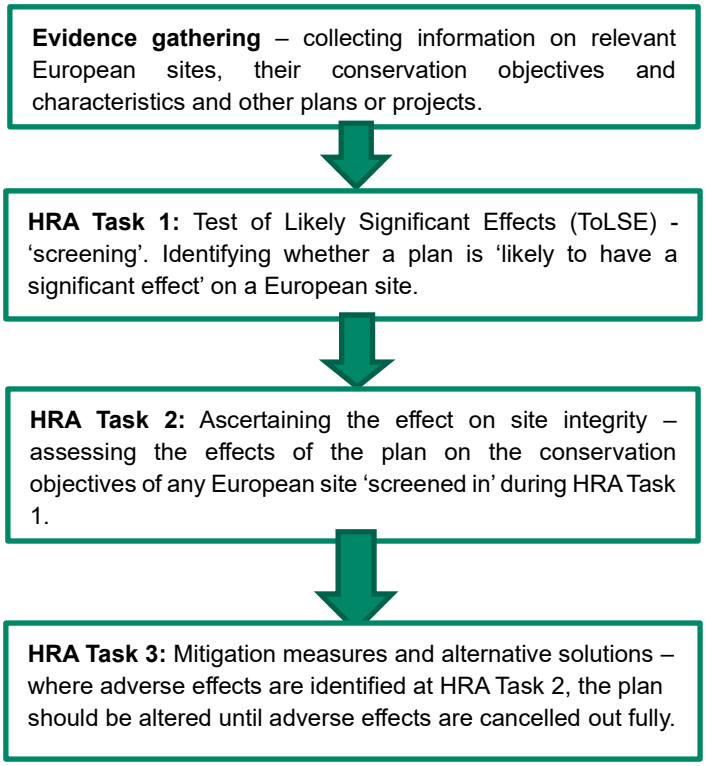


Plate 2: Four Stage Approach to Habitats Regulations Assessment. Source EC, 2011.

Description of HRA Tasks

HRA Task 1 – Likely Significant Effects (LSEs) Screening

2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a LSEs screening - essentially a brief, high-level assessment to decide whether the full subsequent stage known as AA is required. The essential question is:

> *'Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?'*

2.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction.

2.5 The LSEs screening is based on identification of the impact source, its pathway to receptors and an appraisal of the specific European site receptors. These are normally designated features but also include

[4] European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.
[5] https://www.gov.uk/guidance/appropriate-assessment

habitats and species fundamental for designated features to achieve favourable conservation status (notably functionally linked habitats outside the European site boundary).

2.6 In the Waddenzee case[6], the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive, including that:

- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44);
- An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48); and
- Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).

2.7 The LSEs screening consists of two parts: Firstly, it should determine whether there are any policies that could result in negative impact pathways and secondly it establishes whether there are any European sites that might be affected. It identifies European sites that are most likely to be impacted by the Plan and the impact pathways that are most likely to require consideration.

2.8 It is important to note that LSEs screening must generally follow the precautionary principle as its main purpose is to determine whether the subsequent stage of AA (i.e., a more detailed investigation) is required.

HRA Task 2 – Appropriate Assessment

2.9 Where it is determined that a conclusion of 'no LSEs' cannot be drawn, the analysis must proceed to the next stage of HRA known as AA. Case law has clarified that AA is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to AA rather than the screening process. AA refers to whatever level of assessment is appropriate to form a conclusion regarding effects on the integrity (coherence of structure and function) of European Sites in light of their Conservation Objectives.

2.10 By virtue of the fact that it follows LSEs screening, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during AA is whether there is available mitigation that would entirely address the potential effect. In practice, the AA would take any policies or proposed sites that could not be dismissed following the high-level screening analysis and evaluate the potential for an effect in more detail, with a view to concluding whether there would be an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the European site(s)).

2.11 In 2018 the Holohan ruling[7] handed down by the European Court of Justice included among other provisions paragraph 39 of the ruling stating that '*As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, … typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area*' [emphasis added].

2.12 In evaluating significance, AECOM will rely on professional judgement as well as the results of bespoke studies, supported by appropriate evidence/data, and previous stakeholder consultation regarding the impacts of development on the European sites considered within this assessment.

HRA Task 3 – Mitigation

2.13 Where necessary, measures will be recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. For example, there is considerable precedent, both nationally and locally, concerning the level of detail that a Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.

[6] Case C-127/02
[7] Case C-461/17

2.14 When discussing 'mitigation' for a NP document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the detail of the mitigation measures themselves since the NP document is a higher level policy document.

Geographical Scope of the HRA

2.15 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the source-pathway-receptor model should be used to determine whether there is any potential pathway connecting development to any European sites.

2.16 In the case of the Torpoint Neighbourhood Plan, an area extending to 10 km from the Parish boundary was selected in which European sites were identified. European sites with hydrological sensitivities were also considered. A search radius of 10km has been used for this analysis on the basis that any potential for aquatic pollution effects at greater distances is likely to be negligible due to dilution factors.

Confirming Other Plans and Projects That May Act 'In Combination'

2.17 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

2.18 In considering the potential for combined regional housing development to impact on European sites the primary consideration is the impact of visitor numbers – i.e., recreational pressure and urbanisation.

2.19 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e., to ensure that those projects or plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan or policy would otherwise be screened out because its individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee[8] case.

2.20 For the purposes of this HRA, we have determined that the key other documents with a potential for in-combination effects are the Adopted Cornwall Local Plan (2016) and its associated Site Allocations Development Plan Document (DPD)[9]. As outlined in the introduction, this Plan sets out the broad spatial development targets for the County of Cornwall in the period of 2010 – 2030. Cornwall does not have individual districts and unitary authorities and the Plan therefore covers a broad geographical area including 213 parishes.

2.21 While individual planning applications have been submitted and in some cases permitted since the Cornwall Local Plan was adopted, examination of planning applications only provides a snapshot in time. In contrast, a review of the Local Plan and its allocations provides the fullest overall picture of the most significant housing and employment development that will be delivered between 2010 and 2030. Overall, the (previously modified) and adopted Local Plan provides for a minimum of 52,500 homes at an average of 2,625 homes delivered per year, 318 permanent gypsy and traveller pitches and 704,000 m^2 of employment floorspace. Within the Plan, the residential and employment growth is partitioned into various Community Network Areas (CNAs). For example, the Saltash, Torpoint and Cornwall Gateway CNA provides for 1,900 additional residential dwellings and 17,500 m^2 of employment space. The growth provided in other CNAs Is provided in Table 2.

2.22 The Cornwall Local Plan is associated with the following impact pathways: recreational pressure, water quality and atmospheric pollution, and as such the same impact pathways link the Torpoint Neighbourhood Plan to nearby European sites. Given the extent of development, both in terms of its volume and geographical distribution, that it proposes, the Cornwall Local Plan and the Site Allocations DPD (and its

[8] Waddenzee case (Case C-127/02, [2004] ECR-I 7405)
[9] Cornwall Site Allocations Development Plan Document. Adopted November 2019. Available at: https://www.cornwall.gov.uk/media/38344158/allocations-dpd-full-doc-web.pdf [Accessed on the 09/10/2019].

HRAs) are the most important documents to consider in assessing the in-combination effect of the Torpoint Neighbourhood Plan.

2.23 As shown in the table, residential growth in the Saltash, Torpoint and Cornwall Gateway CNA (at the top of the table), which is made up of 11 parishes, only accounts for 3.7% of the total residential growth in Cornwall, while its employment growth only accounts for 2.5% of the overall employment growth in Cornwall, which will also be considerably smaller for Torpoint Parish individually (0.67% of residential growth based on 350 dwellings being allocated within the Neighbourhood Plan). Nevertheless, the potential for Torpoint's contribution – however small – to an in-combination effect arising from increased development throughout Cornwall, must be considered.

