# Essex Coast Recreational disturbance Avoidance & Mitigation Strategy (RAMS)

## Habitats Regulations Assessment Strategy document 2018-2038

January 2019

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## Executive Summary

The Essex coast Recreational disturbance Avoidance and Mitigation Strategy (the "Essex coast RAMS" or the Strategy) aims to deliver the mitigation necessary to avoid significant adverse effects from 'in-combination' impacts of residential development that is anticipated across Essex; thus protecting the Habitats (European) sites on the Essex coast from adverse effect on site integrity. All new residential developments within the evidenced Zone of Influence where there is a net increase in dwelling numbers are included in the Essex Coast RAMS.

The Essex Coast RAMS identifies a detailed programme of strategic mitigation measures which are to be funded by developer contributions from residential development schemes.

The 11 Local Planning Authorities (LPAs) which are partners in and responsible for the delivery of the Essex Coast RAMS are listed below:

- Basildon Borough Council
- Braintree District Council
- Brentwood Borough Council
- Castle Point Borough Council
- Chelmsford City Council
- Colchester Borough Council
- Maldon District Council
- Rochford District Council
- Southend Borough Council
- Tendring District Council
- Thurrock Borough Council

The published Habitats Regulations Assessments (HRAs) for the relevant Local Plans have identified recreational disturbance as an issue for all of the Essex coastal Habitats sites.

Mitigation measures have been identified in the HRA (screening and/or Appropriate Assessments) for many of the Local Plans. There are similarities in the mitigation measures proposed, reflecting the identification of in-combination effects resulting from planned and un-planned growth in LPA areas.

Mitigation at this scale, and across a number of LPAs, is best tackled strategically and through a partnership approach. This ensures maximum effectiveness of conservation outcomes and cost efficiency. In recognition of this, Natural England recommended a strategic approach to mitigation along the Essex coast.

This strategic approach has the following advantages:

- It meets the requirements of planning legislation: necessary to make a development acceptable in planning terms, directly related to the development and fairly and reasonably related in scale and kind to a development;
- It is endorsed by Natural England and has been used to protect other Habitats sites across England;
- It is pragmatic: a simple and effective way of protecting and enhancing the internationally important wildlife & habitats of the Essex coast and will help to reduce the time taken to reach planning decisions;
- It allows for detailed evidence to be gathered to understand the recreational disturbance patterns and provide an effective mitigation package;
- It provides an evidence based and fair mechanism to fund the mitigation measures required as a result of the planned residential growth; and

It provides developers, agents and planning authorities with a comprehensive, consistent and efficient way to ensure that appropriate mitigation for residential schemes within the Zone of Influence is provided in an effective and timely manner.

The mitigation measures in the Essex Coast RAMS toolkit are summarised below:

| **Action area** | **Examples** |
|---|---|
| Education and communication | |
| Provision of information and awareness raising | This could include:<br>• Information on the sensitive wildlife and habitats<br>• A coastal code for visitors to abide by<br>• Maps with circular routes away from the coast on alternative footpaths<br>• Information on alternative sites for recreation<br><br>There are a variety of means to deliver this such as:<br>• Through direct engagement led by Rangers/volunteers<br>• Interpretation and signage<br>• Using websites, social media, leaflets and traditional media to raise awareness of conservation and explain the Essex Coast RAMS project.<br>• Direct engagement with clubs e.g. sailing clubs, ramblers clubs, dog clubs etc. and local businesses. |
| Habitat based measures | |
| Fencing/waymarking/screening | Direct visitors away from sensitive areas and/or provide a screen to minimise their impact |
| Pedestrian (and dog) access | • Zoning<br>• Prohibited areas<br>• Restrictions of times for access e.g.to avoid bird breeding season |

| | |
|---|---|
| Cycle access | Promote appropriate routes for cyclists to avoid disturbance at key locations |
| Vehicular access and car parking | Audit of car parks and capacity to identify hotspots and opportunities for "spreading the load" |
| Enforcement | • Establish how Water Rangers operating the patrol boats can be most effective. It should be possible to minimise actual disturbance from the boat itself through careful operation.<br>• Rangers to explain reasons for restricted zones to visitors e.g. for bait digging, dogs on a lead |
| Habitat creation | Saltmarsh recharge, regulated tidal exchange and artificial islands may fit with Environment Agency Shoreline Management Plans |
| Project delivery | |
| Partnership working | Natural England, Environment Agency, RSPB, Essex Wildlife Trust, National Trust, landowners, local clubs and societies. |
| Monitoring and review | Birds and visitor surveys with review of effectiveness of measures with new ideas to keep visitors wanting to engage |

The overall cost for the mitigation package is £8,916,448 in total **from today 14 Feb 2019** until 2038. **The tariff per dwelling for this period is currently calculated at £122.30.**

Existing visitor pressure at Habitats sites will need to be mitigated through alternative means and any pressure that would arise from different types of development would be addressed through the relevant project HRA.

Ahead of the production of the Essex coast RAMS, LPAs have had an interim approach to delivering the requirements of the Habitats Regulations. The publication of the RAMS begins the strategic mitigation phase and the Essex Coast RAMS allows LPAs to collect developer contributions for applications for new residential dwellings which fall within the Zone of Influence of the Essex coast Habitats sites. The Essex Coast RAMS will be accompanied by a Supplementary Planning Document, which will facilitate its delivery.

Place Services
11 January 2019

# 1 Introduction

1.1 The Essex coastline stretches for just over 350 miles, extending from the Thames Estuary in the south, northwards to the port of Harwich and the Stour Estuary. The coastline is extremely diverse and features a variety of habitats and environments and which are internationally important for wildlife as shown on Fig. 1.1.

1.2 Most of the Essex coast is designated under the UK Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations') as part of the European Natura 2000 network a series of these sites across Europe. For the purposes of this Strategy this means Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites. A key purpose of these designations is to protect internationally important numbers of breeding and non-breeding birds and their coastal habitats.

1.3 The Habitats Regulations usually refer to these sites as 'European Sites', however as SPAs and SACs (designated under the EU Birds and Habitats Directives) are now defined as 'Habitats sites' in the National Planning Policy Framework (NPPF) (2018) they will be referred to as Habitats sites in this Strategy. The NPPF (para 176) gives the same protection to Ramsar sites (wetlands of international importance designated under the Ramsar convention). For this Strategy, the term Habitats Sites will therefore also include Ramsar sites.

1.4 The Essex coast also provides opportunities for recreation. Housing and consequent population growth in Essex is likely to increase the number of visitors to these sensitive coastal areas, creating the potential for impacts from increased recreational disturbance of the birds and their habitats, unless adequately managed.

1.5 This Recreational disturbance Avoidance and Mitigation Strategy (RAMS) will support sustainable residential growth in Essex. It will deliver mitigation to protect coastal Habitats sites and the wildlife they support, from the increased recreational disturbance associated with a growth in population.

1.6 This mitigation must keep ahead of the rate of population growth to avoid any adverse effects on the integrity of coastal Habitats sites.

1.7 The Essex Coast RAMS will be deemed successful if the level of bird disturbance is not increased despite an increase in population and the number of visitors to the coastal sites for recreation.

1.8 The network of Habitats sites within the UK covers over 8.5% of the land area or 920 sites in total. There are 10 of these sites in the Essex Coast RAMS area[1] (see Figure 1.1 overleaf for more details). This means that almost the entire Essex coast is protected by an international designation for its wildlife interest.

1.9 Each Habitats site is underpinned by one or more Site of Special Scientific Interest (SSSI) as defined by Natural England advice.

1.10 Natural England is the Government's advisor for the natural environment in England and has published a set of mapped Impact Risk Zones (IRZs) for all Sites of Special Scientific Interest (SSSIs). These are defined on the Natural England website as "a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to: Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts."

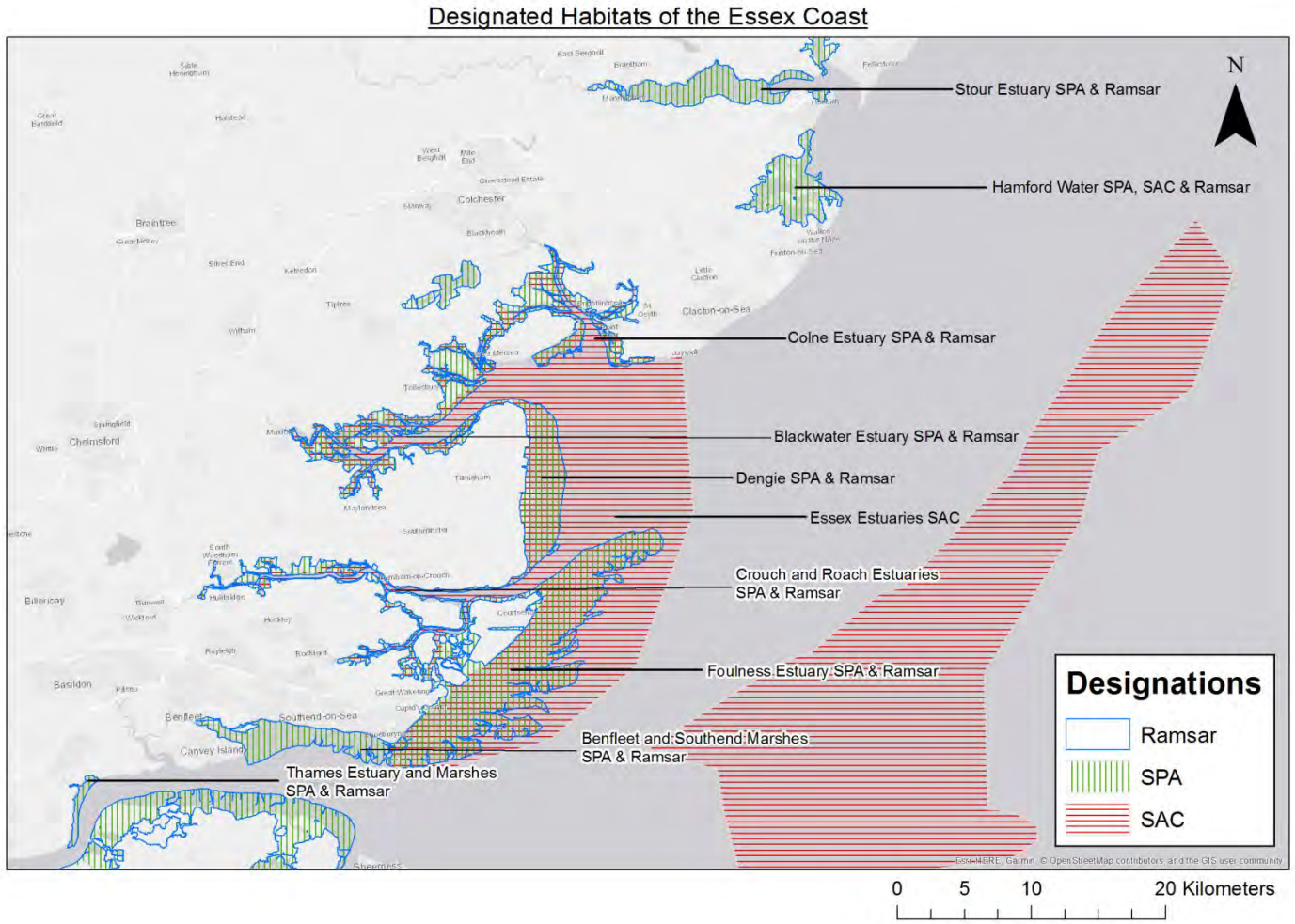
1.11 The IRZs have been identified for all SSSIs, with different trigger distances for a variety of types of developments. This study has defined Zones of Influence (ZOIs) for each Habitats site, based purely on recreational disturbance from residential dwellings.

1.12 11 of the 14 Essex Local Planning Authorities (LPAs) lie wholly or partly within the IRZs of these coastal Habitats sites. The 11 LPAs that are therefore partners to this strategy are:

- Basildon Borough Council
- Braintree District Council
- Brentwood Borough Council
- Castle Point Borough Council
- Chelmsford City Council
- Colchester Borough Council
- Maldon District Council
- Rochford District Council
- Southend-on-Sea Borough Council
- Tendring District Council
- Thurrock Council

[1] Abberton Reservoir and Epping Forest are also Habitats sites in Essex, but these are not within scope for the Essex Coast RAMS.

***Figure 1.1: Habitats (European) sites on the Essex coast***




***Notes:***

- *Ramsar sites are areas of wetland which are designated of international importance under the Ramsar Convention (1971)[1].*
- *Special Protection Areas (SPAs) are sites which support rare, vulnerable and migratory birds.*
- *Special Areas for Conservation (SACs) are sites which support high-quality habitats and species.*

1.13 Together, these LPAs are aiming to deliver approximately 80,000 new homes in the next 20 years according to growth set out in current and emerging Local Plans. This will potentially result in around 190,000 new residents in this area between 2018 and 2038 (based on a 2.4 person per household average household occupancy).

1.14 Harlow and Epping Forest Districts are not included in the Essex Coast RAMS because their geographical areas were outside the Zones of Influence for the coastal Habitats sites. However now that the ZOI for the Blackwater Estuary SPA & Ramsar site includes a small part of Uttlesford District, the District Council may decide to join as a partner for adoption of SPD and the delivery phase of the Essex Coast RAMS.

1.15 Under the Habitats Regulations, each of the partner LPAs is defined as “competent authority”, which is a term used for any public body or individual holding public office. In practice, this means that these LPAs have a duty to comply with the Habitats Regulations and ensure that plans and projects under their jurisdiction do not lead to adverse effects on the integrity of Habitats sites.

1.16 The published Habitats Regulations Assessments (HRAs) for the relevant Local Plans have also identified recreational disturbance as an issue for all of the Essex coastal Habitats Sites.

1.17 Each Habitats site or complex of sites in England has a Site Improvement Plan (SIP), developed by Natural England.

1.18 SIPs provide a high level overview of the issues (both current and predicted) affecting the condition of the designation features on the Habitats site(s) and outlines the priority measures required to improve the condition of the features. It does not cover issues where remedial actions are already in place or ongoing management activities which are required for maintenance.

1.19 The SIP consists of three parts: a Summary table, which sets out the priority Issues and Measures; a detailed Actions table, which sets out who needs to do what, when and how much it is estimated to cost; and a set of tables containing contextual information and links.

1.20 The SIPs are based on Natural England's current evidence and knowledge. The SIPs are not legal documents; they are live documents that are continually updated.

1.21 The planned growth in population is expected to increase the number of residents

using recreational spaces within reach of the new housing, including the Essex coast where people can undertake a range of recreational activities including picnics, hiking, walking their dogs, swimming, sailing and many other land and water based activities.

1.22 The Essex coast Habitats sites already experience recreational pressures but the planned level of population growth in Essex is likely to increase the number of visitors to these sensitive coastal areas. Unless adequately managed, this creates a potential for conflict between recreational activities and the conservation of internationally important assemblages of birds and habitats.

1.23 In response to the evidence for potential for recreational disturbance impacts from housing allocations in Local Plans, Natural England provided a list of Habitats sites to be included in a strategic approach to mitigation on the Essex coast. These are listed in Table 1.1 and shown on Figure 1.1:

**Table 1.1: Habitats sites in Essex relevant to the Strategy**

| Habitats Sites on the Essex Coast |
|---|
| Essex Estuaries SAC |
| Hamford Water SAC, SPA and Ramsar |
| Stour and Orwell Estuaries SPA and Ramsar |
| Colne Estuary SPA and Ramsar |
| Blackwater Estuary SPA and Ramsar |
| Dengie SPA and Ramsar |
| Crouch and Roach Estuaries SPA and Ramsar |
| Foulness Estuary SPA and Ramsar |
| Benfleet and Southend Marshes SPA and Ramsar |
| Thames Estuary and Marshes SPA and Ramsar |

***Notes:***

- *Ramsar sites are areas of wetland which are designated of international importance under the Ramsar Convention (1971)[2].*
- *Special Protection Areas (SPAs) are sites which support rare, vulnerable and migratory birds.*
- *Special Areas for Conservation (SACs) are sites which support high-quality habitats and species.*

[2] Listed or proposed Wetlands of International Importance under the Essex Coast Ramsar Convention (Ramsar) sites are protected as a matter of Government policy. Paragraph 118 of the National Planning Policy Framework applies the same protection measures as those in place for European sites.

1.24 Evidence for a link between population increase, increased recreational pressure on the Essex coast and the resultant impact on wildlife comes from a study by Footprint Ecology commissioned by Natural England (Panter, C & Liley, D 2016). The following text box provides further details.

***Table 1.2: Effects of recreational disturbance on non-breeding SPA birds***
(Reproduced from Panter, C & Liley, D. 2016)

1.3 Disturbance has been identified by Natural England as a generic issue across many European Marine Sites (see Coyle & Wiggins 2010), and can be an issue for a range of species. During the winter/passage periods there can be high numbers of birds present, and competition for food and resources (Caldow *et al.* 1999; Goss-Custard *et al.* 2002, 2006; Stillman *et al.* 2007). Disturbance to wintering and passage waterfowl can result in:

- A reduction in the time spent feeding due to repeated flushing/increased vigilance (Fitzpatrick & Bouchez 1998; Stillman & Goss-Custard 2002; Bright *et al.* 2003; Thomas, Kvitek & Bretz 2003; Yasué 2005)
- Increased energetic costs (Stock & Hofeditz 1997; Nolet *et al.* 2002)
- Avoidance of areas of otherwise suitable habitat, potentially with birds feeding at poorer quality locations (Cryer *et al.* 1987; Gill 1996; Burton *et al.* 2002; Burton, Rehfisch & Clark 2002)
- Increased stress (Regel & Putz 1997; Weimerskirch *et al.* 2002; Walker, Dee Boersma & Wingfield 2006; Thiel *et al.* 2011)

1.25 For breeding SPA birds, different issues result from recreational disturbance. Key breeding roosts are known on particular estuaries/shorelines and in specific locations where habitat and conditions enable territories to become established. Recreational pressure adds to the stresses of defending a territory, laying eggs and rearing chicks which means that SPA birds are often more vulnerable, and levels of public access to breeding areas can rise in the summer months too. During the breeding season, recreational disturbance can affect breeding success as it can result in nest desertion, potential trampling of eggs and an increase in predation rates etc. (Liley & Sutherland 2007).

1.26 Since this Footprint Ecology study was published, mitigation schemes across the UK have provided data which accords with the conclusions of this study.

1.27 The maps in Appendix11 for each Habitats site, are annotated with existing recreational disturbance issues evidenced by Managers of these sites.

1.28 The potential ways in which species and their habitats are impacted by recreational disturbance, are considered in this Strategy. TheEssex Coast RAMS identifies the baseline:

- The current condition of the Habitats sites, such as the existing pressures upon them, the effects on species and habitats;
- The level of recreational disturbance to non-breeding and breeding birds, trampling of sensitive vegetation e.g. saltmarsh, and nutrient enrichment and erosion of habitats; and
- The mitigation currently in place.

1.29 The Strategy then predicts the future situation without any mitigation and suggests suitable recreational disturbance avoidance and mitigation measures to negate possible significant effects on the Habitats sites.

1.30 The baseline will be used to assess the effectiveness of the Essex Coast RAMS.

1.31 A separate Supplementary Planning Document (SPD) will set out how each LPA will deliver the Essex Coast RAMS through the planning process. This SPD will build upon and provide more detailed guidance about the policies in the Local Plans prepared by the 11 Local Planning Authorities (LPAs) for adoption.

## 2 Background to the Strategy

Policy Context

2.1 This Strategy complies with the relevant legislation and national guidance, including:

- Article 6 of the Habitats Directive (92/43/EEC) 1994
- European Commission (2001) Assessment of plans and projects significantly affecting Habitats sites – Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC [3]
- Government Circular 06/2005
- Conservation of Habitats and Species Regulations 2017
- The National Planning Policy Framework (NPPF) 2018

2.2 The Conservation of Habitats and Species Regulations 2017, as amended (commonly known as the Habitats Regulations) transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into UK law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations came into force on 30th November 2017 and extend to England.

2.3 The Habitats Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites (henceforth referred to as Habitats sites in accordance with the NPPF).

2.4 Regulations 63 and 64 of the Habitats Regulations require a series of steps and tests to be followed for plans or projects that could potentially affect a Habitats site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' (HRA) process that competent authorities must undertake to consider whether a proposed development plan or programme is likely to have significant effects on a Habitats site.

2.5 HRA is often referred to as 'Appropriate Assessment' (AA) although the requirement for AA is first determined by an initial HRA 'Screening' stage undertaken as part of the full HRA.

[3] http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf

2.6 Specifically, Regulation 63 states:

> *63.—(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—*
>
> *(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and*
>
> *(b)is not directly connected with or necessary to the management of that site,*
>
> *must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.*

2.7 The Regulation 63 of the Habitats Regulations refers to "the competent authority". These are the body or bodies responsible for the application of the Habitats Regulations Assessment process, on a case-by-case basis to ensure compliance with the Habitats and Birds Directives. A competent authority is defined in Regulation 7 of the Habitats Regulations so as to include:

> *a) Any Minister of the Crown (as defined in the Ministers of the Crown Act 1975(1)), government department, statutory undertaker, public body of any description or person holding a public office;*
>
> *b) the Welsh Ministers; and*
>
> *c) any person exercising any function of a person mentioned in sub-paragraph (a) or (b).*
>
> *and public body includes:*
>
> *a) the Broads Authority(4);*
>
> *(b) a joint planning board within the meaning of section 2 of the TCPA 1990 (joint planning boards)(5);*
>
> *(c) a joint committee appointed under section 102(1)(b) of the Local Government Act 1972 (appointment of committees)(6);*
>
> *(d) a National Park authority; or*
>
> *(e) a local authority, which in this regulation means—*
>
> *(i) in relation to England, a county council, a district council, a parish council, a London borough council, the Common Council of the City of London, the sub-treasurer of the Inner Temple or the under treasurer of the Middle Temple;*
>
> *(ii) in relation to Wales, a county council, a county borough council or a community council;*

2.8 The Habitats Regulations also use the following terms, which are used in this Strategy and are defined below:

> ***Likely Significant Effect*** *– this is a possible adverse effect that would undermine the conservation objectives for a Habitats (European) site and which cannot be ruled out based on clear verifiable objective information.*
>
> ***Alone*** *– consideration given to the details of the plan or project which may result in effects on a Habitats site*
>
> ***In combination with other plans and projects*** *– consideration needs to also be given to the cumulative effects which will or might result from the addition of the effects of other relevant plans or projects.*

2.9 The Government has produced core guidance for competent authorities and developers to assist with the HRA process. This can be found online [4]

2.10 HRA is thus a vital part of a Local or Strategic Plan's evidence base: for Plans to be considered legally compliant and sound, as set out in section 35 of the National Planning Policy Framework 2018, each LPA must provide mitigation.

Identifying the problem

2.11 The majority of the HRAs produced by Essex LPAs as part of the production of their respective Local or Strategic Plans identified that the level of planned housing growth may lead to disturbance of birds in coastal Habitats (European) sites within and beyond each individual LPA boundary.

2.12 HRA work relating to the Essex coast Habitats sites undertaken to date at the plan level and project level across the 11 LPAs is detailed in Table 2.1.

4 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/82706/habitats-simplify-guide-draft-20121211.pdf

***Table 2.1 LPAs and their relevant Habitats Sites***

| LPAs | Work undertaken | Relevant Habitats sites |
|---|---|---|
| Basildon Borough Council | Basildon Borough Council Local Plan 2014-2034 and HRAs (Oct 2018) at the plan and project level | The HRA identifies that new residential development is likely to result in significant effects on the Essex coast Habitats sites due to the draw of the coast for recreation. |
| Braintree District Council | North Essex Authorities Shared Section 1 Local Plan HRA (May 2017)<br>Braintree District Council Section 2 Local Plan HRA (May 2017)<br>Braintree District Council has prepared project level HRAs for residential developments in Hatfield Peverel, Cressing, Braintree and Coggeshall. | The HRA identifies that new residential development is likely to result in significant effects on the Essex coast Habitats sites due to the draw of the coast for recreation. |
| Brentwood | Brentwood Local Plan Habitat Regulations Assessment (January 2018) | The HRA identifies that new residential development is likely to result in significant effects on the Essex coast Habitats sites due to the draw of the coast for recreation. |
| Castle Point | Castle Point Local Plan HRA is currently being undertaken | • Crouch and Roach Estuaries<br>• Foulness Estuary<br>• Benfleet and Southend Marshes<br>• Outer Thames Estuary |
| Chelmsford | Chelmsford City Council's Pre-Submission Local Plan Habitats Regulations Assessment (January 2018) and an update dated June 2018 | The HRA identifies the possibility of significant effects on European sites. In the Pre-Submission Local Plan, the Council has committed to the adoption of the RAMS SPD. Plan level mitigation measures are considered to be both achievable and likely to be effective. Additional provision and master planning requirements are included to minimise effects on the Crouch and Roach Estuaries. |
| Colchester Borough Council | North Essex Authorities Shared Section 1 Local Plan HRA<br>Colchester Borough Council Section 2 Local Plan HRA<br>- HRA screening for Boxted Neighbourhood Plan (2014-2029)<br>- HRA screening for West Bergholt Neighbourhood Plan (2018-2033)<br>- HRA re-screening for Wivenhoe Neighbourhood Plan (2017-2032) | Colne Estuary,<br>Hamford Water,<br>the Blackwater Estuary<br>the Stour and Orwell Estuaries. |

| LPAs | Work undertaken | Relevant Habitats sites |
|---|---|---|
| Maldon District Council | Maldon District Council Local Development Plan Sustainability Appraisal Report (March 2017) incorporating Strategic Environmental Assessment and Habitats Regulations Assessment<br><br>Nine LDP allocations with planning permission or planning consent subject to a S106 agreement have project level HRAs. Only two LDP allocations without consent have not had project level HRAs. | Maldon's Local Development Plan was approved in 2017 and all mitigation identified through its HRA was reflected in relevant LDP policies and has been secured via project level HRAs for each allocation. |
| Rochford District Council | Rochford District Council Local Plan HRA (January 2013)<br>HRA Maylons Farm, West Hullbridge and Wallasea Island | • Crouch and Roach Estuaries<br>• Foulness Estuary<br>• Benfleet and Southend Marshes<br>• Outer Thames Estuary |
| Southend Council | Southend Council Local Plan HRA (September 2010)<br>Southend Central Area Action Plan (February 2018) | • Crouch and Roach Estuaries<br>• Foulness Estuary<br>• Benfleet and Southend Marshes<br>• Outer Thames Estuary |
| Tendring District Council | North Essex Authorities Shared Section 1 Local Plan HRA (May 2017)<br>Tendring District Council Section 2 Local Plan HRA (May 2017)<br>Adopted project level HRAs for development | • Colne Estuary,<br>• Hamford Water,<br>• Blackwater Estuary<br>• Stour and Orwell Estuaries |
| Thurrock | Thurrock Local Plan Local Development Scheme (December 2015) | • Crouch and Roach Estuaries<br>• Foulness Estuary<br>• Benfleet and Southend Marshes<br>• Outer Thames Estuary |

*Notes: Not all of the LPAs have prepared project level HRAs for residential developments within the IRZs[3] of the SSSIs that underpin each Habitats site. Uttlesford is only affected by a small geographical area on its eastern boundary within the ZOI of Blackwater Estuary SPA &Essex Coast Ramsar and this component of the Essex Estuaries SAC. This also applies to* strategic plans eg Joint Strategic Plan and north Essex

[4] Natural England has published a set of mapped Impact Risk Zones (IRZs) for Sites of Special Scientific Interest (SSSIs). This helpful GIS tool can be used by LPAs to help consider whether a proposed development is likely to affect a SSSI and determine whether they need to consult Natural England to seek advice on the nature of any potential SSSI impacts, their avoidance or mitigation. The dataset and user guidance can be accessed from the gov.uk website.

Identifying the need for a strategic solution

2.13 In 2017, Natural England's West Anglia Team identified the Essex coast as a priority for strategic and proactive planning engagement and mitigation. This was due to the high numbers of dwellings that were likely to come forward for each Plan alone and also in combination within the relevant Local Plans by 2038 to meet projected housing needs, and the potential recreational impact these new residents could have upon the Habitats sites.

2.14 In September 2017, Natural England proposed a strategic approach to LPAs and recommended identifying the scale of the disturbance and implementing measures to mitigate impacts through the preparation of a joint Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS). Based on existing evidence of visitor pressures, Natural England advised that 11 district/borough Councils across Essex should be partners in the preparation of the Strategy. To reflect the differing Local Plan adoption dates of these authorities, Natural England advised that a Supplementary Planning Document should be the mechanism to secure developer contributions towards the mitigation measures identified as necessary by the Strategy.

2.15 Natural England's advice was that the Local Plans must have a clear policy commitment to producing a Mitigation Strategy, with a clear timeframe for its completion. This should be by the time the plan is adopted to ensure any developments coming forward as part of the plan have certainty that there are mitigation measures which can be implemented as soon as the plan is live.

2.16 Local Plans are advancing across Essex. The number of Local Plan consultations that are scheduled further increases the urgency to produce the strategy and secure a delivery mechanism for an effective mitigation package.

2.17 Mitigation measures have been identified in the HRA (screening and/or Appropriate Assessments) for many of the Local Plans. There are similarities in the mitigation measures proposed, reflecting the identification of in-combination effects resulting from growth in LPA areas. In recognition of this, Natural England recommended a strategic approach to mitigation along the Essex coast.

2.18 The LPAs agreed that a strategic solution to mitigate the impacts of recreational disturbance from Local Plans was a sensible approach to take the support of Natural England and Essex County Council. Strategic solutions are usually driven by challenges and opportunities arising from planning issues. They apply more broadly than at a single designated site and often include aims such as cutting down on unnecessary consultations, providing strategic scale mitigation or developing a generic approach to evidence collection and use. The development plan process provides huge opportunities to influence planning policy and create solutions that

can filter down to the application stage, providing confidence that mechanisms exist to deliver much needed development in the right places whilst also ensuring the natural environment is fully considered. Under planning legislation, LPAs have a statutory 'duty to cooperate' with each other, and other bodies, when preparing, or supporting the preparation of policies which address strategic matters. This includes the Essex Coast RAMS.

2.19 The initial Essex Coast RAMS meeting was held in November 2017 under the umbrella of the Essex Planning Officers Association (EPOA), with all Essex LPAs invited to discuss the rationale for taking a strategic approach to securing a solution to support their Local Plans. Natural England explained the need for Local Plans to provide mitigation in order that sustainable housing growth can be delivered whilst at the same time, adequately protecting Habitats sites from harm that could potentially occur because of increased recreational pressure arising from the new housing growth.

2.20 Natural England's guidance provided at the meeting held on 13 September 2017 outlined that a mitigation strategy should:

- Set clear parameters, providing a mechanism by which pressure from increased recreation can be avoided and mitigated for, thus enabling rather that stalling the progression of planned housing growth within local Plans;
- Be based on evidence and be precautionary where uncertainties remain;
- Provide a good degree of certainty that the required measures can be delivered;
- Be solutions focused, seeking to find robust means of mitigating for impacts to allow development to proceed, incorporating such mitigation at the plan level wherever possible so that these requirements are clear to developers and are consistently applied;
- Build upon work undertaken to date as part of the HRAs for the various Local Plans;
- Reflect best practice; and
- Include monitoring.

2.21 At the same meeting, Natural England also set out the key lessons learnt from strategic mitigation schemes in other parts of the country. These are:

- Early engagement is key to ensuring issues and opportunities are identified from the outset when time is on our side to deliver real solutions
- Embedding strategies – whilst a robust evidence base and options for avoidance and mitigation are crucial, the policy framework within a LPA's development Plan needs to be clear and reflect what is required at project stage to ensure successful delivery
- Stepping back and seeing the "bigger picture"

- Sharing and learning to embed strategic solutions is hugely important and enables lessons to be learnt and to apply best practice elsewhere.

2.22 Mitigation measures applied for the protection of Habitats sites through development should be those that :

- Are essential for and relevant to the planning permission being granted
- Provide certainty that housing development can proceed without adverse effect on the Habitats sites
- Are proportionate to the potential impact that may be generated, evidence based and cost effective.

Developing the Essex Coast RAMS project

2.23 The three options for the scale of joint working were discussed by the Essex LPAs present at the initial Essex Coast RAMS meeting. These are outlined in Table 2.2 below.

***Table 2.2: Options for preparing an Essex Coast RAMS***

| **Option 1 – No Joint Project** |
|---|
| In the absence of some form of joint project, it would fall upon those LPAs with likely effects predicted on European Sites to prepare the Essex Coast RAMS. However, in order for them to do this, information was required on housing growth from the other LPAs for the full extent of recreational impacts to be determined. Furthermore, those other LPAs would still be under a legal obligation to fulfil their duties under the Habitats Regulations, including managing residual recreational impacts on Habitats sites. In this situation, it would be the LPA with the Essex Coast RAMS determining how this could be resolved with no input from those other LPAs, potentially resulting in disputes over the appropriateness of projects and their costs. This did not appear to be an appropriate approach given the scale and cross-boundary nature of the problem. |
| **Option 2 – Sub-regional Projects** |
| LPAs are familiar with working across their housing market areas in order to deliver evidence-based projects and elements on plan making. This option offered some benefits in terms of utilising existing working arrangements. However, the housing market areas do not align with the ZOIs for the Habitats sites along the Essex coast and therefore there would still be a need for each sub-region to look at the Essex Coast RAMS beyond their area in order to determine their full impact on Habitats sites.<br><br>Additionally, different approaches between these sub-regions may give rise to areas of dispute over the appropriateness and cost of projects, although this risk is not considered to be as significant as for Option 1. A further issue with this option is that some LPAs in Essex, such as Maldon are not part of a sub-regional working group because Maldon sits within its own housing market area. Given these issues, normal patterns of sub-regional working may not be appropriate in this instance. |
| **Option 3 – Essex-wide Project** |
| In order to cover all of the coastal Habitats Sites, and all of the Essex LPAs within the ZOIs, an Essex coast RAMS could be prepared jointly by the 11 LPAs considered likely to be affected. This was considered to be the |

most effective approach in terms of capturing all cross-boundary interactions between the different LPAs involved, and ensures that all authorities affected would have a stake in the final selection of mitigation projects and are aware of the costs associated with these.

Without a co-ordinated approach, it may be very difficult for LPAs to deliver bespoke mitigation measures particularly for those at a distance from the Essex coast.
However, experience with the Gypsy & Traveller Accommodation Assessment, as an example, has shown that it is difficult to manage a project with this number of authorities and therefore a dedicated project management would be a requirement, particularly if it is to deliver in a timely manner.

2.24 It was concluded that the best outcomes in terms of delivering an Essex coast RAMS which addresses the issues in an effective and equitable way will be achieved through joint working at an Essex wide level i.e. Option 3. However, this option presented the greatest challenge in terms of project management. It was agreed by the LPAs present that Option 3 would be taken forward.

2.25 The Essex LPAs appointed Place Services to prepare the Essex Coast RAMS and undertake project management.

What will the Strategy achieve?

2.26 A Steering Group (comprising officers from the 11 LPAs, from Essex County Council and Natural England and consultants from Place Services, Essex County Council) was established to lead this project. The initial work of the Steering Group focused on approval of the project plan, signing of a Memorandum of Understanding which set out the commitment to undertaking this project, an initial review of existing information sources (Baseline Evidence Report), and planning for stakeholder events to aid information sharing. The need for visitor surveys to provide a robust evidence base was subsequently agreed with Natural England.

2.27 The initial brief for the Essex Coast RAMS is set out in Table 2.3 although details were considered in consultation with Natural England along the journey of producing the Strategy. It was decided by the Steering Group that governance and resourcing would be a separate piece of work to the Strategy.