Table 1: Summary of the development (residential and employment growth) allocated in parishes within the Adopted Cornwall Local Plan (2016).

Location (CNA)	Residential Growth (dwellings)	Employment growth (m^2 of floorspace)
Saltash, Torpoint and Cornwall Gateway	**1,900**	**17,500**
Penzance and West Penwith	3,150	32,166
Hayle and St. Ives	3,180	38,166
Helston	2,300	29,417
Csmborne, Pool, Illogan and Redruth	6,200	122,250
Falmouth and Penryn	3,400	47,417
St. Agnes, Perranporth and Newquay	4,800	58,000
Eco-Communities and St. Austell	3,200	22,250
St. Blazey, Fowey, and Lostwithiel	900	25,333
China Clay	1,800	26,250
Wadebridge and Padstow	2,100	13,334
Bodmin	3,200	47,500
Camelford	1,000	7,834
Bude, Stratton, Flexbury and Poughill	1,800	21,166
Lanceston	2,300	42,250
Liskeard	2,900	44,334
Callington and Caradon	1,000	14,750
Truro and Roseland	5,100	69,583
All CNAs	**52,500**	**704,000**

2.24 It should be noted that, while the broad potential impacts of the Cornwall Local Plan will be considered as part of the 'in combination' assessment, this document does not carry out a full HRA of that Plan. Instead, it draws upon existing HRAs that have been carried out on the Plan and the Site Allocations DPD between 2014 and its adoption in 2016.

2.25 Within this document, each site proposed for potential allocation and policy within the Neighbourhood Plan is subjected to HRA screening (summarised in Appendix A). LSEs are then scrutinised in more detail in the main body of the report and where necessary an AA is undertaken.

3. European Sites

3.1 In the case of the Torpoint Neighbourhood Plan, it has been determined that the European sites identified in Table 2 require consideration. The locations of these European sites in relation to the Torpoint Neighbourhood Plan boundary are shown in Appendix B.

Table 2. European sites for consideration and their location in relation to Torpoint Parish boundary.

European site	Location and reason for inclusion
Plymouth Sound and Estuaries SAC (and marine component)	Within the Neighbourhood Plan boundary There is potential for impacts related to public access and disturbance and water pollution.
Tamar Estuaries Complex SPA (and marine component)	Within the Neighbourhood Plan boundary There is potential for impacts related to public access and disturbance and water pollution.
Start Point to Plymouth Sound and Eddystone SAC (marine)	7.4 km south-east of the Neighbourhood Plan boundary. This site was included for initial screening as the SAC is located within 10km of the site, however, the site is designated for reefs and the only site vulnerability listed is commercial fisheries e.g. dredging, potting and netting and the physical damage that these activities could cause on the reefs. The Torpoint Neighbourhood Plan does not have authority over these activities nor does it allocate development associated with these activities, therefore the Neighbourhood Plan does not present a linking impact pathway and **this SAC can be screened out of further assessment.** Background to the SAC has been included below for information.

3.2 This was based upon a search of surrounding European sites and the vulnerabilities of their designated features. All the above sites were subjected to the initial screening exercise. It should be noted that the presence of a conceivable pathway linking the parish to a European site does not mean that LSEs will occur.

3.3 The reason for designation, Conservation Objectives and environmental vulnerabilities of the European sites are detailed below.

Plymouth Sound and Estuaries SAC

Introduction

3.4 Plymouth Sound and its associated tributaries comprises a complex site of marine inlets. The ria systems entering Plymouth Sound (St John's Lake and parts of the Tavy, Tamar and Lynher), the large bay of the Sound itself, Wembury Bay, and the ria of the River Yealm are of international marine conservation importance because of their wide variety of salinity conditions and sedimentary and reef habitats The broader lower reaches of the rivers form extensive tidal mud-flats bordered by saltmarsh communities which are of international importance for the large numbers of waterbirds.

Conservation Objectives

3.5 With regard to the SAC[10] and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.6 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

[10] http://publications.naturalengland.org.uk/file/6256070553239552 [Accessed 11/01/2023]

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features

3.7 With regard to the SAC the following are qualifying features:

- Sand banks which are slightly covered by sea water all the time; subtidal sandbanks;
- Estuaries;
- Mudflats and sandflats not covered by seawater at low tide; intertidal mudflats and sandflats;
- Large shallow inlets and bays
- Reefs
- Atlantic sald meadows (*Glauco-Puccinellietalia maritimae*)
- *Alosa alosa; a*llis shad; and,
- *Rumex rupestris;* shore dock.

Environmental Vulnerabilities

3.8 With regard to the SAC the following have been listed within the 2014 Site Improvement Plan[11] as being a vulnerability; threat or pressure of the site:

- Coastal squeeze;
- Inappropriate weirs dams and other structures;
- Planning permission; general;
- Water pollution;
- Public access/disturbance;
- Invasive species;
- Direct landtake from development;
- Fisheries: commercial marine and estuarine; and,
- Air pollution: impact of atmospheric nitrogen deposition.

Tamar Estuaries Complex SPA

Introduction

3.9 The Tamar Estuaries Complex SPA is composed of extensive intertidal mudflat communities, areas of mixed muddy sediment communities and saltmarsh communities. These habitats provide important feeding and

[11] http://publications.naturalengland.org.uk/file/5305007922479104 [Accessed 11/01/2023]

roosting areas for over wintering avocet and little egret. The mudflats support high densities and variety of invertebrates, a vital food source for birds.

Conservation Objectives

3.10 With regard to the SPA[12] and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.11 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Qualifying Features

3.12 With regards to the SPA[13] the following are qualifying features:

- *Egretta garzetta;* little egret (non-breeding) – 9.3% of the GB population (count at 1995)
- *Recurvirostra avosetta;* pied avocet (non-breeding) - 15.8% of GB population (5 year peak mean 1991/92 – 1995/96)

Environmental Vulnerabilities

3.13 With regard to the SPA the following have been listed within the 2014 Site Improvement Plan[14] as being a vulnerability; threat or pressure of the site:

- Coastal squeeze;
- Planning permission; general;
- Water pollution;
- Public access/disturbance;
- Direct landtake from development;
- Fisheries: commercial marine and estuarine; and,
- Air pollution: impact of atmospheric nitrogen deposition.

Start Point to Plymouth Sound and Eddystone SAC

Introduction

3.14 The Start Point to Plymouth Sound and Eddystone SAC lies off the south coast of England, off the counties of Devon and Cornwall. The site boundary extends across three separate geographical areas where reef is present:

- The Eddystone reefs
- Plymouth Sound to Bigbury Bay reefs

[12] http://publications.naturalengland.org.uk/file/5407902819155968 [Accessed 11/01/2023]
[13] UK9010141.pdf (jncc.gov.uk) [Accessed 11/01/2023]
[14] http://publications.naturalengland.org.uk/file/5305007922479104 [Accessed 11/01/2023]

- West Rutts to Start Point reefs

3.15 The reefs support a wide variety of plant and animal communities commonly showing excellent examples of zonation, from deep circalittoral to the shallow infralittoral. The site represents some of the most biologically diverse reefs in the country and supports many locally distinct and nationally rare or scarce species. Large dense beds of the protected pink sea fan (*Eunicella verrucosa*) and priority species such as the sea fan anemone (*Amphianthus dohrnii*) and the rare sunset cup coral (*Leptopsammia pruvoti*) have been recorded within the site.