***Table 2.3: The Brief for the Essex Coast RAMS***

| | |
|---|---|
| **1. Patterns of use of SPAs/SACs/Ramsar sites** | **a)** Review existing sources of information, and produce report/paper to present to the Steering Group |
| | **b)** Agree with Natural England whether sufficient information exists. |
| | **c)** Obtain further primary data where necessary. |

| | |
|---|---|
| | **d)** Analyse data to identify the locations where new development may lead to an impact in order for the LPAs to justify contributions being sought. |
| **2. Mitigation and visitor monitoring** | **a)** Based upon the conclusions from the patterns of use, identify which Habitats sites are relevant to which growth locations/ LPA. |
| | **b)** Identify mitigation and visitor monitoring objectives (i.e. what needs to be monitored, how often and to identify what methodologies to use). |
| | **c)** Identify specific existing or proposed on-site/off-site mitigation and site management measures which would address the HRA requirements. This must reflect HRA recommendations, set out the governance arrangements and likely delivery partners. |
| | **d)** Identify gaps (e.g. SAC/SPAs/Ramsar sites or parts of these Habitats sites where no mitigation or visitor monitoring is planned or where no or insufficient management is in place or planned, or where no delivery partner can be identified). |
| **3. Funding** | **a)** Identify what measures have already been funded and provide detail of how the current funding mechanisms work. |
| | **b)** Calculate the total cost of mitigation measures over the period of the local plans (based on the longest plan period of the project partners as in preparation now). |
| | **c)** Identify planned growth in the locations identified under 2c (above). |
| | **d)** Identify mechanisms for securing funding for each mitigation measure. |
| | **e)** Identify effective mechanisms for a Strategic Mitigation Scheme(s), to include collecting and holding contributions for 11 separate LPAs, prioritising spend and transfer of funds to delivery partners/organisations. |
| **4. Monitoring of the Strategy** | **a)** Identify mechanisms for monitoring the delivery and effectiveness of the mitigation strategy (e.g. outputs and outcomes – the former might be monitored more regularly). |
| | **b)** Provide recommendations related to future growth e.g. how might the strategy take account of growth in the longer term (beyond most plan periods) which would be subject to new HRAs and how should the results of monitoring feed into decisions about locations / scale of future growth. |
| | **c)** Identify how monitoring results will be analysed and used effectively. |
| **5. Strategy finalised with recommendation for SPD** | **a)** Incorporate areas above into strategy. |
| | **b)** Agree strategy with the Steering Group. |

| | |
|---|---|
| **to facilitate implementation** | **c)** LPAs to consult on draft SPD- targeted consultation with interested parties, but strategy publically available for comment. |
| **6. Finalise SPD** | **a)** Consider consultation responses. |
| | **b)** Amend and finalise SPD. |
| | **c)** Adopt SPD. |

## 3 Purpose of the Strategy

3.1 The Essex Coast RAMS will support sustainable residential growth in Essex while protecting Habitats sites and their wildlife from the increased disturbance from recreation associated with a growth in population. The Essex Coast RAMS will identify specific avoidance and mitigation measures that will be necessary to enable the planned housing and associated population growth within the strategy area to go ahead, without adversely affecting the designated features of the Habitats sites.

3.2 The Essex Coast RAMS will identify:

- the likely in combination impacts from recreational disturbance;
- a range of effective mitigation measures;
- when the mitigation measures are required;
- where the mitigation is required;
- how mitigation relates to development (or development locations);
- how mitigation measures will be funded;
- how the Strategy will be implemented
- how the success of the mitigation measures will be monitored; and
- how best to incorporate monitoring data and other information and best practice into future reviews of the strategy and Local Plans.

3.3 The Strategy does not cover any additional site-specific infrastructure, such as Country Parks, which are often referred to as Suitable Alternative Natural Greenspaces (SANGs). The issue of SANG is slightly different as, given that the coast cannot be replicated inland, SANGs do not tend to form part of coastal mitigation strategies. However, there is some evidence from the Solent HRA Mitigation project and corresponding website[4] that if people are only visiting the coast because it is their nearest greenspace, then they can be drawn away from the coast by providing an attractive site nearer to their home. Natural England therefore may advise that on-site greenspace should be provided as part of individual developments (e.g. to include circular walks, dogs off lead areas etc.) to take some of the pressure off the coastal sites. However, this will not remove residents' overall desire to visit the coast, so a contribution to the mitigation measures at the coastal Habitats sites still needs to be made in all cases.

[5] http://www.birdaware.org/

3.4 The Essex Coast RAMS Strategy does not provide:

- A mechanism to deliver mitigation for recreational impacts from individual residential developments alone; this must be provided on/near the development site;
- A mechanism for measures necessary to avoid likely significant effects from non-recreational impacts e.g. air or water quality, identified through project level HRAs prepared for individual planning application;
- Any mitigation needed to reduce or avoid *existing* impacts from recreational or other activities identified by Natural England in the SIPs for each Habitats site along the Essex coast;

or

- Mitigation for the England Coast Path (ECP). This is a Natural England project, which aims to create a new National Trail around the entirety of England's coast. For each section of the ECP, Natural England undertakes an "Access and Sensitive Features Appraisal" (ASFA) which contains a bespoke HRA to mitigate for the effects of the Coast Path.

3.5 As listed in Natural England's letters to LPAs (Interim advice to ensure new residential development and any associated recreational disturbance impacts on European designated sites are compliant with the Habitats Regulations, November 2017 & August 2018) provided in Appendix 1, the Strategy applies to all net increases in residential dwellings that fall within the ZOI which are in the Planning Use Classes listed in Table 3.1, overleaf (excluding replacement dwellings and extensions).

***Table 3.1: Planning Use Classes***

| Planning Use Class* | Class Description |
|---|---|
| C2 Residential institutions | Residential care homes, boarding schools, residential colleges and training centres. |
| C2A Secure Residential Institution | Military barracks. |
| C3 (a) Dwelling houses (a) | Covers use by a single person or a family (a couple whether married or not, a person related to one another with members of the family of one of the couple to be treated as members of the family of the other), an employer and certain domestic employees (such as an au pair, nanny, nurse, governess, servant, chauffeur, gardener, secretary and personal assistant), a carer and the person receiving the care and a foster parent and foster child. |
| C3 Dwelling houses (b) | Up to six people living together as a single household and receiving care e.g. supported housing schemes such as those for people with learning disabilities or mental health problems. |
| C3 Dwelling houses (c) | Allows for groups of people (up to six) living together as a single household. This allows for those groupings that do not fall within the C4 HMO definition, but which fell within the previous C3 use class, to be provided for i.e. a small religious community may fall into this section as could a homeowner who is living with a lodger. |

| | |
|---|---|
| C4 Houses in multiple occupation | Small shared houses occupied by between three and six unrelated individuals, as their only or main residence, who share basic amenities such as a kitchen or bathroom |
| Sui Generis *** | - Residential caravan sites (excludes holiday caravans and campsites)<br>-Gypsies, travellers and travelling show people plots |

*Notes:*
** This table is based on Natural England advice (244199, included as Appendix 1) which was advisory, not definitive.*
*** Care homes will be considered on a case-by-case basis according to the type of residential care envisaged.*
**** Sui Generis will be considered on a case-by-case basis according to the type of development.*

3.6 The applications in scope for consideration will be confirmed in the SPD and should include:

- Full planning applications;
- Reserved Matters planning applications where the outline planning consent that were not previously assessed through the HRA process and assessed under the Essex Coast RAMS where updated evidence is now available; and
- Permitted Development as clarified by SPD.

3.7 A strategic, coordinated approach will reduce the burden on the LPAs and developers for project-level HRAs and offer a straight-forward, efficient and effective option for residential developers to provide appropriate mitigation measures, to ensure development accords with the Habitats Regulations.

3.5 Without a co-ordinated approach, it may be very difficult for LPAs to deliver effective bespoke mitigation measures particularly for locations that are on the outer edge of the Essex coast RAMS ZOI.

# The Technical Report – Evidence Base

## 4 The Baseline

4.1 In order to determine the baseline, the following methodology was followed in the review process to determine patterns of visitor use of designated sites:

- Desk studies to determine what evidence existed and identify any gaps;
- Visitor surveys to supplement the desk studies and gain an understanding of the origins of visitors to the Habitats sites and thereby determine the ZOIs;
- Continual engagement with Natural England to discuss and agree the methodology, location and results of the studies to provide robust evidence on which to develop the Strategy; and
- Stakeholder meetings with those parties with a responsibility for or an interest in the Habitat sites to gain a fuller understanding of the Habitats sites, the recreational pressures they are under presently, those that would arise with an increase in population and an understanding of what mitigation has been undertaken to date and how effective this is. Full details of the workshop attendees can be found in Appendix 10.

### The Importance of the Essex coast Habitats sites – Desktop review

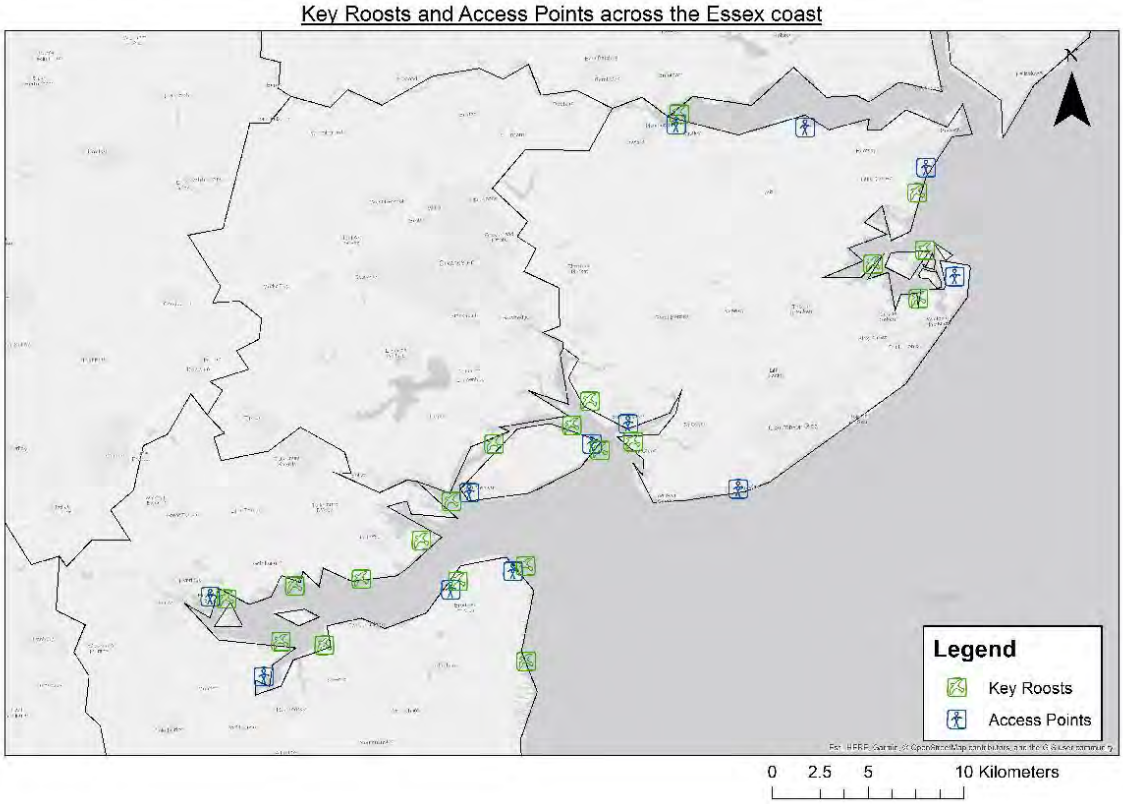
4.2 A desktop review looked at the existing data on the Habitats sites and the species therein.

4.3 Forty different bird species – predominantly waders and wildfowl – are specifically listed by Natural England as designated Interest Features for at least one of the Habitats sites.

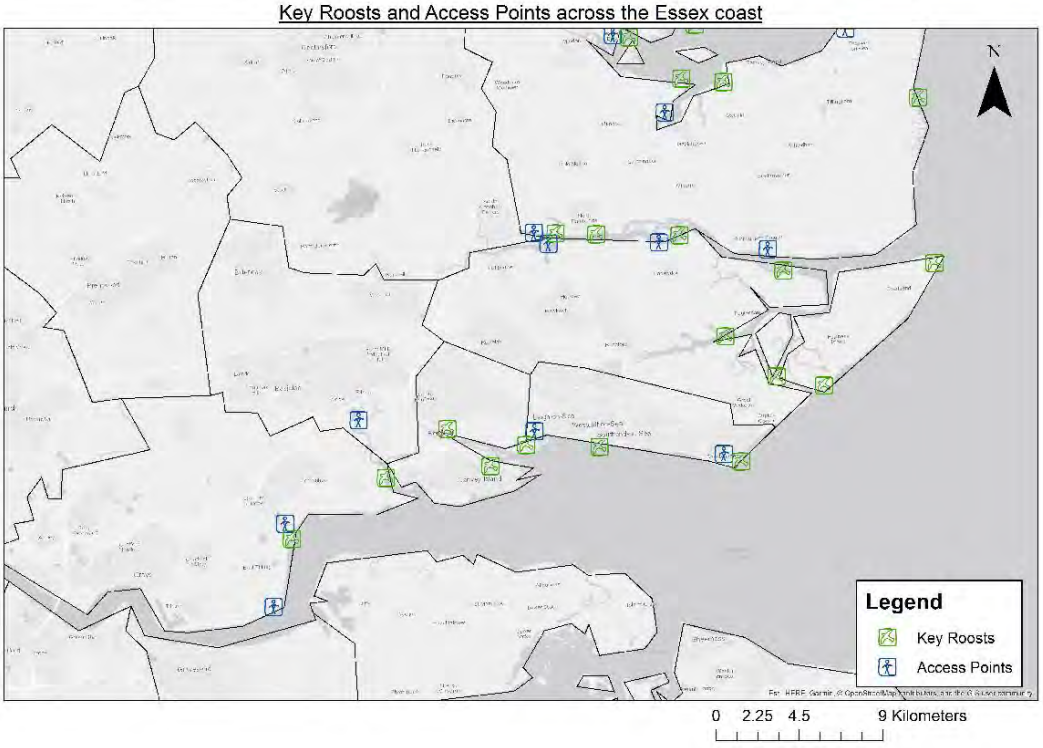
4.4 Discussion with the Royal Society for the Protection of Birds (RSPB) on data available on key bird roost locations which are sensitive to disturbance has identified 20 key sites, which are shown on the maps 4.1 and 4.2. Because breeding information is confidential, the maps do not distinguish breeding and non-breeding roosts.

4.5 Functionally Linked Land (FLL) also needs to be protected from disturbance e.g. key areas of farmland and grassland for Brent geese. This will need to be mapped and has been included as a project in the mitigation package set out in this Strategy.

## *Map 4.1 Key SPA bird roosts/breeding areas and access points for North Essex*




## *Map 4.2 Key SPA bird roosts/breeding areas and access points for South Essex*



4.12 As key roosts are used by SPA birds at different times of the year (breeding and non-breeding), there are seasonal variations as well as daily variations in usage due to the tidal cycle. Key locations for SPA birds and the state of the tide can mean birds are closer or further from the shoreline and potential disturbance.

4.13 During harsh winters, a prolonged cold spell can mean birds struggle to get sufficient feeding time in between tides and any disturbance in these conditions is more significant to bird populations. Some roost sites hold large concentrations of birds but numbers may change as use fluctuates and factors other than disturbance or habitat degradation may be an issue in some locations.

4.14 The Wetland Bird Survey (WeBS) data has also been reviewed. WeBS monitors non-breeding waterbirds in the UK. There is a WeBS Alerts system which provides a method of identifying changes in numbers of water birds at a variety of spatial and temporal scales and reports are written every 3 years. It would be beneficial to integrate WeBS counts with the Essex Coast RAMS bird monitoring programme. Species that have undergone major changes in numbers are flagged, by the issuing of an Alert. Alerts are intended to be advisory; subject to interpretation, they should be used as a basis on which to direct research and subsequent conservation efforts if required.

## Identifying visitor patterns of use of Habitats sites

4.15 Visitor surveys were undertaken to inform the Strategy, with the aim of gathering information on the number of visitors expected at coastal Habitats sites and evidence of the distances visitors to the sites will travel to access coastal locations for recreation purposes. This evidence is then used to calculate the Zones of Influence.

### Visitor surveys

4.16 Where visitor data existed for Habitats sites, which had been previously collected by the LPAs, this was collated, and gaps identified in a baseline report to the Steering Group.

4.17 Visitor data (for the Stour & Orwell Estuaries SPA and Ramsar site, Hamford Water SAC, SPA and Ramsar site, the Colne SPA and Ramsar site and the Essex Estuaries SAC) was collected over a three-year period (from 2011 to 2013) as required by the appropriate assessments of Colchester and Braintree's adopted development plans and Tendring's emerging Local Plan.

4.18 On the advice of Natural England, the Essex Coast RAMS Steering Group agreed that the sites which would be subject to visitor surveys needed to be prioritised due

to resourcing and time constraints.  Surveys at locations with no data were therefore prioritised so that there were data on which to base the ZOIs for all Habitats sites.

4.19 Tables 4.1 and 4.2 below show the visitor survey data which had previously been completed, and also the location of surveys needed to fill in the gaps.

4.20 ZOIs for the Habitats sites in North Essex were informed by the survey and monitoring work undertaken as a requirement of the Appropriate Assessments of Colchester and Braintree's adopted development plans and Tendring's emerging Local Plan. Since this joint survey work the North Essex LPAs have submitted an Appropriate Assessment (AA) for the North Essex Authorities Shared Strategic Part 1 for Local Plans Pre-submission (Regulation 19) prepared by Land Use Consultants (LUC) May 2017.

4.21 The AA for this joint plan identifies an increased prevalence and occurrence of negative recreational effects to the Habitats sites, which in the absence of effective mitigation is likely to lead to adverse effects on the sites' integrity.

***Table 4.1*: *North Essex visitor survey details***

| Survey Location | Habitats Site | Source of existing information? | Seasons which information is needed for: Summer (May-July) Winter (August to April) |
|---|---|---|---|
| Mistley Walls | Stour and Orwell Estuaries | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Stour Wood | Stour and Orwell Estuaries | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Kirby Quay | Hamford Water | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| The Naze | Hamford Water | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Brightlingsea Marsh | Colne Estuary | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Cudmore Grove CP, Mersea | Colne Estuary | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Wivenhoe Barrier | Colne Estuary | None | Winter |
| Strood Channel | Blackwater Estuary | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Old Hall Marshes (owned by RSPB) | Blackwater Estuary | North Essex surveys over winter and summer months from 2010-2013. | Summer and winter |
| Tollesbury Wick (owned by EWT) | Blackwater Estuary | None | Summer and Winter |
| Promenade Park Maldon (Northey Island Causeway) | Blackwater Estuary | None | Winter |
| Bradwell Marina | Blackwater Estuary | None | Summer and winter |
| Dengie (St Peters Chapel) | Dengie | None | Winter |

***Table 4.2: South Essex visitor surveys required to identify impacts on the designated features***

| Survey Location | Habitats Site | Existing information? | Season Summer (May-July) Winter (August to April) |
|---|---|---|---|
| Burnham-on-Crouch | Crouch and Roach Estuaries | None | Winter |
| Blues House Farm (EWT), North Fambridge | Crouch and Roach Estuaries | None | Winter |
| Wallasea Island | Crouch and Roach Estuaries | Total visitor numbers recorded by RSPB from 2008-2016 and visitor numbers to the sea wall and number of cars from Apr-Sep 2017. | All |
| Thameside Nature Park (EWT) | Thames Estuary and Marshes | None | Winter |
| Coalhouse Fort | Thames Estuary and Marshes | None | Winter |
| Cinder Path, Leigh-on-Sea | Benfleet and Southend Marshes | None | Summer and Winter |
| Gunners Park, Shoebury | Benfleet and Southend Marshes | None | Winter |
| Two Tree Island, Leigh-on-Sea | Benfleet and Southend Marshes | None | Summer |

Additional evidence gathered and analysis

4.22 The first round of visitor surveys took place in winter 2017/18, when non-breeding waders and wildfowl which are designated features of the Habitats sites are present along the Essex coast (August to April). The second round of visitor surveys took place on the Blackwater Estuary during the spring of 2018 when breeding birds such as the Little Tern and Ringed Plover, which are designated features of this Habitats site, use it for nesting. Benfleet and Southend Marshes SPA provide habitat for SPA birds which could be impacted by trampling during the summer months used by non-breeding species over winter.