Conservation Objectives

3.16 With regard to the SAC[15] and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

3.17 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which the qualifying natural habitats rely

Qualifying Features

3.18 With regards to the SAC[16] the following are qualifying features:

- Reefs

Environmental Vulnerabilities

3.19 With regard to the SPA the following have been listed within the 2015 Site Improvement Plan[17] as being a vulnerability; threat or pressure of the site:

- Fisheries: commercial marine and estuarine

[15] http://publications.naturalengland.org.uk/file/4806652369043456 [Accessed 11/01/2023]
[16] Start Point to Plymouth Sound and Eddystone SAC (naturalengland.org.uk) [Accessed 11/01/2023]
[17] http://publications.naturalengland.org.uk/file/5789027052552192 [Accessed 11/01/2023]

4. Background to Impact Pathways

4.1 The following pathways of impact are considered relevant to the HRA of the Plan:

- Recreational Pressure
- Water Quality and Water Resources
- Atmospheric Pollution (Atmospheric Nitrogen Deposition)

Recreational Pressure

4.2 Recreational use of a European site has the potential to:

- Cause disturbance to sensitive species, particularly ground-nesting birds and (where relevant) wintering wildfowl;
- Cause damage through erosion and fragmentation;
- Cause eutrophication as a result of dog fouling; and
- Prevent appropriate management or exacerbate existing management difficulties.

4.3 Different types of European sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex.

4.4 It should be emphasised that recreational use is not inevitably a problem. Many European sites also contain nature reserves managed for conservation and public appreciation of nature.

4.5 HRAs of Local Plans tend to focus on recreational sources of disturbance as a result of new residents[18]

Activities causing disturbance

4.6 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration. The presence of people and dogs generate a substantial disturbance effect because of the areas accessed and the impact of a potential predator on bird behaviour. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.

4.7 The factors that influence a species response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.

4.8 The distance at which a species takes flight when approached by a disturbing stimulus is known as the 'tolerance distance' (also called the 'escape flight distance') and differs between species to the same stimulus and within a species to different stimuli.

4.9 The potential for apparent disturbance may be less in winter than in summer, in that there are often a smaller number of recreational users. In addition, the consequences of disturbance at a population level may be reduced because birds are not breeding. However, activity outside of the summer months can still cause important disturbance, especially as birds are particularly vulnerable at this time of year due to food shortages. Disturbance which results in abandonment of suitable feeding areas can have severe consequences for those birds involved and their ability to find alternative feeding areas. Several empirical studies have, through correlative analysis, demonstrated that out-of-season (October-March) recreational activity can result in quantifiable disturbance:

[18] The RTPI report 'Planning for an Ageing Population'(2004) which states that 'From being a marginalised group in society, the elderly are now a force to be reckoned with and increasingly seen as a market to be wooed by the leisure and tourist industries. There are more of them and generally they have more time and more money.' It also states that 'Participation in most physical activities shows a significant decline after the age of 50. The exceptions to this are walking, golf, bowls and sailing, where participation rates hold up well into the 70s'.

- Tuite et al[19] found that during periods of high recreational activity, bird numbers at Llangorse Lake decreased by 30% as the morning progressed, matching the increase in recreational activity towards midday. During periods of low recreational activity, however, no change in numbers was observed as the morning progressed. In addition, all species were found to spend less time in their 'preferred zones' (the areas of the lake used most in the absence of recreational activity) as recreational intensity increased;
- Underhill et al[20] counted waterfowl and all disturbance events on 54 water bodies within the South West London Water Bodies Special Protection Area and clearly correlated disturbance with a decrease in bird numbers at weekends in smaller sites and with the movement of birds within larger sites from disturbed to less disturbed areas.

4.1 Human activity can affect birds either directly (e.g. through causing them to flee) or indirectly (e.g. through damaging their habitat). The most obvious direct effect is that of immediate mortality such as death by shooting, but human activity can also lead to behavioural changes (e.g. alterations in feeding behaviour, avoidance of certain areas *etc.*) and physiological changes (e.g. an increase in heart rate) that, although less noticeable, may ultimately result in major population-level effects by altering the balance between immigration/birth and emigration/death[21]. The impact of disturbance on birds changes during the seasons in relation to a number of very specific factors, for example the winter below freezing temperature, the birds fat resource levels and the need to remain watchful for predators rather than feeding. These considerations lead to birds apparently showing different behavioural responses at different times of the year.

4.2 The degree of impact that varying levels of noise will have on different species of bird is poorly understood except that a number of studies have found that an increase in traffic levels on roads does lead to a reduction in the bird abundance within adjacent hedgerows - Reijnen et al (1995) examined the distribution of 43 passerine species (i.e. 'songbirds'), of which 60% had a lower density closer to the roadside than further away. By controlling vehicle usage, they also found that the density generally was lower along busier roads than quieter roads[22].

Mechanical/abrasive damage and nutrient enrichment

4.3 Most types of aquatic or terrestrial European site can be affected by trampling, which in turn causes soil compaction and erosion:

- Wilson & Seney (1994)[23] examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
- Cole et al (1995a, b)[24,25] conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & grassland communities (each tramped between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were

[19] Tuite, C. H., Owen, M. & Paynter, D. 1983. Interaction between wildfowl and recreation at Llangorse Lake and Talybont Reservoir, South Wales. *Wildfowl* 34: 48-63
[20] Underhill, M.C. et al. 1993. Use of Waterbodies in South West London by Waterfowl. An Investigation of the Factors Affecting Distribution, Abundance and Community Structure. Report to Thames Water Utilities Ltd. and English Nature. Wetlands Advisory Service, Slimbridge
[21] Riley, J. 2003. Review of Recreational Disturbance Research on Selected Wildlife in Scotland. Scottish Natural Heritage.
[22] Reijnen, R. et al. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. Journal of Applied Ecology 32: 187-202
[23] Wilson, J.P. & J.P. Seney. 1994. Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. Mountain Research and Development 14:77-88
[24] Cole, D.N. 1995a. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. Journal of Applied Ecology 32: 203-214
[25] Cole, D.N. 1995b. Experimental trampling of vegetation. II. Predictors of resistance and resilience. Journal of Applied Ecology 32: 215-224

considered least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

- Cole (1995c)[26] conducted a follow-up study (in 4 vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier tramplers caused a greater reduction in vegetation height than lighter tramplers, but there was no difference in effect on cover.
- Cole & Spildie (1998)[27] experimentally compared the effects of off-track trampling by hiker and horse (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Higher trampling intensities caused more disturbance.

4.4 Walkers with dogs contribute to pressure on sites through nutrient enrichment via dog fouling and also cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and also tend to move in a more erratic manner. Sites being managed by nature conservation bodies and local authorities frequently resort to hardening eroded paths to restrict erosion but at the same time they are losing the habitats formerly used by sand lizards and burrowing invertebrates. Motorcycle scrambling and off-road vehicle use can cause more serious erosion, as well as disturbance to sensitive species. Boats can also cause some mechanical damage to intertidal habitats through grounding as well as anchor and anchor line damage.

Water Quality

4.5 Increased amounts of housing or business development can lead to reduced water quality of rivers and estuarine environments. Sewage and industrial effluent discharges can contribute to increased nutrients on European sites leading to unfavourable conditions. In addition, diffuse pollution, partly from urban run-off has been identified during an Environment Agency Review of Consents process and a joint Environment Agency and Natural England evidence review, as being a major factor in causing unfavourable condition of European sites.

4.6 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:

- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour. Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen;
- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life; and
- Increased discharge of treated sewage effluent can result both in high levels of macroalgal growth, which can smother the mudflats of value to SPA birds and in greater scour (as a result of greater flow volumes).

4.7 At sewage treatment works, additional residential development increases the risk of effluent escape into aquatic environments in addition to consented discharges to the catchment. In many urban areas, sewage treatment and surface water drainage systems are combined, and therefore a predicted increase in flood and storm events could increase pollution risk.

[26] Cole, D.N. 1995c. Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.
[27] Cole, D.N., Spildie, D.R. 1998. Hiker, horse and llama trampling effects on native vegetation in Montana, USA. Journal of Environmental Management 53: 61-71

Atmospheric Pollution (Atmospheric Nitrogen Deposition)

4.8 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH_3) and sulphur dioxide (SO_2). NO_x can have a directly toxic effect upon vegetation. In addition, greater NO_x or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to soils. An increase in the deposition of nitrogen from the atmosphere to soils is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

Table 3: Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO_2, NO_x and ammonia all contribute to acid deposition. Although future trends in S emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased nitrogen emissions may cancel out any gains produced by reduced sulphur levels.	Can affect habitats and species through both wet (acid rain) and dry deposition. Some sites will be more at risk than others depending on soil type, bed rock geology, weathering rate and buffering capacity.
Ammonia (NH_3)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO_2 and NO_X emissions to produce fine ammonium (NH_4^+) containing aerosol which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH_3 is rapidly deposited, some of the most acute problems of NH_3 deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides NO_x	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations.	Deposition of nitrogen compounds (nitrates (NO_3), nitrogen dioxide (NO_2) and nitric acid (HNO_3)) can lead to both soil and freshwater acidification. In addition, NO_x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO_X and NH_3 emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O_3)	A secondary pollutant generated by photochemical reactions from NO_x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O_3 above 40 ppb can be toxic to humans and wildlife and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide SO_2	Main sources of SO_2 emissions are electricity generation, industry and domestic fuel combustion.	Wet and dry deposition of SO_2 acidifies soils and freshwater and alters the species

May also arise from shipping and increased atmospheric concentrations in busy ports. Total SO_2 emissions have decreased substantially in the UK since the 1980s.	composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils.

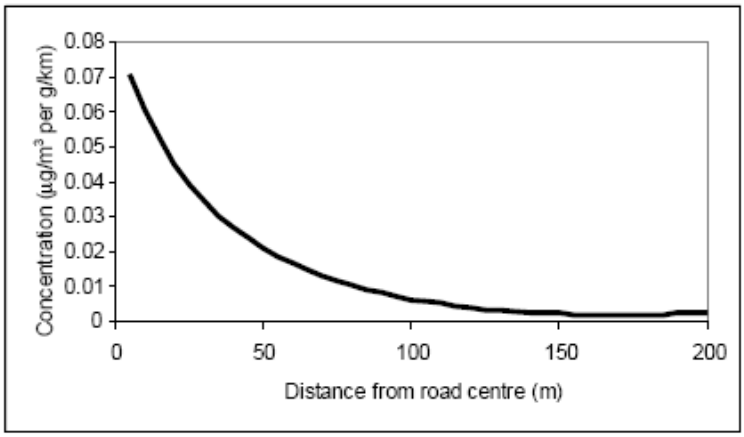
4.9 Sulphur dioxide emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil. Ammonia emissions are dominated by agriculture, with some chemical processes also making notable contributions. As such, it is unlikely that material increases in SO_2 or NH_3 emissions will be associated with Local Plans. NO_x emissions, however, are dominated by the output of vehicle exhausts. Within a 'typical' housing development, by far the largest contribution to NO_x (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison[28]. Emissions of NO_x could therefore be reasonably expected to increase as a result of greater vehicle use as an indirect effect of the LDF.

4.10 According to the World Health Organisation, the critical NO_x concentration (critical threshold) for the protection of vegetation is 30 μgm^{-3}; the threshold for sulphur dioxide is 20 μgm^{-3}. In addition, ecological studies have determined 'Critical Loads'[29] of atmospheric nitrogen deposition (that is, NO_x combined with ammonia NH_3) for key habitats within European sites.

Local Air Pollution

4.11 According to the Department of Transport's Transport Analysis Guidance, "*Beyond 200 m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*"[30].

Plate 3. Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)



4.12 This is therefore the distance that is used throughout the HRA process in order to determine whether a European site is likely to be significantly affected by development under a Plan.

[28] Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory.
[29] The Critical Load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur.
[30] www.webtag.org.uk/archive/feb04/pdf/feb04-333.pdf

5. Test of Likely Significant Effects

Introduction

5.1 When seeking to identify relevant European sites, consideration has been given primarily to identified impact pathways and the source-pathway-receptor approach, rather than adopting purely a 'zones'-based approach. The source-pathway-receptor approach is a standard tool in environmental assessment. In order for an effect to occur, all three elements of this mechanism must be in place, whereas the absence of one or more of the elements means there is no possibility for an effect. Furthermore, even where an impact is predicted to occur, it may not result in significant effects (i.e., those which undermine the Conservation Objectives of a European site).

5.2 The likely zone of impact (also referred to as the likely Zone of Influence, ZoI) of a plan or project is the geographic extent over which significant ecological effects are likely to occur. The ZoI of a plan or project will vary depending on the specifics of a particular proposal and must be determined on a case-by-case basis with reference to a variety of criteria, including:

- the nature, size / scale and location of the plan;
- the connectivity between the plan and European sites, for example through hydrological connections or because of the natural movement of qualifying species;
- the sensitivity of ecological features under consideration; and,
- the potential for in-combination effects.

Approach to Torpoint Neighbourhood Plan Screening

5.3 There are 7 policies and site allocations within the Torpoint Neighbourhood Plan. Policies and allocations were screened out of having LSEs on a European site where any of the following reasons applied:

- they are environmentally positive;
- they will not themselves lead to any development or other change;
- they make provision for change but could have no conceivable effect on a European site. This can be because there is no pathway between the policy and the qualifying features or a European site, or because any effect would be positive;
- they make provision for change but could have no significant effect on a European site (i.e., the effect would not undermine the conservation objectives of a European site); or,
- the effects of a policy on any particular European site cannot be ascertained because the policy is too general. For example, a policy may be screened out if, based on absence of detail in the policy, it is not possible to identify where, when, or how the policy may be implemented, where effects may occur, or which sites, if any, may be affected.

5.4 Any 'criteria-based' policy (i.e., those that simply list criteria with which development needs to comply) or other general policy statements that have no spatial element were also screened out. Likewise, policies that simply 'safeguard' an existing resource (e.g., existing green infrastructure or mineral resources) by preventing other incompatible development, were also screened out.

5.5 The appraisal therefore focussed on those policies with a definable spatial component. Having established which policies required scrutiny by virtue of being spatially defined, consideration was given as to whether LSEs could be dismissed due to a lack of connectivity to any European site for one of the following reasons:

- a potentially damaging activity may occur as a result of the policy but there is no pathway connecting it to a European site (due to distance, for example);
- there are no European sites vulnerable to any of the activities that the policy will deliver; or,

- the policy will not result in any damaging activities.