***Table 4.3: Designation features per Habitats site (MAGIC, 2018) and visitor surveys undertaken to assess disturbance***

| **Habitats Site** | **Designation features sensitive to recreational disturbance and surveys undertaken** | | | | |
|---|---|---|---|---|---|
| | **Habitats** | **Breeding birds** (May to July) | Summer survey completed? | **Non-breeding birds August to April** | Winter survey completed? |
| Stour and Orwell Estuaries | Yes | Yes | Yes | Yes | Yes |
| Hamford Water | Yes | Yes | Yes | Yes | Yes |
| Colne Estuary | Yes | Yes | Yes | Yes | Yes |
| Blackwater Estuary | Yes | Yes | Yes | Yes | Yes |
| Dengie | Yes | No | N/A | Yes | Yes |
| Crouch and Roach Estuaries | Yes | No | No | Yes | Yes |
| Foulness Estuary | Yes | No | No | Yes | No** |
| Benfleet and Southend Marshes | Yes | No | Yes | Yes | Yes |
| Thames Estuary and Marshes | Yes | No | No | Yes | Yes |
| Essex Estuaries | Yes | No* | No* | No* | No* |

**The Essex Estuaries comprise the Colne Estuary, Blackwater Estuary Dengie, Crouch and Roach Estuaries and Foulness Estuary and so follow the respective ZoIs throughout.*
*** As Foulness Estuary has limited access due to military control of much of the land, no surveys were considered necessary by Natural England.*

4.23 Foulness Estuary, which is located within the Foulness Estuary SPA and Ramsar site, is Ministry of Defence (MoD) land and public access is restricted. For that reason, recreational disturbance from visitors is likely to be minimal or non-existent. As a result, no visitor surveys were carried out in this location.

4.24 A copy of the Visitor Survey methodology is included in Appendix 2, the questionnaire in Appendix 3 and the results for the Winter Visitor Surveys are in Appendix 4. Summer Visitor Survey results for the Blackwater Estuary and Benfleet and Southend Marshes are in Appendix 5.

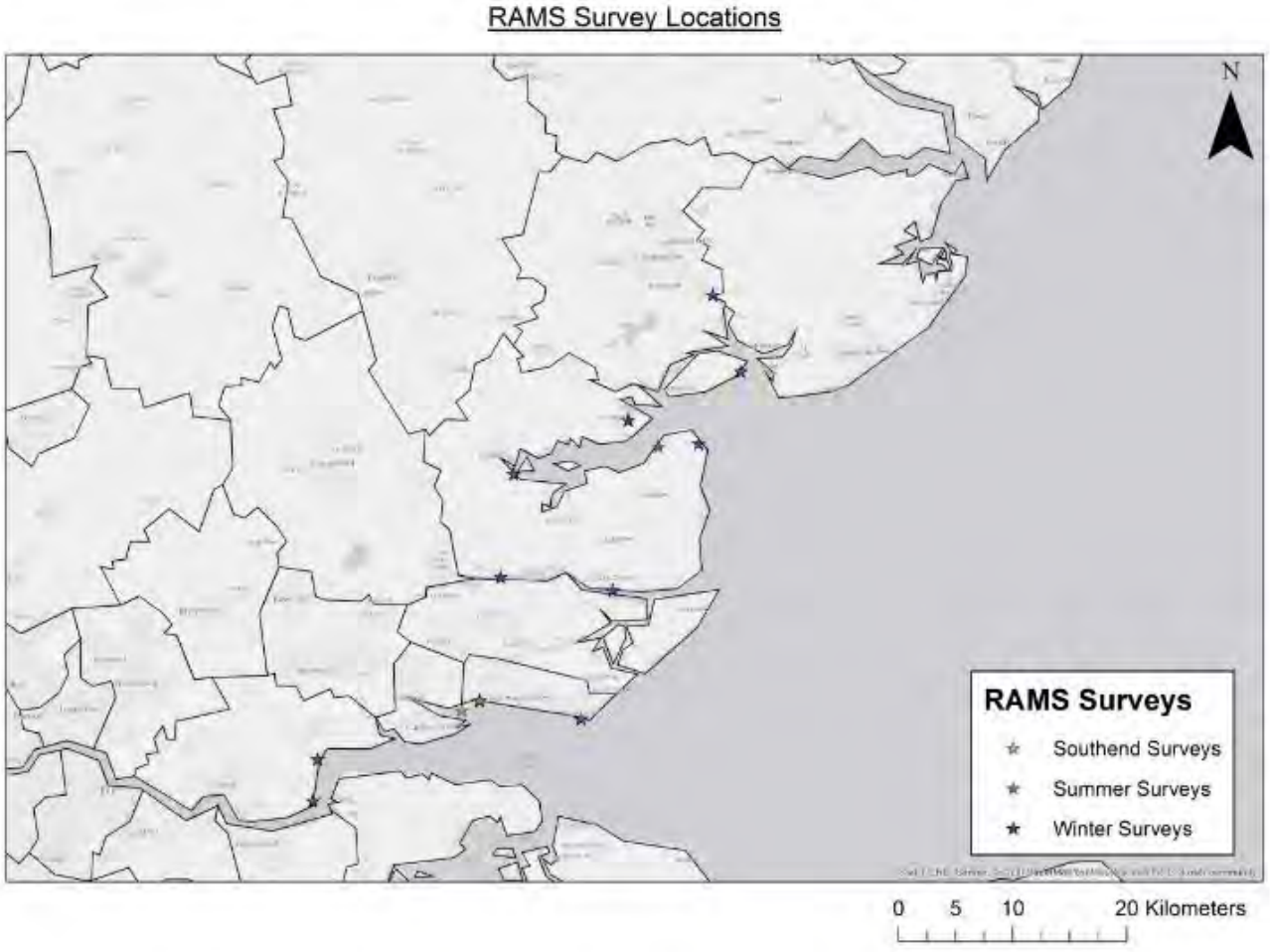
4.25 The survey questionnaires were the same for both winter and summer, with the addition of a question relating to water borne recreational activities for the summer surveys. This was in response to the particularly high level of water borne recreation in the Blackwater Estuary when compared to other sites. The content of the survey questionnaires was agreed by the Steering Group and Natural England.

4.26 Cudmore Grove Country Park situated on the Colne Estuary was surveyed from 2011-2013, in the first north Essex surveys. This was repeated in 2018 as the ZOI was a lot higher than anticipated and the data was potentially skewed based on the

surveyor's location. As Cudmore Grove is a Country Park that attracts visitors from afar, the Essex Coast RAMS needed to clarify which of these visitors were there to use the facilities within the park and not at risk of causing disturbance to the coast. Therefore surveys were repeated with surveyors being focussed on locations where key bird roosts or habitats were likely to be disturbed by recreational activities. This enabled efforts to capture disturbance to coastal Habitats sites and no other recreational activities such as the children's play area.

4.27 Figure 4:1 shows the existing (completed) and additional allocations for visitor surveys on the Essex coast in 2018.

***Figure 4.1 Locations of Visitor surveys undertaken 2018***



4.28 Further visitor surveys were completed during May/June 2018 for the Blackwater Estuary SPA, when breeding SPA designated birds e.g. Little Tern & Ringed Plover use the site for nesting. Survey locations within the Blackwater Estuary were at Bradwell Marina and Tollesbury Wick. Additional visitor surveys were also undertaken by Southend Council in August 2018 for Benfleet and Southend Marshes SPA & Ramsar site with surveyors at Cinder Path and Two Tree Island. All locations were agreed with Natural England to ensure the results would inform recreational disturbance of Habitats sites features.

4.29 The visitor surveys provided data to add to the picture painted by attendees at the workshops. Indeed the significant visitor pressure experienced on the foreshore at Southend with over 7 million day visitors a year, principally in the summer months, includes dog walking at the Garrison in Shoebury as well as along the foreshore in the winter months when dogs are permitted on the beach.

4.30 The questions asked of visitors to the SPA locations were designed to collect data on the reasons for visits as well as postcodes to evidence Zones of Influence. The datasets collected for surveys of people visiting the Habitats sites on the Essex coast are therefore up to date and the best available. Natural England, as well as the LPAs and other key stakeholders are satisfied that they are acceptable to inform the mitigation strategy. It will therefore be used as a robust basis for identifying the mitigation measures necessary for this Strategy.

4.31 Additional surveys will improve the robustness of the datasets and repeat, surveys of visitors will be undertaken at the earliest opportunity to review the postcode data and Zone of Influence for the Dengie SPA & Ramsar. The total number of visitors completing questionnaires was below the number considered by Visit Britain guidelines to provide a comprehensive picture of recreational activities to draw them to this site (i.e. below 400). This is in addition to repeat visitor surveys throughout the lifetime of the Local Plan periods for all Habitats sites to ensure that the ZOIs remain fit-for-purpose, for example in the context of new development, infrastructure and advances in technology.

Identifying Zones of Influence (ZoI) for Essex coast Habitats sites

4.32 Data from both the winter and summer visitor surveys has been used primarily to calculate the ZoIs for each Habitats site, and also to collate information on current recreational activities at Habitats sites and predict likely impacts from increased use by additional residents.

4.33 The consideration of mitigation needed at each Habitats site and assessment of need, based on site sensitivity and housing allocated within the ZOI will be included

in the mitigation section of this report.

4.34 The results of the winter and summer visitor surveys provided substantial evidence relating to who uses the Habitats sites, where they travel from, how often they visit and why..

4.35 The data used to calculate the ZOIs defined in Table 4.4 has been refined to eliminate surveys where people were unlikely to cause disturbance to the coast. Although surveyors were placed in locations to capture the most potential disturbance in sensitive coastal areas, some sites had facilities that could be used for alternative recreational activities. For example, in the Dengie surveyors were located by St. Peters Chapel where some visitors were there solely for the use of the Chapel and were unlikely to cause recreational disturbance. Therefore an adjustment was made. Without refinement this would have increased the ZOI and affected the credibility of the data.

4.36 The ZOIs were calculated by ranking the distances travelled by visitors to the coast based on the home town postcode data they provided. Not all postcode data is used as this can skew the results. Instead the ZOIs are based on the 75$^{th}$ percentile of postcode data (i.e. the distance where the closest 75% of visitors come from) taken from the winter.

4.37 This method was used for a number of strategic mitigation schemes, including the emerging Suffolk Coast RAMS and is considered by Natural England to be best practice.

4.38 The ZOIs identify the distance within which new residents are likely to travel to the Essex coast Habitats sites for recreation. The ZOIs presented within this report will guide the requirement for residential developments to provide a financial contribution towards visitor management to mitigate for in-combination impacts on all the Habitats sites. Natural England have reviewed their IRZs, on MAGIC website on the basis of the overall ZoI because the data collected for this Strategy is the most comprehensive and up-to-date available.

4.39 ZOIs will be used to trigger developer contributions for delivery of mitigation measures for the Habitats sites. This will enable the delivery of mitigation measures to avoid impacts from increased recreational pressure.

4.40 Figure 4.4 below shows the overall ZOI for the Essex Coast RAMS to be used by each LPA to secure developer contributions for the Essex Coast RAMS package of measures. NB This excludes areas within the adjoining counties of Suffolk and Kent.

***Table 4.4: ZOI calculations for Essex Coast Habitats sites***

| European designated site | Original ZOI (km) from Natural England's interim advice letter (Nov 2017) | Updated ZOI based on winter Essex Coast RAMS visitor surveys (RAW DATA) | Updated ZOI based on winter Essex Coast RAMS visitor surveys (REFINED DATA) | Updated ZOI based on summer Essex Coast RAMS visitor surveys (RAW DATA) | Updated ZOI based on summer Essex Coast RAMS visitor surveys (REFINED DATA) | Final ZOI (km) |
|---|---|---|---|---|---|---|
| Essex Estuaries SAC | 24 | - | - | - | - | -* |
| Hamford Water SAC, SPA and Ramsar | 8 | - | - | - | - | 8 |
| Stour and Orwell Estuaries SPA and Ramsar | 13 | - | - | - | - | 13 |
| Colne Estuary SPA and Ramsar | 24 | 9.7 | 9.7 | - | - | 9.7 |
| Blackwater Estuary SPA and Ramsar | 8 | 14.2 | 14.2 | 22 | 22 | 22 |
| Dengie SPA and Ramsar | 13 | 27.3 | 20.8 | - | - | 20.8 |
| Crouch and Roach Estuaries SPA and Ramsar | 10 | 4.5 | 4.5 | - | - | 4.5 |
| Foulness Estuary SPA and Ramsar | 13 | - | - | - | - | 13 |
| Benfleet and Southend Marshes SPA and Ramsar | 10 | 4.1 | 4.1 | 4.9 | 4.3 | 4.3 |
| Thames Estuary and Marshes SPA and Ramsar | 10 | 8.1 | 8.1 | - | - | 8.1 |

**The Essex Estuaries comprise the Colne Estuary, Blackwater Estuary, Dengie, Crouch and Roach Estuaries and Foulness Estuary and so follow the respective ZOIs throughout.*

**Figure 4.2: Overall Zone of Influence (ZoI) for Essex Coast RAMS**



## 5 Housing planned in the Zones of Influence

5.1 Tables 5.1 and figures 5.1 and 5.2 represent the amount of housing that is being planned for in each Local Plan. All LPAs are at different stages of the plan making process. Some figures will be based on Local Plan allocations, but where that is not possible LPAs have provided an informed estimate based on evidence from housing trajectory documents and past housing delivery rates.

5.2 The housing data goes up to 2038, which is the longest Plan period for a partner LPA. These housing numbers will be reviewed and, where necessary, updated over the lifetime of the strategy in accordance with LPA monitoring data, as part of the Essex Coast RAMS monitoring and review process.

5.3 The housing numbers supplied in Table 5.1 below are based on the quantity of net new dwellings that are expected to fall within the ZOI for the Essex Coast RAMS. Basildon, Braintree, Brentwood, Chelmsford, and Thurrock are all partially covered by the ZOI, and therefore only the numbers of homes that are expected to be built within the ZOI have been included in the figures in the tables below. All the other authorities are wholly covered by the ZOI. Estimated windfall is the amount expected for the length of the strategy.

## *Table 5.1: – Housing to be delivered in the Essex coast RAMS overall ZoI*

| | Included in calculations for RAMS mitigation package for Local Plans | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Phasing of dwellings from allocations within ZOI | | | | A<br>Total dwellings within ZOI | A2<br>Of the total dwellings (column A), how many have been consented ? | A3<br>Dwellings to include in the RAMS tariff = A-A2. |
| **Local planning authority** | **Estimated total windfall Nov 2017-2038** | **2017 - 2022/23** | **2023/24 - 2027/28** | **2028/29 - 2032/33** | **2033/34 - 2037/38** | | | |
| Basildon | 686 | 2669 | 2625 | 3758 | 2133 | 11871 | 2431 | 9440 |
| Braintree | 582 | 3169 | 5269 | 3659 | 1300 | 13979 | 209 | 13770 |
| Brentwood | 41 | 0 | 0 | 0 | 0 | 41 | 0 | 41 |
| Castle Point | 300 | 1369 | 1867 | 886 | 470 | 4892 | 171 | 4721 |
| Chelmsford | 1222 | 2149 | 2969 | 2964 | 1672 | 10976 | 2205 | 8771 |
| Colchester | 315 | 1407 | 3266 | 3851 | 455 | 9294 | 150 | 9144 |
| Maldon | 300 | 1795 | 1421 | 130 | 0 | 3646 | 0 | 3646 |
| Rochford | 300 | 471 | 701 | 0 | 0 | 1472 | 150 | 1322 |
| Southend-on-Sea | 3843 | 2450 | 2073 | 193 | 0 | 8559 | 911 | 7648 |
| Tendring | 1195 | 185 | 1384 | 1545 | 4568 | 8877 | 448 | 8429 |
| Thurrock | 375 | 3500 | 2100 | 0 | 0 | 5975 | 0 | 5975 |
| **Total** | **9159** | **19164** | **23675** | **16986** | **10598** | **79582** | **6504** | **72907** |