Summary of Test of Likely Significant Effect

5.6 The results of the likely significant effects test for screening of policies included in the Torpoint Neighbourhood Plan are presented in Table 5 in Appendix A. Where a policy is shaded green, there are no linking impact pathways to European sites and likely significant effects can be excluded. Where screening outcome is shaded orange, likely significant effects cannot be excluded, and the policy is screened in for Appropriate Assessment. The following policies within the Torpoint Neighbourhood Plan are considered to have the potential to result in likely significant effects, either alone or in-combination with other plans and projects as they are associated with impact pathways linking to European sites:

- TOR SS1: The Northern Fringe
- TOR SS2: Torpoint Town Centre

Finally, there is a paragraph within the Section 4: Housing Statement. NDP Housing Requirement which states "*Cornwall's Local Plan: Strategic Policies apportions 1,900 dwellings to be delivered in the 11 parishes that make up the rural area of Cornwall Gateway Community Network Area (CNA). The Minimum NDP housing target to be in conformity with Cornwall's Local Plan in Torpoint is 350. Figures supplied by Cornwall Council show that as a minimum Torpoint needs to deliver around 255 new dwellings including affordable housing and self-build plots between 2022 and 2030, to be considered in general conformity with the Local Plan. Following a request from the landowner Antony Estate, proposed housing in fields 3 and 4 will be the first consultation on these sites*".

It is noted here that this is not a policy and does not allocate any housing at Field 3 or Field 4 (shown on Figure 1). It is merely a request from the landowner to safeguard these fields for housing development and for the fields to be considered first should Torpoint Neighbourhood Plan have any future housing need over the plan period. Therefore Field 3 and 4 can be screened out from further assessment.

Linking Impact Pathways Summary

5.7 Start Point to Plymouth Sound and Eddystone SAC (marine) has been scoped out of this HRA as the marine SAC is solely designated for reefs. The only site vulnerability listed is commercial fisheries e.g. dredging, potting and netting and the physical damage that these activities could cause on the reefs. The distance between the SAC and the Neighbourhood Plan area (7.4km at its closest) and the facts that the Torpoint Neighbourhood Plan does not have authority over these activities nor does it allocate development associated with these activities means that the Neighbourhood Plan does not present a linking impact pathway to the SAC.

5.8 Therefore, the following sections focus on Plymouth Sound and Tamar Estuaries SAC and Tamar Estuaries Complex SPA.

Table 4. Impact Pathways related to Plymouth Sound and Tamar Estuaries SAC and Tamar Estuaries Complex SPA of Relevance to the Neighbourhood Plan

Impact Pathway	Description of Relevance to the Torpoint Neighbourhood Plan
Coastal squeeze	Sea level rise and pressures from coastal development and flood defences are limiting the available area for dynamic intertidal features to respond to changes within the estuary environment. However, Neighbourhood Plans do not denote whether a certain area of coastline is to 'hold the line' or be allowed to retreat. There are specific Shoreline Management Plans across the coastline which manage coastal squeeze and therefore this is not a linking impact pathway of relevance to the Neighbourhood Plan.
Inappropriate weirs dams and other structures	The Tamar Estuary Complex has a number of weirs and dams at the top of each estuary which create a barrier to the migration of allis shad and reduce available spawning habitat. These weird and dams are outside of the Neighbourhood Plan area and the Neighbourhood plan does not have authority over these activities nor does it allocate development associated with these activities and therefore this is not a linking impact pathway of relevance to the Neighbourhood Plan.
Planning permission; general	This impact pathway relates to European sites being vulnerable to development through the current management of planning applications through existing planning and licencing regimes. The management of planning and licencing systems is not within the remit of the Neighbourhood Plan and therefore, is not a linking impact pathway of relevance to the Neighbourhood Plan.

Impact Pathway	Description of Relevance to the Torpoint Neighbourhood Plan
Water pollution	Water pollution can come from a range of sources, including diffuse pollution from agriculture practices around the estuary, point source from sewage outlets and historic mining sites and major pollution incidents from industry located within the river catchment. The Neighbourhood Plan allocates a quantum of residential development which can increase the nutrient nitrogen in wastewater being discharged into the estuaries. **This source will be discussed further within the Appropriate Assessment.** All other sources are not within the remit of the Neighbourhood Plan and therefore are not linking impact pathways of relevance to the Neighbourhood Plan.
Public access/disturbance	The European sites are vulnerable to a range of public activities including public access to the foreshore, recreational boat use, anchoring and giving, which have the potential to cause disturbance or direct impact to shoredock, bird and allis shad. **This will be discussed further in the Appropriate Assessment.**
Invasive species	There are a number of marine invasive species that have been recorded within the sites including Pacific oyster (*Crassostrea gigas*), wakame seaweed (*Undaria pinnatifida*) and wireweed (*Sargassum muticum*) that are increasing in density. These species have the potential to dominate areas and thus exclude native species. The Neighbourhood Plan does not have influence over invasive species being introduced or removed from the European sites and therefore this is not a linking impact pathway of relevance to the Neighbourhood Plan.
Direct landtake from development	The European sites are vulnerable to physical destruction of benthic habitats as well as change in hydrodynamics The Neighbourhood Plan does not allocate any development within the European sites, nor any development which could change the hydrodynamics of the marine environment and therefore, this is not a linking impact pathway of relevance to the Neighbourhood Plan.
Fisheries: commercial marine and estuarine	The Neighbourhood Plan does not have authority over these activities nor does it allocate development associated with these activities and therefore this is not a linking impact pathway of relevance to the Neighbourhood Plan.
Air pollution: impact of atmospheric nitrogen deposition	The level of development allocated (350 dwellings) within the Neighbourhood Plan, in itself would amount to a de minimis level of increase pollution. However, considered together with all developments within Cornwall and neighbouring authorities the small increases from each parish could amount to a much larger impact. Analysis of atmospheric pollution from vehicles was undertaken as part of the Cornwall Local Plan HRA. Several links were analysed including the A38 which lies within 200m of the Plymouth Sound and Estuaries SAC. According to the analysis the NOx concentrations relating to the total development within Cornwall, exceeded 1% of the critical level at 39m from the roadside (A38), however, the total cumulative NOx concentrations were predicted to remain below the actual critical level. The HRA stated that "*Since the critical level (the empirically established concentration above which some adverse effects on vegetation may potentially occur) will not be exceeded there is no possibility of an adverse effect on the vegetation for which the European sites are designated*". Similarly for nitrogen deposition, the contribution from development across Cornwall was predicted to be at or below 1% of the critical load for the SAC. Given that the adopted Cornwall Local Plan HRA was able to conclude no adverse effects on the integrity of the Plymouth Sound and Estuaries SAC, as either the contribution of the Local Plan was below 1% of the critical load or that the critical load itself was not exceeded, it can be assumed that the Torpoint Neighbourhood Plan would not cause a likely significant effect either in isolation or in-combination with other plans and projects.

6. Appropriate Assessment

Introduction

6.1 Recreational pressure and disturbance and water quality are inherently in-combination effects. A significant effect would not arise from a single Neighbourhood Plan because the amount of growth is small. As discussed in Paragraph 2.23 Torpoint Parish individually accounts for <1% of residential growth within Cornwall, based on the 350 dwellings being allocated within the Neighbourhood Plan. The actual number of dwellings allocated within the plan is smaller at 285 over two sites (TOR SS1 and TOR SS2). As such it is necessary to look at Torpoint's contribution to the overall impact of residential growth in the ZoI of the relevant European sites. Therefore, the following appropriate assessments are undertaken as an in-combination assessment.

Plymouth Sound and Tamar Estuaries SAC and Tamar Estuaries Complex SPA

Recreational Pressure

6.2 The Plymouth Sound and Estuaries SAC and Tamar Estuaries Complex SPA are designated for its population of little egret and avocet, allis shad and shoredock as well as its subtidal sandbanks, estuaries, large shallow inlets and pays, saltmarsh, reef and intertidal mudflats/sandflat. The majority of the sites fall into the County of Devon, however, several areas such as half of the Tamar estuary itself falls into the County of Cornwall. A HRA for the adopted Cornwall Local Plan[31] was undertaken in 2014 which discussed the impacts of the Saltash, Torpoint and Gateway CNA on the SAC and SPA. The HRA discussed that the sites were sensitive to recreational pressure, however, the increase net new dwellings and therefore recreational pressure from Cornwall would be significantly smaller than the increase in net new dwellings from Plymouth City on the opposite side of the Tamar estuary to Torpoint Parish. Torpoint itself is allocating a minimum of 285 dwellings, whereas in the Plymouth Core Strategy at the time (2007) they were proposing 17,000 dwellings. Plymouth has since updated their Core Strategy with the Plymouth & South West Devon Joint Local Plan (2019)[32] which proposed to provide 26,700 new dwellings within Plymouth and South West Devon with 19,000 within the Plymouth Plan area. As part of the Plymouth and South Devon Joint Local Plan a visitor survey was undertaken within the SAC/SPA which identified a zone of influence of 12.3 km for the SAC and 12.1 km for the SPA. Two thirds of the recreational activity recorded were terrestrial activities surrounding walking, dog walking and outings with children/family. The Plymouth and South West Devon Joint Local Plan HRA concluded that, the majority of the recreational pressure on the SAC/SPA would come from Plymouth with development in Cornwall unlikely to lead to an effect in isolation, rather a small but additional affect in-combination.

6.3 The Plymouth & South Devon Joint Local Plan proposed a program of measures which raise awareness and understanding of the importance of a European site, change visitor behaviours, introduce management interventions to minimise the impacts and provide alternative spaces to encourage people to visit other less sensitive areas. This was facilitated through the Tamar Estuaries Consultative Forum, and their publications of the Tamar Estuaries Management Plan 2013 – 2018 [33] and its 2019 – 2020 Extension[34]. The full management plan is set out in the multi-agency document Recreation Mitigation and Management Scheme Plymouth Sound and Estuaries European Marine Site (November 2019)[35] which Cornwall Council was a part of. The specific mitigation actions include:

- Voluntary codes of conduct

[31] AECOM, 2014. Cornwall Local Plan Habitats Regulations Assessment (HRA) Report.
[32] Plymouth & South West Devon Joint Local Plan 2014 – 2034 (Adopted 2019) JLP - ADOPTED VERSION 2019 (plymouth.gov.uk) [Accessed 27/01/2023]
[33] Tamar Estuaries Consultative Forum, 2012. Tamar Estuaries Management Plan. tecf_temp20132018.pdf (plymouth-mpa.uk) [Accessed 27/01/2023]
[34] Tamar Estuaries Consultative Forum, 2019. Tamar Estuaries Management Plan: Annex 1: Extension 2019-2020. TEMP-Extension-for-Web.pdf (plymouth-mpa.uk) [Accessed 27/01/2023]
[35] Plymouth City Council, South Hams District Council, West Devon Borough Council, Cornwall Council, Tamar Estuaries Consultative Forum, 2019. Recreation Mitigation and Management Scheme Plymouth Sound and Estuaries European Marine Site Recreation Mitigation and Management Scheme (plymouth-mpa.uk)

- Provision of adequate litter receptacles
- Funding of marine litter clean ups
- Awareness raising of sensitive habitats including development of user-scale maps
- 'Check, Clean, Dry' signage, leaflets and stickers
- Educational workshops and roadshows
- Reconfiguration of moorings to remove them from sensitive sites and installation of Advanced Mooring System or trot moorings.
- Monitoring of the effectiveness of the above measures and of ongoing recreational usage of the SAC/SPA
- One full time and one seasonal ranger for wardening and a part-time project co-ordinator.

6.4 These mitigation measures are funded through developer contributions by all dwellings within 12.3 km of the European site under a sliding scale dependent on number of bedrooms. This includes any dwellings developed within the Torpoint Neighbourhood Plan area. The payments are made through the Local Authorities and the fee is updated yearly based on the Retail Price Index (RPI).

6.5 The TOR5: Green Infrastructure does mention that "*Development proposals must demonstrate that they will not have any adverse effects on the integrity of nearby designated European sites*".

6.6 Additionally, Policy 22: European Protected Sites – mitigation of recreational impacts from development of the Adopted Cornwall Local Plan 2016[36] states *"For residential development and student and tourist accommodation, mitigation measures for recreational impacts on European Sites will be required where development is proposed within the identified zones of influence around those European Sites that are vulnerable to adverse recreational impacts. Residential development, student and tourist accommodation within these zones of influence will be required to provide for appropriate management, mitigation and monitoring on site, and/ or financial contributions towards of site mitigation and management. This will need to be agreed and secured prior to approval of the development.*

Mitigation measures will include:

• On site access and management

• Of-site provision of suitable alternative recreational facilities

The required level of contributions will be set out in more detail in the European Sites Mitigation Strategy Supplementary Planning Document."

6.7 Currently there is no mention of the developer contributions or adherence with the adopted Cornwall Local Plan policies, within the Neighbourhood Plan. **Therefore, it is recommended that the Policy TOR5: Green Infrastructure policy should be updated to include adherence to Policy 22 of the Cornwall Local Plan with regard to the necessity to provide developer contributions for all developments within the Torpoint Neighbourhood Plan area for recreational mitigation on Plymouth Sound and Estuaries SAC and Tamar Estuaries Complex SPA.**

6.8 Should this be added to the Neighbourhood Plan it can be concluded that the Neighbourhood Plan would not have adverse effects on the SAC/SPA either alone or in-combination with other plans and projects.

Water Quality

6.9 Increased amounts of housing or business development can lead to reduced water quality in rivers and estuarine environments. Sewage and industrial effluent discharge and runoff due to construction activities can contribute to increased nutrients in European sites, ultimately leading to unfavourable conditions. In addition, diffuse pollution, partly from urban runoff has been identified during an Environment Agency Review of Consents process and a joint Environment Agency and Natural England evidence review, as being a major factor in causing unfavourable condition of European sites.

[36] Cornwall Council, 2016. Cornwall Local Plan Strategic Policies 2010 – 2030. Cornwall Local Plan [Accessed 31/01/2023]

6.10 Although construction related runoff has the potential to cause pollution it is considered that water pollution arising from construction works is unlikely to be a threat for the Plymouth Sound and Estuaries SAC and the Tamar Estuaries Complex SPA. This is because it is illegal to pollute watercourses (whether or not they are designated as European sites) under the Environmental Damage (Prevention and Remediation) (England) Regulations 2015[37] and Environmental Permitting (England and Wales) Regulations 2016[38]. This includes pollution via suspended sediment such as dust or soil. Therefore, any site, where a risk exists, must incorporate protection measures into construction and operational procedures. Each initiative brought forward will have to provide a Construction Environmental Management Plan (CEMP). The plan will be implemented during construction and will include good practice measures to ensure dust emissions and surface runoff do not result in adverse effects on the integrity of European sites.

6.11 With regard to water quality from wastewater Plymouth Sound and Estuaries SAC and by extension Tamar Estuaries Complex SPA was discussed within the Cornwall Local Plan HRA. The HRA pointed out that the Torpoint Sewage Treatment Works (STW), the treatment works which facilitates wastewater for the Parish, would "*probably receive new dwellings within its catchment under the Local Plan. Unless it can be confirmed that the proposed levels of development can be accommodated within the existing consent at this STW then it would not be possible to confirm no adverse effects on the integrity of the SAC would result from development"*. The HRA recommended that South West Water (SSW), the company which manages waste water treatment in Cornwall and the council should confirm that the levels of development envisaged can be accommodated without a requirement for increase in discharge consent volumes. The response within the HRA from the council stated there was a meeting between the Council and SSW and although Torpoint STW was not responded too specifically the response stated that "*SSW confirm*[ed] *that they will deal with the levels of development proposed*".