***Figure 5.1: North Essex - distribution of housing allocations and numbers of units***

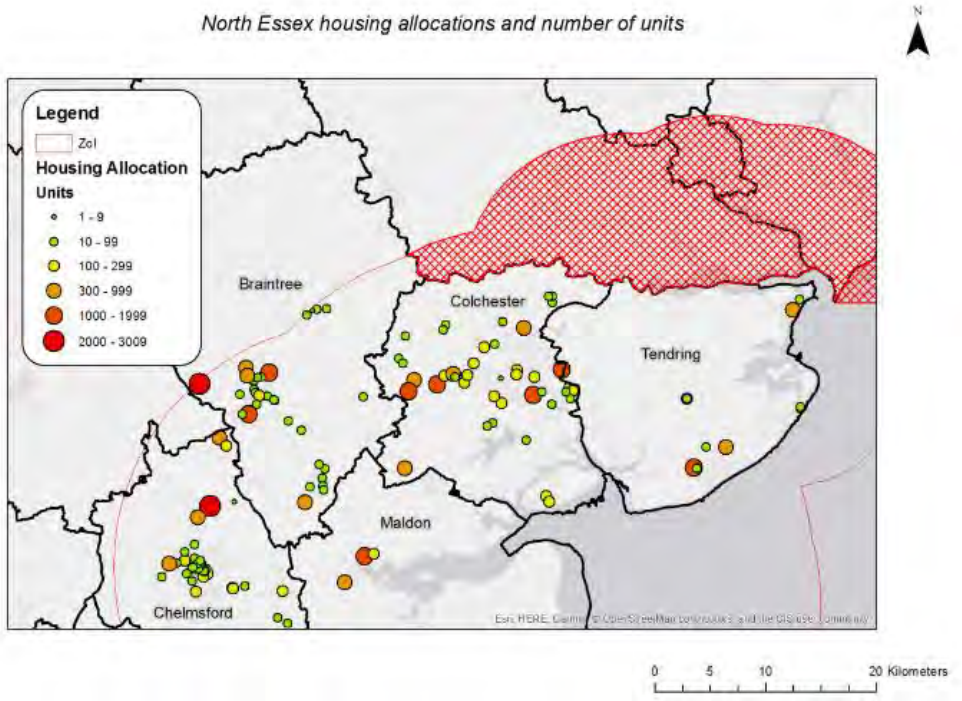
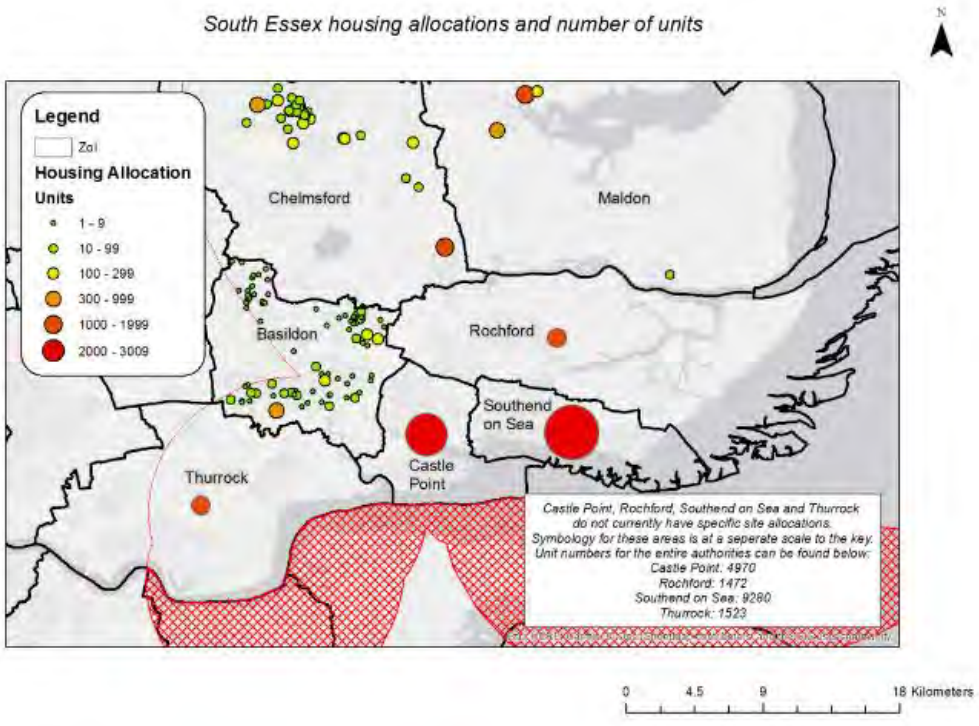



***Figure 5.2: South Essex - distribution of housing allocations and numbers of units (NB Castle Point and Southend have a single dot instead of sites)***



## 6 Exploring mitigation options

6.1 Two initial workshops were held for key stakeholders in February and March 2018 to gather local and specialised knowledge from organisations and individuals on the following:

- The locations of visitors at the coast and the recreational activity currently taking place;
- Current recreational disturbance problems; and
- Current mitigation measures in place.

6.2 A follow-up workshop held with key stakeholders in June provided an opportunity to capture the mitigation measures considered as most effective to avoid the impacts likely to result from increased recreational pressure on the Essex coast on Habitats sites in the future.

6.3 For each Habitats site, stakeholder input has helped to identify current issues of recreational disturbance which have provided a focus for and will help prioritise measures in the Essex Coast RAMS. The results of the workshop are summarised in the tables below and full details of the workshops is in Appendix 7.

6.4 It was explained to workshop attendees that the Essex Coast RAMS funds are targeted at non-infrastructure measures which are needed for in-combination effects from the overall quantum of residential development.

6.5 The provision of Suitable Accessible Natural Greenspaces (SANGs) (see Section 3.3) are not within the scope of the Essex Coast RAMS, since this provision is required to deal with impacts from an individual development scheme (i.e. identified by the project level HRA for that scheme). Furthermore, SANGs would have to be funded by the Community Infrastructure Levy, rather than the use of Section 106 (s106) Planning Obligations/agreements. Since no more than five s106 agreements may currently be pooled to contribute to infrastructure projects is will be up to the Project Board to determine whether any of these are a priority or if pooling restrictions are amended, It will however be important for LPAs involved with SANG provision to liaise closely with the Essex Coast RAMS Rangers to deliver the same messages to avoid recreational disturbance.

6.6 LPAs could decide to identify SANG(s) to be provided through separate funding streams (CIL) or enhancements such as the Local Growth Fund and Local Enterprise Partnership, where appropriate. Examples discussed by the Steering Group include:

- expand Belhus and/or Hadleigh Castle Country Parks

- upgrade other open space areas near the coast to attract visitors away from the beach areas
- provide a new Country Park/open space facility to the northeast of Southend as identified in the adopted Southend-on-Sea Core Strategy.

6.7 The information gained from the workshops has been summarised in the following tables as well as in Figures 6.1 and 6.2. They show the current recreational disturbance by increased visitor access, existing mitigation in place and identification of any gaps in mitigation which could be considered to be part of the Essex Coast RAMS.

***Figure 6.1: Types of recreational disturbance reported at the Essex Coast RAMS workshops***

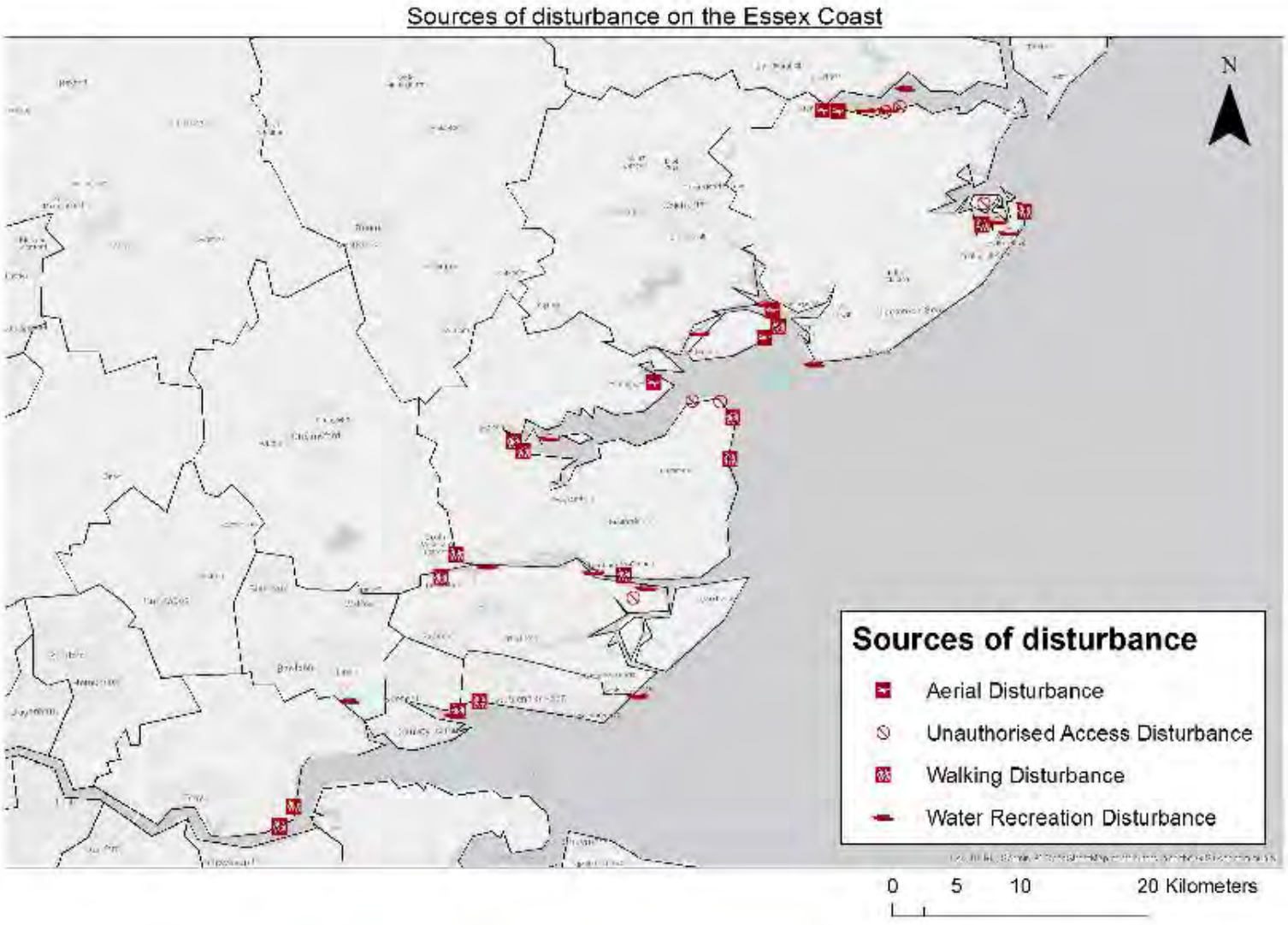


***Figure 6.2: Key mitigation options identified at the Essex Coast RAMS workshops***

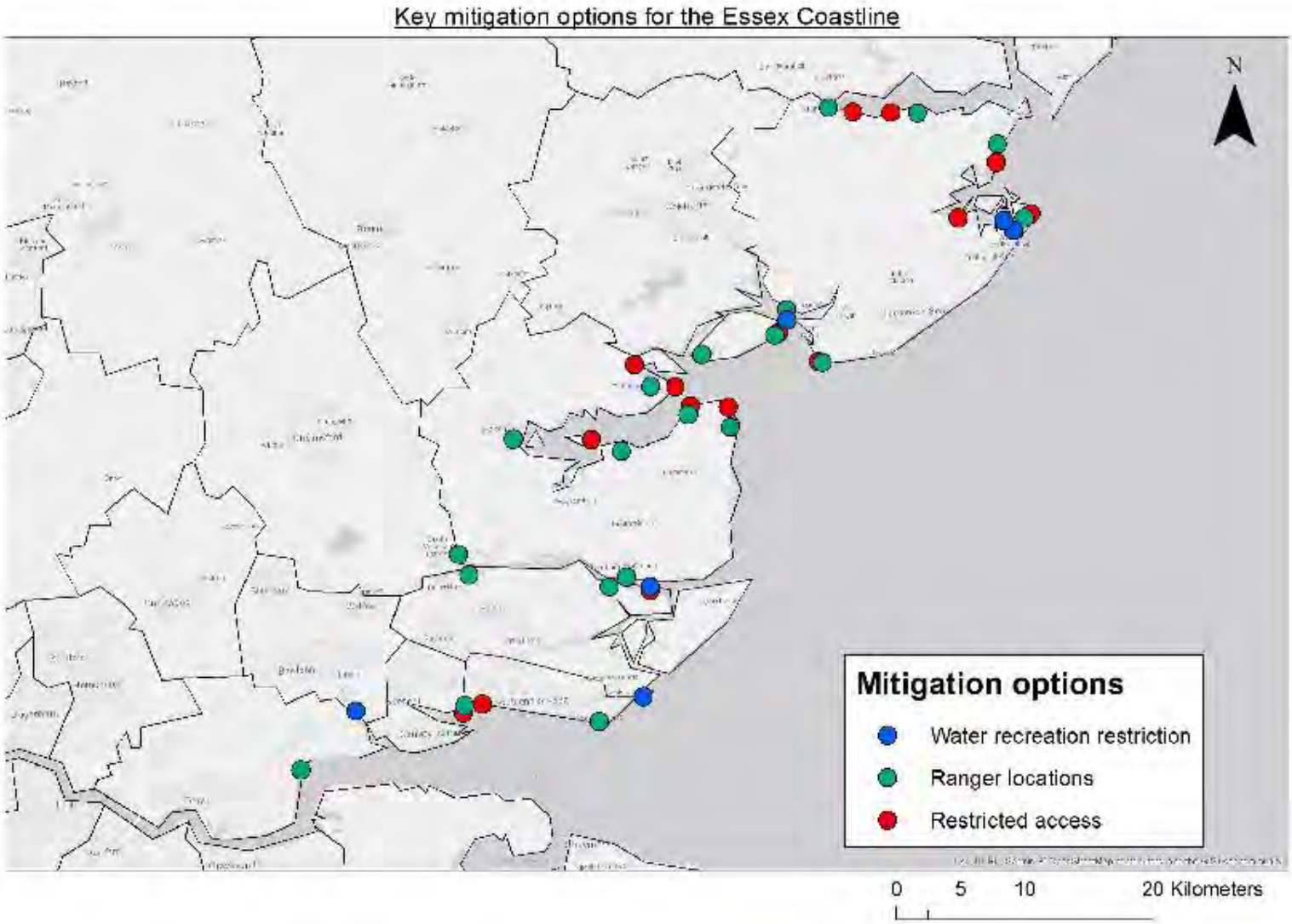


***Table 6.1: Potential for disturbance to birds in Stour Estuary (Essex side only)***

| Stour Estuary SPA and Ramsar (Essex side only) | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - Average percentage from WeBS for southern sectors is relatively low suggesting relatively even distribution of birds across southern part of estuary.<br>- Relatively few roost sites mapped suggest that those mapped may hold large numbers of birds.<br>- Percentage of mudflat within 60m of the shore are mostly quite low, though WeBS sector at Mistley relatively high suggesting shoreline access here has potential to affect a high proportion of open mud feeding areas.<br>- Shoreline near Manningtree and Harwich has high levels of local housing suggesting access levels could be potentially high at access points creating hotspots for recreation. One WeBS section with high housing near Harwich is identified as not having easy access to the estuary.<br>- Paths all along southern shore but high path densities around eastern and western ends, suggesting more current access around Harwich and Manningtree. Relatively few car-parks mapped. | - There is a visual screening and a bird hide on the southern shore of the estuary at RSPB Stour Wood. This ensures that an area looks more important for overwintering birds, with the aim of creating a better public attitude on how the area is used.<br>- Oyster shell recharge projects are being undertaken to help create habitats for Little Terns<br>- The Stour estuary has few access points to the Habitats site on the Essex side. Main points include Mistley Walls, Bradfield foreshore, Wrabness foreshore from Stone Lane and RSPB Stour Wood, Essex Coast Ramsey.<br>- EWT manage the Wrabness nature reserve with a volunteer on site visual screening. However walkers use seawall which is not PROW from Wall Lane towards Bradfield and a lot of signage on site for visitors<br>- EWT also manage some of the Wrabness Marsh fields which are adjacent to the Nature Reserve; these have no access and have been improved with scrapes and bunds to retain more water on site. There is a hide and the marsh fields under EWT management which will be extended following a purchase of additional land.<br>- To the north of Harwich international port and Parkeston the estuary is relatively inaccessible due to the lack of PROW and the private ownership of the port.<br><br>- At the RSPB Stour Estuary reserve there is already a ban on dogs for parts of the site, rangers, screening and hides. | - Recreational disturbance is focused in the Manningtree and Mistley area. Although the shoreline near Harwich is within a short distance of housing, there is limited access due to a lack of PROW and private ownership of the port.<br>- Essex coast RAMS measures should tie in with Suffolk Coast RAMS measures for this estuary, particularly at the western end near Cattawade Marshes and a high tide roost on the Brantham side which is relatively close to the Essex shoreline.<br>- Drone activity and paramotors over SSSI/SPA – witnessed at Manningtree and Mistley Walls<br>- Kayakers accessing saltmarsh at inappropriate times, e.g. close to high tide roosts<br>- Increased mid-estuary mooring<br>- Water skiing is common in Holbrook Bay and speed limits are not kept to in Jacques Bay. This should be enforced to reduce disturbance.<br>- Saltmarsh is driven over and trampled at Jacques Bay (accessed via Shove Lane, Bradfield): possible reduction in access to avoid habitat erosion.<br>- Unauthorised access along sea wall in front of screen at Wrabness NR (not on PROW) should be managed; this could be through better screening or wardening to encourage use of PROW through Wrabness NR.<br>- There are bait diggers at Jacques Bay which should be made seasonal and have location restrictions.<br>- Pedestrian access from at Wall Lane, Wrabness (no car park) along PROW on landward edge of saltmarsh to high tide roosts can cause disturbance as well as recreational water craft particularly kayakers and paddle boarders. Access and locations of activities should be restricted in conjunction with local landowners. |

***Table 6.2: Potential for disturbance of birds in Hamford Water***

| Hamford Water SAC, SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - Garnham Island and Horsey Island have highest average percentage values from WeBS for Hamford Water, suggesting these areas are particularly important<br>- Large and important gull colonies<br>- Breeding Little Tern and Ringed Plover at a range of beaches around the site<br>- Percentage of mudflat within 60m of the shore for WeBS sectors near Walton and Great Oakley relatively high, suggesting shoreline access in these areas has potential to affect a high proportion of open mud feeding areas<br>- Weighted housing values are mostly relatively low compared to other sites, suggesting few local residents<br>- Some of the shoreline near the south-east of the site is identified as having no access and also has some higher values for local housing, suggesting high numbers of local residents within 'visiting' range<br>- Western side (opposite Garnham) appears to have relatively little or no access and little path infrastructure and is likely to be relatively undisturbed<br>- Limited path network and parking | - Bramble Island has no access and is a quiet area as it is known as an area that is sensitive to wintering and breeding birds<br>- Much of the site is inaccessible but the impact of the England Coast Path (ECP) is difficult to assess at this stage<br>- Low risk to grassland habitat due to its wide nature and known location<br>- Skippers Island has regular visits by a volunteer warden who speaks to visitors<br>- Skippers Island has no landing signage on site<br>- At EWT John Weston reserve there is very little recreation disturbance as 50% of the site has restricted access. However this has led to dog walkers and public users using the other half of the site and has made it worse. This is now being promoted as a safe, dog exercise area<br>- Voluntary regulated speed limits are in place for boats to avoid disturbance to wildlife | - Breeding Little Tern and Ringed Plover nest at a range of beaches and Garnham & Horsey Islands have the highest average WeBS value for the SPA so are important to protect waders and wildfowl from disturbance<br>- Some of the key threats to SPA birds are sailing and jet skiing out of Titchmarsh marina and Walton Yacht Club<br>- The location of the grassland habitat close to the southern PROW is susceptible to trampling and nutrient enrichment. Walking on the saltmarsh is also disturbing birds on the south easterly side of Hamford Water<br>- At John Weston Essex Wildlife Trust reserve dog walkers and public use the accessible half of the site and has made it worse, this is now being promoted as a safe, dog exercise area<br>- Enforcement on unauthorised quadbikes and motorbikes is needed<br>- If a permissive bridle path was created at the western side of Hamford Water, this would draw horses away from the seawalls and give landowners income stream through stabling and grazing<br>- Create shorter circular paths off coastal path with particular access from car parks. A main car park on public open space away from The Naze may encourage people to walk their dogs there instead of sensitive areas<br>- Promote alternative sites for wind surfers and canoeists away from The Naze such as St. Osyth Lake/Jaywick/end of Clacton beach<br>- The Naze would benefit from seasonal access rather than all year round day access |

***Table 6.3: Potential for disturbance to birds and mitigation options in Colne Estuary (including Essex Estuaries SAC)***

| Colne Estuary SPA and Ramsar (including Essex Estuaries SAC) | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - All average percentage values from WeBS are relatively low; creeks around Mersea Island have highest average values for the site<br>- Percentage of mudflat within 60m of the shore values are moderate, suggesting a relatively high proportion of mudflat is close to shoreline areas<br>- MOD land at Fringringhoe holds range of breeding bird species including Marsh Harrier and Pochard<br>- Weighted housing is highest around Brightlingsea, otherwise relatively low levels of housing nearby and sections of shore identified as having no access<br>- Areas around Brightlingsea and St. Osyth with high density of paths; Fingringhoe Ranges and Eastmarsh Point currently appear to have no access<br>- Path network (and parking) focused around Brightlingsea, St Osyth and towards Clacton<br>- Western shoreline and to some extent northern parts with little or no paths (including large area owned by MOD).<br>- Very few slip ways and potentially limited access to water for those with boats<br>- Development at Robinson Road will impact site | - Natural England and EWT manage many of the key areas<br>- The Colne Point is wardened and as such is likely to be resilient to increased visitor impacts although this provides a good opportunity for engagement with visitors. The Brightlingsea Marsh part of the site is only accessible by permit holders<br>- Western edge of the Colne channel is sensitive to disturbance but this is on MOD land where access is difficult<br>- St Osyth Stone Point and Brightlingsea Creek is another area where potential conflict could take place, however these areas are relatively remote<br>- Conflict between water birds and water sports is also recognised on this SPA<br>- Paramotors at Cudmore Grove – Natural England have held a meeting with Mersea Paramotors Club to discuss code of conduct<br>- Ray Island has no landing signs which have proven ineffective. More recently new no access signs, a new gate and fence have been implemented onto the landward access through Bonner Saltings<br>- EWT Fingringhoe Wick Nature Reserve has a no landing sign on Raised Beach which is very effective as well as a warden. Fingringhoe Wick Nature Reserve extension area has no landing signs on the sea wall and outside the wall by the saltmarsh; this reserve also has a warden<br>- EWT Fingringhoe Wick Nature Reserve, Geedon Bay and Saltmarsh belonging to MOD have multiple no landing and keep off signs and a warden<br>- Colne River between Tide Barrier and Point where Alresford Creek joins the Colne Estuary has a warden | - Housing within easy reach of access points is highest around Brightlingsea and St Osyth and this area has a high density of PROW so this is a key area for Essex Coast RAMS ranger patrols<br>- Another key location for mitigation is Mersea and Cudmore Grove Country Park in particular. Strandline/sand/shingle vegetation along the south side of Mersea and Cudmore Grove is currently being damaged by trampling and fires; mitigation is required to reduce impact.<br>Current access levels at Cudmore Grove already cause some damage to vegetation and reduce breeding success for ringed plover. Access to the foreshore at Cudmore Grove at ebb tide causes disturbance to feeding waders<br>- Powered hang gliders currently take off from a field in Mersea which affects a large area, these occasionally fly low and fly over the Colne and Blackwater SPAs. Paramotors have also caused disturbance at Cudmore Grove and it will be important to work with Mersea Paramotors Club<br>- Jet skis and canoes disturbing wader high tide roosts in main channel of the Colne Estuary and Strood Channel. Water based recreation of Strood Channel in summer can also impact on breeding Little Terns<br>- Breeding Ringed Plover and potentially Little Tern are heavily disturbed by the passenger ferry route from Mersea to Brightlingsea<br>- Colne Point is by far the most important area for sand/shingle vegetation and breeding Ringed Plover so should be protected. Saltmarsh is vulnerable to increased visitor pressure at the EWT and National Nature Reserve (NNR)<br>- Natwurst beach - dune vegetation badly damaged in places and may benefit from fencing<br>- The popular beach by Point Clear commonly has kiteboarding which is disturbing terns and ringed plovers<br>- Habitat creation could be used to move roosting birds away from the shoreline<br>- As this SAC is designated for estuary and shoreline habitats eg mudflats, saltmarsh & sandbanks that support SPA birds, the measures specific to this Habitats site are to avoid trampling and degradation by promoting visitor behaviour including codes of conduct |

***Tables 6.4: Potential for disturbance to birds and mitigation options in the Dengie***

| Dengie SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - All WeBS sectors with relatively high average percentages suggesting relatively high importance across site<br>- All WeBS sectors with relatively low percentage of mudflat within 60m of the shore, suggesting open mudflat is mostly away from shoreline areas.<br>- Weighted housing densities are all low<br>- Very little existing paths<br>- No parking identified<br>- No infrastructure providing access to water for boats | - This is not a managed access restriction but as the south-east area of Dengie has poor access it means that it is only occasionally used. | - Canoeists disturb high tide roosts on the River Blackwater although there is no infrastructure providing access to water for boats<br>- There is often illegal off-roading of motorcycles and quadbikes on the seawalls and saltmarsh beach by Bradwell PowerStation<br>- The north east Dengie area is too disturbed for high tide roosts although the open mudflat is mostly away from the shoreline and weighted housing densities are all low for this SPA<br>- Othona Community and St Peters Church area is known to have walkers cross the saltmarshes in all directions. This should be an issue for the ECP to mitigate and Essex Coast RAMS Rangers to explain when they are in this area |

***Table 6.5: Potential for disturbance to birds and mitigation options in Blackwater Estuary***

| Blackwater Estuary SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - RSPB Old Hall Marshes shown to be particularly important from average WeBS values<br>- Gull colony and breeding Ringed Plovers on Peewit Island<br>- Important concentration of breeding birds around Old Hall Marshes<br>- Sectors near Maldon coast, Mayland and St Lawrence have relatively high percentages of mudflat within 60m of the shore, indicating access in these areas has potential to affect higher proportion of open mudflat<br>- Weighted housing values are high around Maldon suggesting higher levels of access here<br>- Path network shows some sections of shoreline with high path density, suggesting much access. Other areas, such as large section of northern shore have just single routes along shoreline<br>- Parking concentrated at western end of estuary near Maldon | - RSPB Old Hall Marshes has a Little Tern colony and has a managed restricted access by boat in the summer<br>- Despite efforts made to gather stakeholder information at workshops and follow-up questionnaires, there are fewer existing measures identified for some SPA sites. It will therefore be important for the Essex Coast RAMS rangers to ensure local stakeholders can add to these lists, and any additional measures and their efficiency are understood before trialling new ones | - Boat landing at Old Hall point (breeding little terns) needs mitigation<br>- Kite surfing and Para hang-gliding are a problem on the wider parts of the estuary and paramotors have caused disturbance at Tollesbury<br>- Dog walking causes disturbance to Little Terns<br>- Weighted housing values are high around Maldon and parking is concentrated in this locality so will be a key area for Essex Coast RAMS ranger patrols<br>- Mayland & St Lawrence also have relatively high percentages of mudflat within 60m of the shore indicating these areas could be subject to disturbance from access<br>- Maldon District Council jet-ski patrols should be supported<br>- Work with Natural England to Keep National Trust Northey Island free of England Coast Path spreading room (access to foreshore)<br>- Goldhanger had a former Little Tern colony<br>- East Osea is a very popular picnic area which is un-authorised<br>- Keep shingle spit free from public access at Tollesbury Wick<br>- Stationary electronic people counters have been used by Essex County Council (Highways) to determine visitor numbers to areas in Essex which will be useful for monitoring the strategy and its effectiveness |

***Table 6.6: Potential for disturbance to birds and mitigation options in Crouch and Roach Estuaries***

| Crouch and Roach Estuaries SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - Central part of site has highest average WeBS values<br>- WeBS sectors around Wallasea have relatively high percentage of mudflat within 60m of the shore, indicating access in these areas has potential to affect higher proportion of open mudflat. Creeks here are relatively narrow<br>- High weighted housing values for South Woodham Ferrers, Hullbridge and around Burnham on Crouch, suggesting access levels higher in these areas<br>- Areas near Brandy Hole and Bridgemarsh Island likely to be currently relatively undisturbed<br>- Path network variable, with some areas with high density of paths (suggesting good current access provision and use), particularly around the settlements and for much of shoreline continuous routes. Some parts of north shore seem to have limited or little paths<br>- Wide range of parking locations scattered around the estuary | - Essex County Council parks such as Fenn Washland and Chelmsford City Council's Saltcoats Park are alleviating pressures on Habitats Sites as they provide good facilities such as dog walking, car parking, play and sports facilities.<br>- EWT manages Blue House Farm<br>- There is signage on the sea walls and Public Rights of Way (PROW).<br>- RSPB Wallasea Island Nature Reserve (Allfleets Marsh is soon to be a designated SPA) | - Although there is a wide range of parking opportunities around the estuaries, high weighted housing values for South Woodham Ferrers, Hullbridge and Burnham on Crouch suggest access levels are highest in these areas. These should be key patrol areas for Essex Coast RAMS rangers.<br>- Dogs off lead require mitigation and maybe free leads being available from Essex Coast RAMS rangers<br>- Trespass - regular occurrences of public access to private areas of the RSPB Wallasea reserve - generally on foot, but recently on motorcycles<br>- Unauthorised boat activity – entering Allfleets Marsh to fish (which is the northern section of the island where the first seawall breaches took place)<br>- Unauthorised fishing off the old seawalls on Allfleets Marsh<br>- "Recreational" use of high speed watercraft including unauthorised temporary mooring to the conveyor pontoon in both the Crouch and Roach estuaries<br>- Drone flying in this area causes disturbance to SPA birds & needs code of conduct for clubs<br>- Better signage to minimise cycling on the seawall as it's a public footpath)<br>- Use the Southend Council foreshore officers to enforce byelaws and speed limits for water sports such as jet-skis |

***Table 6.7: Potential for disturbance to birds and mitigation options in Foulness***

| Foulness SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - Central part of site has highest average WeBS values<br>- WeBS sectors around Wallasea have relatively high percentage of mudflat within 60m of the shore, indicating access in these areas has potential to affect higher proportion of open mudflat. Creeks here are relatively narrow<br>- High weighted housing values for South Woodham Ferrers, Hullbridge and around Burnham on Crouch, suggesting access levels higher in these areas<br>- Areas near Brandy Hole and Bridgemarsh Island likely to be currently relatively undisturbed<br>- Path network variable, with some areas with high density of paths (suggesting good current access provision and use), particularly around the settlements and for much of shoreline continuous routes. Some parts of north shore seem to have limited or little paths | - This site is under MoD management and heavily restricted access or no public access at all<br>- This site has 31 SSSI units that are unaffected by recreational pressure | - Currently there is access for jet-skis in the north of Shoebury which causes disturbance and possible restrictions should be considered |

***Table 6.8: Potential for disturbance to birds and mitigation options in Benfleet and Southend Marshes***

| Benfleet and Southend Marshes SPA and Ramsar | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - North side of Canvey Island has highest average WeBS values<br>- No data on the distribution of roost sites<br>- WeBS sectors tend to have relatively low values for percentage of mudflat within 60m of shore, reflecting expansive areas of intertidal.<br>- Weighted housing values all high, particularly around north side of Canvey, suggesting these areas have high levels of current access<br>- Very high path density around most of shoreline particularly at Southend which experiences over 7 million day visitors a year to its tourist facilities centred on the coast which displaces local residents<br>- Car-parking relatively evenly spread around shore | - Signage at various locations along the length of the foreshore about the different types of birds and habitats raising awareness<br>- Southend Council dog controls are in force in the summer months preventing dogs from entering the beach areas from 1st May to 30th September<br>- Bait diggers are a common sight on the foreshore and their activities are controlled by local bye-laws. They can be seen travelling quite a way out from the shore<br>- Significant water recreation takes place along the foreshore including sailing (5 clubs, jet skiing and rowing). Bye-laws are available to control accessibility to the foreshore and jet-ski use<br>- EWT lease the nature reserves at Two Tree Island and Gunners Park from Southend-on-Sea BC and manage these areas | - Two Tree Island has been highlighted as key area of habitat disturbance for breeding birds (eastern saltmarsh, island and eastern lagoons). Two Tree Island is subject to a wildfowling shooting agreement made in the 1950s.The agreement was made in perpetuity<br>- The foreshore is accessible (with the exception of Gunners park) for its entire length and is regularly visited by residents and tourists. In the summer months the area experiences significantly high volumes of visitors with residents tending to be dispersed to the west which impacts on the SPA features and east foreshore which is also sensitive to disturbance in winter, Thameslink pathway near Two Tree Island is heavily used (Two Tree to Hadleigh Loop)<br>- Leigh Cockle Sheds provide access to mudflats – people take their dogs which causes degradation of the habitat which impacts birds over the winter<br>- Foreshore Officers have been significantly reduced in recent years. This and a lack of enforcement powers to implement by-laws and codes of conduct is resulting in some habitat degradation. On busy days in the summer, Foreshore officers are focused in central Southend to the detriment of other sensitive areas. Southend BC is working with Natural England to identify a solution<br>- Delivering the sustainable links between Southend-on-Sea and Rochford as set out in the urban habitats strategy would provide relief to the coastal areas<br>- Motorbiking, horse riding and trespassing for fishing in this SPA are activities which require mitigation |

***Table 6.9: Potential for disturbance to birds and mitigation options in Thames Estuary & Marshes (Essex side only)***

| Thames Estuary & Marshes SPA and Ramsar (Essex side only) | | |
|---|---|---|
| Potential for disturbance of birds by increased visitor access | Access management and monitoring measures currently in place | Discussion of mitigation options |
| - No variation in average WeBS values and all moderately high<br>- WeBS sector near Thurrock has high percentage of mudflat within 60m of the shore, suggesting little mudflat is away from shoreline areas<br>- No data on the distribution of roost sites<br>- Little variation in weighted housing and all currently moderate<br>- Relatively low path density for whole area<br>- Limited parking | - Thameside Nature Park (Essex Wildlife Trust) is set to expand – this park has rangers and opening / closing times to the car park restricting access<br>- East Tilbury Quarry is anticipated to restore provide recreational facilities/areas away from the coast | - Thameside Nature Park run by EWT will be a key location for the Essex Coast RAMS rangers to complement the existing resource<br>- Restoration of East Tilbury Quarry is anticipated to provide recreational facilities away from the coast<br>- Unauthorised activities involving motorbikes, horse riding and trespassing for fishing are problems which will require input to resolve<br>- Holehaven Creek is proposed as an extension to this SPA so may be a focus for the Essex Coast RAMS rangers to visit<br>- There is little mudflat away from the shoreline in this WeBS sector and jet skis from Wat Tyler Park using this part of the coast are a problem. This issue could benefit from better signage and working with this supplier and clubs in the wider area |

# The Mitigation Report

## 7 Overview of Essex coast RAMS mitigation options

7.1 This report has used the evidence gathered in the Technical report (sections 4- 6) to identify the package of effective measures considered necessary to avoid and mitigate the impacts of recreational disturbance from planned residential growth over the next 20 years in each participating LPA area. It is not designed to mitigate or reduce the current level of recreational disturbance in the Essex coastal sites although the measures identified for delivery will promote good visitor behaviour, which will have a positive impact where there are existing problems.

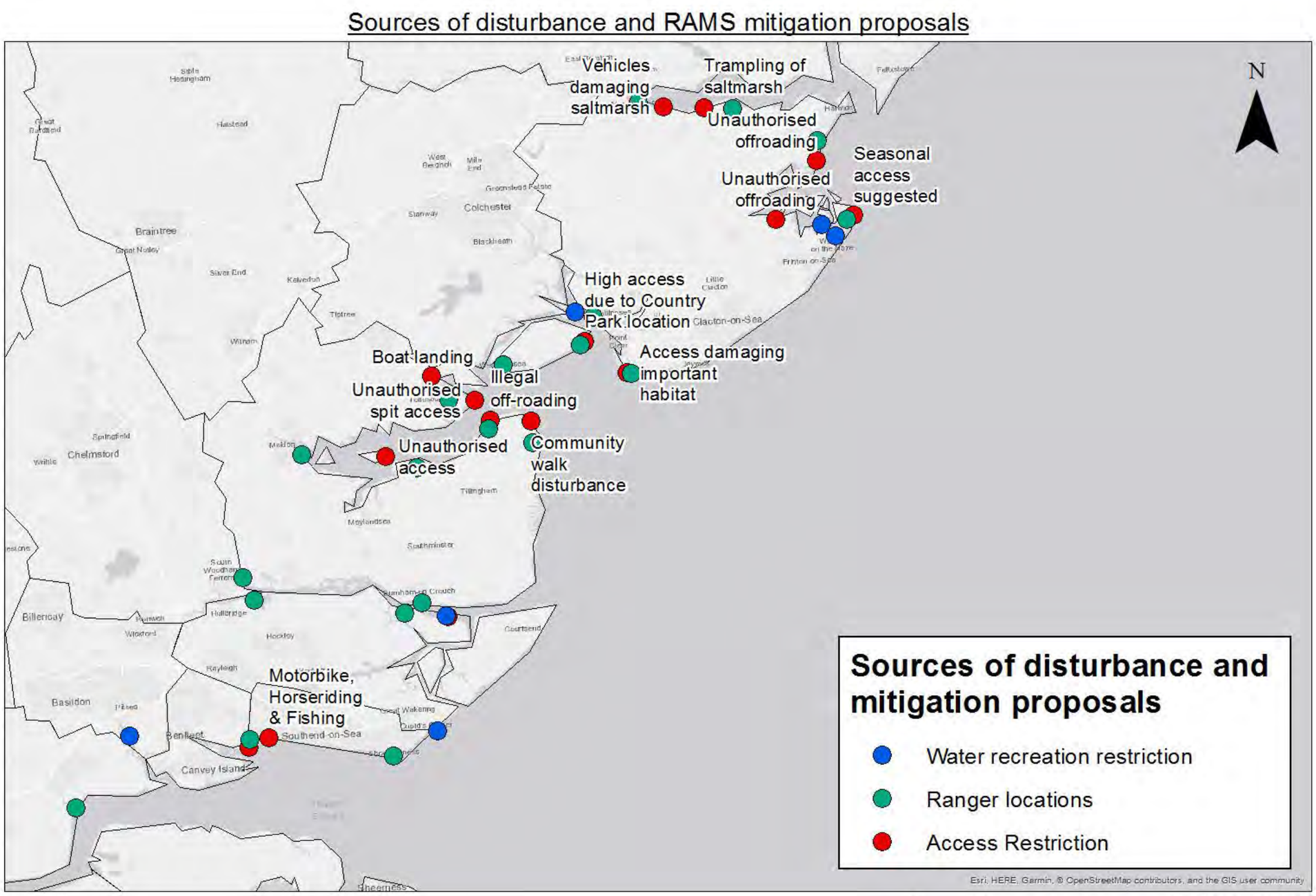
7.2 This chapter contains sections that address the following parts of the brief:

a) effective mitigation measures;
b) when the mitigation measures are required;
c) where the mitigation is required;
d) how mitigation relates to development;
e) how mitigation measures will be funded;
f) How the mitigation will be implemented;
g) how the success of the mitigation measures will be monitored; and
h) how best to incorporate monitoring data and other information and best practice into future reviews of the strategy and Local Plans.