6.12 The Cornwall Local Plan itself has some text included in the supporting information of Policy 28: Infrastructure which states that "*the Council will continue to work in partnership with infrastructure providers and other delivery agencies to keep an up to date Infrastructure Delivery Plan that will enable proposals, in accordance with the spatial objectives, to be brought forward. Particular importance is placed upon the provision of adequate sewerage and sewage waste treatment facilities. In areas where development without the provision of adequate facilities could impact on the integrity of the designated or candidate international wildlife sites, including the Fal and Helford and River Camel SACs and Tamar Estuaries Complex SPA development proposals will be refused where there is an impact*".

6.13 Policy 23 of the Local Plan: Natural Environment considers protecting the conservation status of internationally, nationally and locally designated sites and states that "*The highest level of protection will be given to potential and existing Special Protection Areas, candidate and existing Special Areas of Conservation and listed or proposed Ramsar sites. Proposals having an adverse impact on the integrity of such areas that cannot be avoided or adequately mitigated to remove any adverse effect will not be permitted other than in exceptional circumstances.*

These circumstances will only apply where there are:

a) no suitable alternatives;

b) imperative reasons of overriding public interest; and

c) necessary compensatory provision can be secured to ensure that the overall coherence of the Natura 2000 network of European sites is protected.

Development will only be permitted where the Council is satisfied that any necessary mitigation is included such that, in combination with other development, there will be no adverse effects on the integrity of European Nature Conservation Sites."

6.14 Given that infrastructure provision is required to keep pace with the level of development and the Local Authority would not approve a development which caused an adverse effect on a European site, there is a robust policy framework to ensure no adverse effects on the integrity of European sites. The Neighbourhood Plan is required to adhere to the Local Plans policy framework. The Neighbourhood Plan does currently

[37] The Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (legislation.gov.uk) [Accessed 31/01/2023]
[38] The Environmental Permitting (England and Wales) Regulations 2016 (legislation.gov.uk) [Accessed 31/01/2023]

state within TOR5: Green Infrastructure that "*Development proposals must demonstrate that they will not have any adverse effects on the integrity of nearby designated European sites*".

6.15 **It is recommended that Policy TOR5 is updated to include that developers are required to be engaging with SSW and Cornwall Council at the earliest stages to ensure that sewerage and waste water infrastructure is provided in line with development proposals as required by Policy 28: Infrastructure and adhering to Policy 23: Natural Environment where no development would be approved unless it could be demonstrated that there would be no adverse effects on the integrity of European sites either alone or in combination with other plans and projects.**

6.16 Should this be added to the Neighbourhood Plan it can be concluded that the Neighbourhood Plan would not have adverse effects on the SAC/SPA either alone or in-combination with other plans and projects.

7. Recommendations and Conclusions

7.1 This assessment undertook both screening and Appropriate Assessment of the policies and any allocations within the Torpoint Neighbourhood Plan.

7.2 The European designated sites, considered within the Appropriate Assessment for impact pathways that could not be screened out at the screening stage were:

- Plymouth Sound & Estuaries SAC
- Tamar Estuaries Complex SPA

7.3 Impact pathways considered within the Appropriate assessment were: recreational pressure and water quality.

7.4 Recommendations were made for both the recreational pressure and water quality impact pathways with regards to the SAC and SPA. These are reproduced below:

- **It is recommended that the Policy TOR5: Green Infrastructure policy should be updated to include adherence to Policy 22 of the Cornwall Local Plan with regard to the necessity to provide developer contributions for all developments within the Torpoint Neighbourhood Plan area for recreational mitigation on Plymouth Sound and Estuaries SAC and Tamar Estuaries Complex SPA; and,**
- **It is recommended that the Policy is also updated to include that developers are required to be engaging with SSW and Cornwall Council at the earliest stages to ensure that sewerage and waste water infrastructure is provided in line with development proposals as required by Policy 28: Infrastructure and adhering to Policy 23: Natural Environment where no development would be approved unless it could be demonstrated that there would be no adverse effects on the integrity of European sites either alone or in combination with other plans and projects.**

7.5 Should these recommendations be incorporated into the final version of the Neighbourhood Plan, it can be concluded that the Neighbourhood Plan will not cause adverse effects on the integrity of European sites, either alone or in-combination with other plans and projects.

Appendix A Screening Table

Table 5. Torpoint Neighbourhood Plan Policy Screening Table

Policy Number	Policy Description	Potential Likely Significant Effect Decision
Section 4: Housing Statement NDP Housing Requirement	This is not a policy however the section states: "*Cornwall's Local Plan: Strategic Policies apportions 1,900 dwellings to be delivered in the 11 parishes that make up the rural area of Cornwall Gateway Community Network Area (CNA). The Minimum NDP housing target to be in conformity with Cornwall's Local Plan in Torpoint is 350. Figures supplied by Cornwall Council show that as a minimum Torpoint needs to deliver around 255 new dwellings including affordable housing and self-build plots between 2022 and 2030, to be considered in general conformity with the Local Plan.* *Following a request from the landowner Antony Estate, proposed housing in fields 3 and 4 will be the first consultation on these sites.*"	Although this is not a policy this does relate to levels of housing within the Neighbourhood Plan. It states that the minimum needed to be within general conformity with the NDP is 255 dwellings. Any further windfall housing not already allocated within the Northern Fringe SS1 or Town Centre SS2 would first be considered for development within Fields 3 and 4 on the map owned by Antony Estate. This section does not allocate housing here, merely safeguarding for potential future development. Any future development within Field 3 and Field 4 would require appropriate scrutiny to determine if a project level habitats regulations assessment would be needed, However, given that this statement is merely safeguarding the sites for potential future development at this time with no current plans to develop the sites, it can be screened out as not presenting a linking impact pathway to any European site.
Policy TOR1: Development Boundary and Development Principles	The policy sets out that development will be supported within and outside of the boundary where it adheres to a list of development management criteria.	No likely significant effects This policy merely sets out criteria to which developments must adhere to be supported. The developments themselves, which is not part of the remit of this policy would require appropriate scrutiny to determine if a project level habitats regulations assessment would be needed. However, given that this policy is setting out criteria for support within and outside of the boundary, it can be screened out as not presenting a linking impact pathway to any European site.
Policy TOR2: Employment	The policy sets out to ensure the safeguarding of existing floorspace at Trevol Business Park. The policy high lights a northern Extension to Trevol Business park, and states that expansion onto the site will only be supported once capacity at the original site has been reached.	No likely significant effects This policy safeguards Tevol Business Park as employment space. It also provides a site for the extension of the Trevol Business park should the original reach capacity. However, to does not allocate development here merely safeguard the land for potential use for employment. The developments themselves, which is not part of the remit of this policy would require appropriate scrutiny to determine if a project level habitats regulations assessment would be needed. However, given that this policy is only safeguarding the site for employment, it can be screened out as not presenting a linking impact pathway to any European site.
Policy TOR3: Transport	The policy sets out that the proposals should ensure that development will improve existing transport links including walking and cycling. As well as providing contribution to encouraging use of public transport and not have a negative effect on the Derry.	No likely significant effect. This is a development management policy. This policy does not allocate development and is only concerned with ensuring adequate

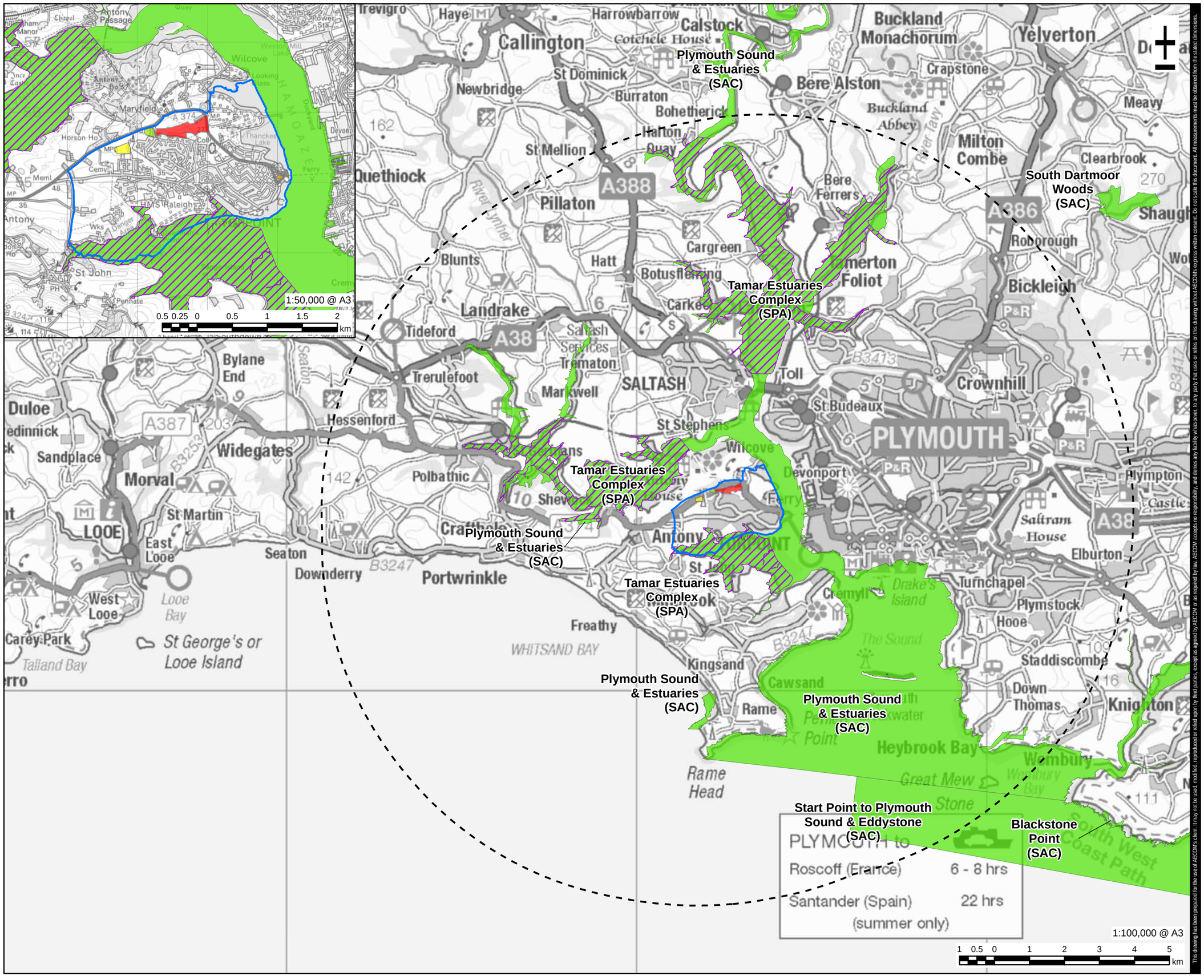
Policy Number	Policy Description	Potential Likely Significant Effect Decision
		active and public transport to ensure appropriate connectivity to the wider area, for the Parish and any development within it.
Policy TOR4: Local Green Space	This policy sets out that the designated green spaces are to be kept and that development that supports their function as greenspaces will be supported in principle and development that would harm the open spaces would not be permitted unless it could demonstrate very special circumstances.	No likely significant effect. The policy does not allocate development, it is designed to protect open spaces within the Neighbourhood Plan area. Therefore, this policy does not present any linking impact pathways to European sites and can be screened out.
TOR5: Green Infrastructure	This policy sets out that development proposals involving the loss of all or part of protected and other important greenspaces will only be supported under certain criteria. The policy also states that "*Development proposals must demonstrate that they will not have any adverse effects on the integrity of nearby designated European sites*"	No likely significant effect. The policy does not allocated development but supports the protection of green spaces and sets out criteria to ensure that the loss of the green spaces in the Neighbourhood Plan area is controlled and minimal. The policy also has a sentence which protects European sites from adverse effects. Therefore, this policy does not present any linking impact pathways to European sites and can be screened out.
Policy TOR SS1: The Northern Fringe	The policy allocates this site to encompass: - 255 dwellings - Convenience retail up to 2,500m^2 - A multipurpose community building - Protected open space including equipped play space - Protected and enhanced network of green infrastructure - Two replacement rugby pitches, club house and changing facilities - Football pitch - Recycling facilities - Land to be set aside for an extension to the existing cemetery - Develop and enhance if walking and cycling network - Heritage Impact Assessment	Potential likely significant effects This policy allocates 255 dwellings in the north of the neighbourhood plan area and also includes retail, community and recreational facilities. The supporting information for the policy states that the Neighbourhood Plan needs to be "*in conformity with the strategic policies of the Local Plan*" however, neither the policy or the supporting information mentions protecting designated sites, nor does it mention specific conformity with Local Plan policies designed to protect designated sites. Therefore, this allocation could potentially have a linking impact pathway to the European sites and will be discussed further within the body of the report.
Policy TOR SS2: Torpoint Town Centre	**Conservation, Design and Local Distinctiveness** The policy sets out that all development should demonstrate how the proposed development will help conserve and enhance the historic fabric of the area. **Diversity of uses in the Town Centre** The Policy sets out that development, redevelopment and diversification of the town centre should support and enhance the continuing vitality and viability of the town centre. **Lower Fore Street** The policy allocates this site to encompass: - Approximately 30 dwellings - Commercial space - Retail space - Improved public realm - Market square - Public parking - Library and Community Hub	Potential likely significant effects This policy allocates approximately 30 dwellings in Lower Fore Street and supports residential development at Harvey Street. The allocation also includes retail and commercial space, community space, parking, library and a market square. There is no mention within the supporting information or the policy itself of ensuring the protection of European sites, nor does it mention specific conformity with Local Plan policies designed to protect designated sites. This allocation could potentially have a linking impact pathway to the European sites and will be discussed further within the body of the report.

Policy Number	Policy Description	Potential Likely Significant Effect Decision
	Harvey Street The policy allocates this site to encompass: - Narrowing of Harvey Street - Provision of public parking on Harvey Street - Removal of public parking in front of St. James Church - Creation of a pedestrian square - Infill development – residential, community, retail and commercial development will be acceptable. **The Waterfront** The policy sets out the need to: - Improve the public realm - Improve connections from the waterfront to the wider town centre area	

Appendix B Figures

Revision: 0 Drawn: ER Checked: LC Approved: LR Date: 2023-06-07

Filename: C:\Users\RaneE\OneDrive - AECOM\Documents\Projects\Current Projects\230206_60571087_Torpoint_HRA\02_Maps\01_Torpoint_HRA.aprx



AECOM

PROJECT

Torpoint Neighbourhood Plan Habitats Regulations Assessment

CLIENT

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LEGEND

- Torpoint Parish Boundary
- 10km Study Area
- Special Protection Area
- Special Area of Conservation

Allocation:

- TOR SS1
- TOR SS2
- Field 3
- Field 4

NOTES

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60571087

FIGURE TITLE

European Sites and Site Allocations

FIGURE NUMBER

Figure 1

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