Recommended measures to avoid impacts from planned residential growth in Essex

7.3 The key measures proposed in the mitigation package are shown in Figure 7.1 below:

***Figure 7.1 Sources of disturbance and Essex Coast RAMS mitigation proposals***



7.4 The geographical distribution of recommended mitigation measures shown on Figure 7.1 indicate key locations where resources should be focussed. However it is possible that during the winter, one ranger would ideally be dedicated to one or two Habitats sites when disturbance of over-wintering birds is likely, where additional new housing delivery numbers are greatest in this part of the Essex Coast RAMS Zone of Influence. Ranger visits in the winter months will be focussed on key locations to counter problems e.g. associated with bait digging, oyster pickers and dog walkers allowed on to the beaches at Southend during these months.

7.5 In the summer months (May to September), Ranger efforts should be dedicated to locations within Habitats sites where trampling of sensitive habitats and SPA breeding birds in the spring & summer months are the focus e.g. Blackwater Estuary SPA, Benfleet & Southend Marshes SPA, Essex Estuaries & Hamford Water SACs. Clearly, the prioritisation of the implementation of these measures will need to consider which measures will achieve the greatest impact, the cost of the measures and the amount of funds available in the Essex Coast RAMS budget and the complexity of projects, for example some may require long term planning and feasibility work.

7.6 The package of mitigation measures, some coast-wide and others specific to an individual Habitats site, will need to be implemented “in perpetuity” although the costs are limited to the lifetime of the Local Plans 2018-2038. The term “in perpetuity” has a legal definition of 125 years (The Perpetuities and Accumulations Act 2009) and it is has been accepted in strategic mitigation schemes for European sites such as those in place for the Thames Basin Heaths and Dorset heathlands. Existing RAMS partnerships elsewhere in England invest some of the developer contributions to ensure that mitigation for impacts from residential development can be delivered for the Local Plan periods without the need for successive funding. BirdAware Solent currently invest 40% of all such contributions. After the current Strategy lifetime, future timetables will need to be prepared based on reviews of the Strategy itself and its evidence base.

7.7 The interventions for the Essex Coast RAMS Rangers are broadly categorised as education, communication and habitats based are listed in Table 7.1 Essex Coast RAMS toolkit. Education and communications is discussed in sections 7.8 – 7.14. Partnership working, monitoring and review will be essential tasks for the partner LPAs

## Table 7.1 – The Essex coast RAMS toolkit

| Action area | Examples |
|---|---|
| Education and communication | |
| Provision of information and awareness raising | This could include:<br>• Information on the sensitive wildlife and habitats<br>• A coastal code for visitors to abide by<br>• Maps with circular routes away from the coast on alternative footpaths<br>• Information on alternative sites for recreation<br><br>There are a variety of means to deliver this such as:<br>• Through direct engagement led by rangers/volunteers<br>• Interpretation and signage<br>• Using websites, social media, leaflets and traditional media to raise awareness of conservation and explain the Essex Coast RAMS project.<br>• Direct engagement with clubs e.g. sailing clubs, ramblers clubs, dog clubs etc and local businesses. |
| Habitat based measures | |
| Fencing/waymarking/screening | Direct visitors away from sensitive areas and/or provide a screen such that their impact is minimised. |
| Pedestrian (and dog) access | • Zoning<br>• Prohibited areas<br>• Restrictions of times for access e.g.to avoid bird breeding season |
| Cycle access | Promote appropriate routes for cyclists to avoid disturbance at key locations |
| Vehicular access and car parking | Audit of car parks and capacity to identify hotspots and opportunities for “spreading the load” |
| Enforcement | • Establish how the crew operating the river Ranger patrol boat could be most effective. It should be possible to minimise actual disturbance from the boat itself through careful operation.<br>• Rangers to explain reasons for restricted zones to visitors |
| Habitat creation | Saltmarsh recharge, regulated tidal exchange and artificial islands may fit with Environment Agency Shoreline Management Plans |
| Partnership working | Natural England, Environment Agency, RSPB, Essex Wildlife Trust, National Trust, landowners, local clubs and societies. |
| Monitoring and review | Birds and visitor surveys with review of effectiveness of measures with new ideas to keep visitors wanting to engage |

Education and communication

7.8 A cost-effective approach which has been successfully implemented in North Kent and the Solent, is to develop a brand and use positive and clearly understandable message to engage with visitors. This positive and comprehensible approach is more engaging than an explanation of the Essex Coast RAMS and the intricacies of planning and conservation law. The latter would be provided on the website for interested parties.

7.9 The Solent partnership uses "Bird Aware" and North Kent uses "Bird Wise", which I s based upon the Bird Aware model. The use of the 'Bird Aware' brand for Essex Coast RAMS would not mean that the entire focus of the Essex Coast RAMS was on SPA birds as designated habitat features must be protected in their own right through the Essex Coast RAMS and these would not be forgotten about if this branding was used.

7.10 The Solent Coast RAMS project now offers a portal for information and partners under the Bird Aware brand which has a ready-made communication package including an established website - www.birdaware.org . This would be available for the Essex coast RAMS team to purchase and would include a bespoke Bird Aware Essex Coast webpage and an initial print run of Essex Coast with leaflets containing relevant local photos. A strategic approach / campaign is usually most effective where an easily understandable, clear, persuasive and memorable message/brand is presented to the target audience at the point of contact (recreational users of the sites in this case). For example, the RSPB have built an easily recognisable and well respected brand and, although the their key focus is on protecting birds, their educational materials etc. advocate the conservation of other species and habitats too which improves people's awareness of these as well. With this in mind, we just need to be mindful that the educational materials, ranger interactions with the public etc. should cover wider coastal habitat protection as well as birds.

7.11 Using a brand would complement the use of the Essex Coast RAMS rangers and the provision of rangers was a measure that was commonly cited in the Essex Coast RAMS workshops as being very effective. This face-to-face engagement with visitors is the main feature of other mitigation schemes such as the Solent (Bird Aware partnership), in the Thames Basin Heaths and Dorset heathlands. Encouraging people to avoid disturbance of roosting and /or feeding wildfowl and waders has been identified as one of the most effective mitigation measures by wardens of Habitats sites.

7.12 The RAMS Rangers will form a small mobile team that spend the majority of their time outside at the coastal sites, educating and communicating with visitors, influencing how visitors behave and showing people wildlife. The advantage of such an approach is that the staff can focus their time at particular priority sites/locations as required, such as those with the best visitor access and those likely to result in disturbance of key roosts (see Figures 4.1 and 4.2).

7.13 The roles of the Essex Coast RAMS team as allocated by the RAMS Delivery co-ordinator would also include helping with the delivery of site-specific and local projects and monitoring of

visitors. As the Strategy is rolled out, the work of the Rangers will change to include publicity, events, monitoring, reporting and working on some of the longer-term measures.

7.14 Apart from the 20 identified key roosts and feeding areas, for Ranger visits across the Essex Coast RAMS area, other less sensitive sites will require additional visits. Locations identified should also include those with high visitor numbers regardless of risk to Habitats site features. Based on information provided by Bird Aware Solent Rangers, key locations should receive weekly visits as High Risk sites for recreational disturbance, whilst other locations should be categorised as Medium (with monthly visits scheduled) or Low (seasonal visits required). This frequency of visits to specific sites within each Ranger's geographical work area is aimed at maximising public engagement at the appropriate time of year which may be year-round in some locations. Rangers should aim to visit 2 sites each day on 3 days/week to allow for other work commitments. This calculation supports the inclusion of three Essex Coast RAMS Rangers within the mitigation package and any additional seasonal rangers will need to be assessed based on developer contributions collected and priorities for mitigation in any specific areas.

7.15 Rangers could also carry out further visitor surveys over the lifetime of the Essex Coast RAMS to provide updated baseline for ZOIs as part of the monitoring programme. This would ideally be prioritised as follows:

- Summer visitor surveys at all sites as the Ramsar sites and Essex Estuaries SAC include habitat features sensitive to recreational pressure at all times of the year, especially from water-based recreation. The ZOI should then be calculated from the combined dataset from summer visitors as well as over winter too.

- Winter and summer visitor surveys at Hamford Water as these had been covered as part of Colchester, Braintree & Tendring visitor survey programme 2013-15.

- Winter visitor surveys at the Stour Estuary as these were covered as part of Colchester, Braintree & Tendring visitor survey programme 2013-15.

- Winter and/or summer visitor surveys for those sites which were surveyed as part of the Essex Coast RAMS programme but which had a dataset lower than 400 as per the Visit Britain guidelines.

<u>Coordination of the Essex Coast RAMS</u>

7.16 Delivering the Essex Coast RAMS will require the appointment of a delivery co-ordinator to overseeing the implementation of the different themes. This officer would report to a Project board. Options for governance of the Strategy implementation are to be dealt with in a separate report.

7.17 The delivery co-ordinator would act as the main contact point for the Essex Coast RAMS and report to the project board and Steering Group and other liaison as directed by the Governance report and relevant Terms of Reference.

7.18 The Essex Coast RAMS rangers would report to the Essex Coast RAMS Delivery co-ordinator and work with existing teams towards similar ends on the Essex coast. This could include the Coastal Guardians trained by Essex Wildlife. These volunteers promote visitor awareness by talks and the management of signage. The details will be finalised when the Essex Coast RAMS governance has been agreed with the partners.

7.19 The delivery co-ordinator will need to ensure that the Strategy complements other work to protect Habitats sites e.g. England Coast Path (Natural England), other projects delivered by stakeholders e.g. landowners, EWT, RSPB; and potentially also bringing additional benefits from funding elsewhere, whereby match funding can open enhancement opportunities over and above the mitigation requirement. As such the delivery co-ordinator would have the following duties:

- Develop projects and help with their implementation, working with stakeholders (landowners, NGOs, statutory bodies, LPA foreshore officers etc.) as necessary;
- As funds are available, assist with recruitment of and oversee the Ranger's work programme. Tasks may include each ranger visiting sites each day and plan to maximise the numbers of people encouraged to avoid disturbance when visiting the coastal Habitats sites. The number of locations possible to visit each week will depend on the distance travelled in between Habitats sites as housing schemes come forward and the key hotspots for birds and people;
- Report to the project board, Steering Group, liaise with Development Management planners and others e.g. s106 officers regarding development implemented and strategy work completed;
- Organise funding for projects, both gaining funding from the developer contributions 'pot' through the Project Board but also linking with stakeholders and seeking other opportunities for additional funding, for example through reserve-based projects, tourism initiatives and the Heritage Lottery Foundation;
- Oversee the project webpages and other publicity opportunities, explaining the strategy and providing information making full use of BirdAware or similar and other resources; and
- Monitoring and review of the Strategy[5].

[5] It is recommended that the visitor survey information is updated within the first two years of the Essex Coast RAMS adoption and repeated every 5 years afterwards to maintain postcode evidence of new residents and justifiable ZoIs. The Essex Coast RAMS package of measures will need to be prioritised and delivered on several timescales. The initial priorities will be reviewed by the Essex Coast RAMS delivery co-ordinator, once they are in post.

## 8 Costed Mitigation Package and Mitigation Delivery

8.1 The costed mitigation package in Table 8.2 has been based on measures considered necessary to avoid likely disturbance at key locations with easy public access (as shown on Figure 7.1). A precautionary approach to avoid adverse effects has been adopted, with priority areas for measures identified as those which have breeding SPA birds which could conflict with high number of visitors to the coast in the summer and those with important roosts and foraging areas in the winter. Sensitive habitats are also at risk from damage by high numbers of visitors and potential hotspots have been identified for ranger visits which may including water rangers. The package includes an effective mixt of avoidance and mitigation measures to provide flexibility and deliverability, based on costed similar provision elsewhere in England.

8.2 This has been developed through identifying best practice measures and gathering local nature conservation practitioner expertise, from a new dedicated staff resource to focussing on awareness raising and appropriate behaviour with a wide range of recreational user groups at Habitats sites. The package particularly prioritises measures considered to be effective at avoiding and mitigating recreational disturbance by Habitats sites managers and Maldon DC in managing water sports on the Blackwater estuary. These measures can be justified as necessary, relevant and reasonable and enables the LAs to demonstrate that as competent authorities, they can avoid adverse effects on the integrity of Habitats sites.

8.3 The proposal to bolster the terrestrial RAMS Ranger visits with water based RAMS Ranger patrols is aimed at encouraging all users to take an active role in avoiding impacts from recreational activities on the coast waters. It is hoped that codes of conduct and zonation of sensitive waters near SPA bird roosts and foraging areas can be implemented, similar to measures on the Exe Estuary.

8.4 There is a potential need for additional rangers following the first five years of the project based on the predicted peak in housing delivery at this time, though evidence for this spend will be based on the findings of the rangers patrolling the coast. To provide flexibility for strategic deployment of resources, indicative locations are identified though “ground- trothing” from Ranger visits and updated surveys for the Essex Coast RAMS project Board and Delivery co-ordinator to account for any unforeseen circumstances.

8.5 The phasing of housing delivery, as shown below (taken from Table 4.4) indicates that most development within the overall ZOI for the Essex coast RAMS will take place in the period 2023/24-2027/28. The third Essex Coast RAMS Ranger is likely to be triggered in this time period.

***Table 8.1 Phasing of housing delivery 2018-2038***

| Phasing of dwellings | | | | Total to be included in the Essex Coast RAMS |
|---|---|---|---|---|
| 2018/19 - 2022/23 | 2023/24 - 2027/28 | 2028/29 - 2032/33 | 2033/34 - 2037/38 | |
| 19,164 | 23,675 | 16,986 | 10,598 | 79,582 |

8.6 The per dwelling tariff is calculated by dividing the total cost of the Essex Coast RAMS mitigation package by the total number of houses still to be delivered over the Local Plans period i.e. any houses already consented having come forward early, are not included in this calculation.

8.7 As the above figures may change before the SPD is adopted, the tariff will require re-assessment beforehand. It will also be required as part of the monitoring process.

***Table 8.2: Mitigation package costed for 2018-2038***

| Priority | Theme | Measure | One off cost? | Annual cost | No. of years | Total cost for developer tariff calculations | Notes |
|---|---|---|---|---|---|---|---|
| Immediate - Year 1/2 | Staff resources | Delivery officer | | £45,000 | 19 | £1,027,825 | Salary costs include NI and overheads & 2% annual increments |
| | | Equipment and uniform | | (small ongoing cost) | | £5,000 | Bird Aware logo polo shirts, waterproof coats and rucksacks, plus binoculars for Rangers |
| Year 2 | | 1 ranger | | £36,000 | 18 | £770,843 | Salary costs include NI and overheads & 2% annual increments |
| Year 2 | | 1 ranger | | £36,000 | 18 | £770,843 | Salary costs include NI and overheads & 2% annual increments |
| | | Staff training | | £2,000 | 19 | £38,000 | £500 training for each staff |
| | | Partnership Executive Group | | (LPA £1,000) | 19 | £0 | This would need to be an 'in kind' contribution from the LPA as this is a statutory requirement of the competent authorities. NB This is over and above the requirement for S106 monitoring |
| | | Administration & audit | | (LPA £1,000) | 19 | £0 | As above |
| | Access | Audit of Signage including interpretation | £1,000 | | | £1,000 | Undertaken by Delivery officer/rangers but small budget for travel |
| | | New interpretation boards | £48,600 | | | £48,600 | £2,700 per board, based on HLF guidance. Approx. 9 boards, one per Site. Cost allows for one replacement in plan period |

***Table 8.2: Mitigation package costed for 2018-2038***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Monitoring | Levels of new development | | | | £0 | No cost as undertaken as part of LPA work in Development Management and s106 or Infrastructure officers |
| | | Recording implementation of mitigation and track locations and costs | | | | £0 | No cost as delivered as part of core work by delivery officer |
| | | Collation & mapping of key roosts and feeding areas outside the SPA | £10,000 | | | £10,000 | Initial dataset to be available to inform Rangers site visits. |
| | | Visitor surveys at selected locations in summer (with questionnaires) | £15,000 | | | £15,000 | Focus on Dengie, Benfleet & Southend Marshes and Essex Estuaries saltmarsh; estimated **cost £5/Habitats** site. Liaise with NE & ECC PROW re England Coast Path |
| | | Visitor numbers and recreational activities | £5000 (£500/ Habitats site/yr ) | | | £5,000 | Rangers, partner organisations, LPAs |
| | | Consented housing development within ZOI. | £0/ Habitats site/yr ) | | | £0 | S106 officers to Track financial contributions for each development for all LPAs; liaise with LPA contributions officers |
| | Communication | Website set up for Day 1 | | | | £0 | Essex Coast Bird Aware webpage set up costs £3k to be covered by LPAs. |
| | | Walks and talks to clubs and estuary users groups | | | | £0 | Covered by salary costs for Delivery officer |

***Table 8.2: Mitigation package costed for 2018-2038***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Promotional materials | | | | £5,000 | Use BirdAware education packs, stationery, dog bag dispensers, car stickers etc. |
| Short to Medium term | Dog related | Set up/expand Dog project in line with Suffolk Coast & Heaths AONB "I'm a good dog" and Southend Responsible Dog Owner Campaign | £15,000 | | | £15,000 | Use BirdAware design for leaflets & website text, liaison with specialist consultants (Dog focussed), liaison with dog owners etc. Liaise with dog clubs & trainers; |
| | Water sports zonation | | £10,000 | | | £10,000 | Approx. costs only to be refined when opportunity arises |
| Year 5 | Staff resources | 1 additional ranger | | £36,000 | 13 | £456,567 | Salary costs include NI and overheads & 2% annual increments |
| | | Staff to keep website & promotion on social media up to date | | £1,000 | 19 | £19,000 | Update/refresh costs spread over plan period and include dog and water borne recreation focussed pages on Essex Coast RAMS / Bird Aware Essex Coast website plus merchandise eg dog leads. |
| Year 5 | Monitoring | Update Visitor surveys at selected locations in summer (with questionnaires) | £45,000 | | | £45,000 | Estimated cost £5000/Habitats site/year for 9 Sites. Liaise with NE & ECC PROW re England Coast Path and LPAs re budgets as some of the survey costs may be absorbed into the budget for the HRAs needed for Local Plans. This could reduce the amount of contributions secured via Essex Coast RAMS which could be used for alternative measures. |

***Table 8.2: Mitigation package costed for 2018-2038***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Signage and interpretation | £14,500 | | | £14,500 | £14500 allows for 3 sets of discs - 3 designs, 1500 of each; e.g. paw prints in traffic light colours to show where no dogs, dogs on lead and dogs welcome. This may linking with a timetable eg Southend with dog ban 1st May to 30th Sept |
| | Water based Rangers to enforce byelaws | Set up Water Ranger | £50,000 | £120,000 | 15 | £2,029,342 | Costs need to include jet ski(s), salary & on costs, training and maintenance plus byelaws costs. Priority is recommended for at least 1 Ranger to visit locations with breeding SPA birds eg Colne Estuary, Hamford Water, and other locations eg Southend to prevent damage during the summer. Explore shared use at different times of year eg winter use at other Habitats sites. |
| | | Additional River Ranger where needed | | £120,000 | 15 | £2,029,342 | Given increased recreation predicted, |
| | Codes of conduct | for water sports, bait digging, para motors/power hang gliders & kayakers | £5,000 | | | £5,000 | Use Bird Aware resources with small budget for printing. Talks to clubs and promotion covered by Delivery officer and rangers |

***Table 8.2: Mitigation package costed for 2018-2038***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Habitat creation - Alternatives for birds project – and long term management | Work with landowners & EA to identify locations eg saltmarsh creation in key locations where it would provide benefits and work up projects | £500,000 | | | £500,000 | Approx. costs only to be refined when opportunity arises for identified locations in liaison with EA and landowners via Coastal Forum and Shoreline Management Plans. |
| | Ground nesting SPA bird project – fencing and surveillance costs - specifically for breeding Lt Terns, &Ringed Plovers | Work with landowners & partners to identify existing or new locations for fencing to protect breeding sites for Little Tern & Ringed Plover populations | £15,000 | | | £15,000 | Check with RSPB, NE & EWT when project is prioritised |
| Longer term projects | Car park rationalisation | Work with landowners, Habitats site managers & partner organisations | £50,000 | | | £50,000 | Approx. costs only to be refined when opportunity arises |
| | Monitoring | Birds monitoring for key roosts & breeding areas within and outside SPAs | | £5,000 | 10 | £50,000 | Costs for trained volunteers; surveys every 2 years |
| | | Vegetation monitoring | | £5,000 | 4 | £20,000 | Costs for surveys every 5 years |

***Table 8.2: Mitigation package costed for 2018-2038***

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Year 10, 15 & 20 | Monitoring | Update Visitor surveys at selected locations in summer (with questionnaires) | £45,000 | | | £135,000 | **Estimated cost £5/**Habitats site. Liaise with NE & ECC PROW re England Coast Path |
| | Route diversions | Work with PROW on projects | £15,000 | | | £15,000 | Approx. costs only to be refined when opportunity arises |

**TOTAL MITIGATION PACKAGE** **COSTS £8,105,862**
**10% contingency** **£ 810,586**
**TOTAL COST** **£8,916,448**

8.8 The total cost for calculation per dwelling tariff is based on the total number of dwellings identified in each Local Plan which have not received Full/Reserved matters consent i.e. any houses already consented having come forward early, are not included in this calculation. **This figure is therefore £8,916,448 divided by 72,907 which means the recommended tariff is £122.30 rounded to nearest pence.**

8.9 As set out in Table 8.3 below, the split of the total cost for the Essex Coast RAMS mitigation package for each LPA to collect (i.e. the proportion of the costs to be collected from developers) is based on their housing figures to be delivered by the Local Plan. If predicted housing numbers are not realised, the associated impacts will also be less so the cost of the mitigation necessary will be reduced.

***Table 8.3 Housing number and cost of mitigation for each LPA***
(to include Habitats site specific measures plus over-arching measures e.g. delivery co-ordinator and Essex Coast RAMS Rangers.)

| Charging Zone | Dwellings coming forward up to the end of Essex Coast RAMS plan period not already consented | Cost per dwelling tariff **(rounded to nearest pence)** | Cost of mitigation per LPA area |
|---|---|---|---|
| Basildon | 9,440 | £122.30 | 1,154,502.00 |
| Braintree | 13,770 | £122.30 | 1,684,056.00 |
| Brentwood | 41 | £122.30 | 5,014.26 |
| Castle Point | 4,721 | £122.30 | 577,373.20 |
| Chelmsford | 8,771 | £122.30 | 1,072,684.00 |
| Colchester | 9,144 | £122.30 | 1,118,301.00 |
| Maldon | 3,646 | £122.30 | 445,901.90 |
| Rochford | 1,322 | £122.30 | 161,679.20 |
| Southend-on-Sea | 7,648 | £122.30 | 935,342.20 |
| Tendring | 8,429 | £122.30 | 1,030,858.00 |
| Thurrock | 5,975 | £122.30 | 730,736.10 |
| **Total (Cost of package plus 10% contingency)** | **72,907** | | **£8,916,448.00** |

8.10 The cost of implementing the mitigation measures will increase with inflation so the per dwelling tariffs will be updated each year in line with the Retail Price Index.

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8.11 A proportion of all developer contributions collected (% to be determined by the Essex Coast RAMS Board) will be invested to cover the cost of delivering the visitor management measures in perpetuity, as the number of new residents will be permanent.

8.12 To avoid impacts, delivery of mitigation needs to be in advance of new residents occupying additional homes so triggers for payment should be prior to commencement of house building.

## 9. Monitoring and review

9.1 The Essex Coast RAMS sets out the baseline, status and disturbance evidence from which to monitor change and the impact of the Essex Coast RAMS in the future.

9.2 The effectiveness of mitigation measures and their timely delivery will be monitored and reviewed by the Essex Coast RAMS team, reporting to the Essex Coast RAMS Steering Group.

9.3 Monitoring will be undertaken annually and a report provided to each LPA to inform their Annual Monitoring Report (AMR). As competent authorities under the Habitats Regulations, the delivery of the Essex Coast RAMS is the responsibility of the LPA needing it to ensure their Local Plan is sound and legally compliant.

9.4 The Steering Group shall work with the Essex Coast RAMS team to establish the monitoring procedure, which will include SMART targets to effectively gauge progress.

9.5 To ensure the monitoring process is fit for purpose, there will be various monitoring activities which will be undertaken at different times and at an appropriate frequency. For example, visitor survey updates will be scheduled for after 2 and then 5 years.

9.6 Table 9.1 provides an example of what the monitoring approach may look like.

***Table 9.1: Monitoring Report***

| Monitoring type | Objective | Responsibility | Action | Notes |
|---|---|---|---|---|
| Visitor numbers and recreational activities | Collect data on use and type of activity at different locations; assess change in behaviour likely to cause disturbance | Ranger / site warden team | Car park counter data; collated every 2 years with counters shared at different locations over plan period | |
| Visitor surveys with questionnaires | Collect repeat or additional post code data to review Zones of Influence for each Habitats site using the same methodology | Ranger/ site warden team | Minimum one face to face survey on each Habitats site location during the plan period | |
| Bird numbers and roost/feeding locations | Identify numbers and behaviour of designated birds | Ranger and volunteers e.g. WeBS on estuaries, continued monitoring of Little Terns | WeBS and breeding bird surveys | |
| Vegetation monitoring | Targeted at identifying impacts of trampling and triggers for mitigation | Site wardens/ managers | | |
| Effectiveness of mitigation measures | Check that projects deliver status quo or improvements | Ranger/ site warden team/Habitats site staff | Questionnaires for behaviour and incident logs, | |
| Delivery of mitigation measures | Audit of projects delivered with feedback on implementation to LPAs refunds spent on each Habitats site. | Delivery officer | Project management tools e.g. membership of dog project, numbers of visitors engaged at different events | |

9.7 Any future decrease (or increase) in bird populations cannot be the only measure of success for the Essex Coast RAMS in this respect as the designated habitats require protection too and effects could not be attributed solely to the implementation of the Essex Coast RAMS. This is due to multiple other factors at play on a local scale (e.g. predation, weather, habitat loss, coastal squeeze) and international scale (e.g. success at breeding or wintering grounds elsewhere etc.). Therefore, a range of monitoring identified for the Essex Coast RAMS delivery is needed and disturbance events reported

9.8 Working closely with partner organisations will be essential to understand these factors, evaluate success and provide feedback to inform reviews of the Essex Coast RAMS work programme. Both Place Services and Natural England recommended that the Essex Coast RAMS team regularly liaise with local nature conservation practitioners for this purpose.

9.9 Formal records will need to be kept of what, where and how the Essex Coast RAMS measures have been implemented e.g.:

- Most sensitive European site locations e.g. key bird roosts & breeding areas (noting that some of this is ecologically sensitive information);
- Pending projects i.e. all mitigation priorities reflected in the above tables;
- Live projects i.e. those underway; and
- Completed projects i.e. those chalked off as the strategy progresses.

9.10 These will support the audit trail for spending against priorities set for the whole Strategy but also for the funds collected for each Habitats site by the Local Authorities. The latter is essential as the numbers of dwellings consented in ZoIs which will be subject to developer contributions and will provide the Essex Coast RAMS budget available for spending in each financial year.

## 10 Conclusions and next steps

10.1 Each LPA partner to the Essex Coast RAMS made a commitment to developing a strategic mitigation solution to address potential significant recreational impacts, in combination with other plans and projects, arising from new housing on the Habitats Sites on the Essex Coast.

10.2 The evidence base for the strategic mitigation package is set out in the Essex Coast RAMS which will be accompanied by an Essex Coast RAMS SPD.

10.3 The Essex Coast RAMS per dwelling tariff (currently £122.30) for new dwellings in the Zone of Influence is to be adopted by the LPAs to fund the mitigation measures set out in this Strategy.

10.4 Place Services recommend that the LPAs now finalise the SPD to ensure that tariff contributions are collected to implement the Essex Coast RAMS and avoid adverse effects on integrity for the Habitats sites identified in this Strategy document.

10.5 Governance and delivery models are still being discussed by the LPAs.

10.6 Place Services recommend that a model similar to that used by the Solent Recreation Mitigation Partnership and that used in North Kent would provide an effective way to deliver the Essex Coast RAMS. Strong branding, such as use of the Bird Aware brand, gives a powerful and intelligible wildlife conservation message and would help deliver elements of the Strategy in a positive and effective way. It also provides a tried and tested model for governance, delivery of measures and communications

10.7 The Essex Coast RAMS will be deemed successful if the level of bird and habitat disturbance is not increased despite an increase in population and the number of recreational visitors to the coastal sites.

## 11 Glossary

| | |
|---|---|
| Appropriate Assessment | Forms part of the Habitats Regulations Assessment |
| Competent Authority | Has the invested or delegated authority to perform a designated function. |
| England Coast Path | Natural England are implementing the Government scheme to create a new national route around the coast of England |
| Impact Risk Zone | Developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals. They cover areas such as SSSIs, SACs, SPAs and Ramsar sites. |
| Habitats sites | Includes SPA, SAC & Ramsar sites as defined by NPPF (2018). Includes SPAs and SACs which are designated under European laws (the 'Habitats Directive' and 'Birds Directive' respectively) to protect Europe's rich variety of wildlife and habitats. Together, SPAs and SACs make up a series of sites across Europe, referred to collectively as Natura 2000 sites. In the UK they are commonly known as European sites; the National Planning Policy Framework also applies the same protection measures for Ramsar sites (Wetlands of International Importance under the Ramsar Convention) as those in place for European sites. |
| Habitats Regulations Assessment | Considers the impacts of plans and proposed developments on Natura 2000 sites. |
| Natural England | Natural England - the statutory adviser to government on the natural environment in England. |
| Local Planning Authority | The public authority whose duty it is to carry out specific planning functions for a particular area. |
| Ramsar site | Wetland of international importance designated under the Ramsar Convention 1971. |
| Responsible Officer | Natural England officer responsible for a particular habitats site. |
| Special Area of Conservation | Land designated under Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora. |
| Special Protection Area | Land classified under Directive 79/409 on the Conservation of Wild Birds. |
| Supplementary Planning Document | Documents that provide further detail to the Local Plan. Capable of being a material consideration but are not part of the development plan. |
| Zone of Influence | A designated distance that establishes where development is permitted. |

## Abbreviations

| | |
|---|---|
| AA | Appropriate Assessment |
| AMR | Annual Monitoring Report |
| ASFA | Access and Sensitive Features Appraisal |
| BTO | British Trust for Ornithology |
| CIL | Community Infrastructure Levy |
| EA | Environment Agency |
| ECP | England Coast Path |
| EPOA | Essex Planning Officers Association |
| EWT | Essex Wildlife Trust |
| FLL | Functionally Linked Land |
| GTAA | Gypsy and Traveller Accommodation Assessment |
| HRA | Habitats Regulations Assessment |
| IRZ | Impact Risk Zone |
| LEP | Local Enterprise Partnership |
| MoD | Ministry of Defence |
| NE | Natural England |
| NGOs | Non-Government Organisations |
| LPA | Local Planning Authority |
| PROW | Public Rights of Way |
| RO | Responsible Officer, Natural England |
| RSPB | Royal Society for the Protection of Birds |
| SAC | Special Area of Conservation |
| SANG | Suitable Alternative Natural Greenspace |
| SIP | Site Improvement Plan |
| SPA | Special Protection Area |
| SPD | Supplementary Planning Document |
| SSSI | Site of Special Scientific Interest |
| WeBS | Wetland Bird Survey |
| ZoI | Zone of influence |

# Essex Coast Recreational disturbance Avoidance & Mitigation Strategy (RAMS)

Habitats Regulations Assessment
Strategy document
2018-2038

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## Appendix 1: Natural England Interim Advice Letters (Nov 2017 & Aug 2018)

Date: 16 November 2017
Our ref: 231488

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Tendring District Council
Thurrock Borough Council

Cc. Graham Thomas, Growing Essex Future Development
Essex Place Services
Essex County Council
Epping Forest District Council
Harlow Council
Uttlesford District Council

**BY EMAIL ONLY**

Dear All

**Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) – Interim advice to ensure new residential development and any associated recreational disturbance impacts on European designated sites are compliant with the Habitats Regulations[1]**

This letter provides Natural England's follow-up advice to the meetings with your authorities on the 13th September and 9th November 2017. During these meetings we discussed the need to take forward a strategic approach to mitigating recreational disturbance impacts from residential growth proposed in your local plans to European designated sites in and around the coastal zone of Essex. We found the discussion at the meetings very helpful and constructive and it was agreed in principle by all present that we would work together to prepare an Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) to ensure that all local plans coming forward would be compliant with the Habitats Regulations and deliver positive outcomes for the natural environment. We consider that such an approach is the most effective and efficient means for planning authorities, developers and Natural England to ensure that housing growth is sustainably integrated alongside nature conservation in the long term.

One of the actions from the meeting on the 9th November 2017 was that we would provide you with some interim advice to ensure that any residential planning applications coming forward ahead of the Essex RAMS which have the potential to impact on coastal European designated sites are compliant with the Habitats Regulations.

[1] Conservation of Habitats and Species Regulations 2010, as amended (commonly known as the 'Habitats Regulations')

This advice specifically relates to additional recreational impacts that may occur on the interest features of the following European designated sites:

- Essex Estuaries Special Area of Conservation (SAC)
- Hamford Water Special Protection Area (SPA) and Ramsar site[2]
- Stour and Orwell Estuaries SPA and Ramsar site (Stour on the Essex side only)
- Colne Estuary SPA and Ramsar site
- Blackwater Estuary SPA and Ramsar site
- Dengie SPA and Ramsar site
- Crouch and Roach Estuaries SPA and Ramsar site
- Foulness Estuary SPA and Ramsar site
- Benfleet and Southend Marshes SPA and Ramsar site
- Thames Estuary and Marshes SPA and Ramsar site (Essex side only)

For further information on these sites, please see the Conservation Objectives and Information Sheets on Ramsar Wetlands which explain how each site should be restored and/or maintained.

The Habitats Regulations Assessment (HRA) reports produced for your local plans have identified recreational disturbance as an issue which can impact on the interest features of coastal SPAs and Ramsar sites. The HRA reports have also identified the potential for other recreational impacts on the interest features of the Essex Estuaries SAC, which includes coastal and intertidal habitats; some of these features are at threat from physical damage (e.g. trampling, erosion from wave damage etc.) which can be caused by land and water-based activities including walking, fishing and water sports.

The local plan HRA reports have also identified a number of zones of influence which determine the distance at which new development may result in changes in recreational use, and therefore where mitigation is necessary. Some of these zones of influence are based on visitor survey information, whereas others have been determined using the best available evidence from other locations (e.g. local habitats of a similar nature). In order to strengthen the evidence base behind the zones of influence within which the Essex RAMS will apply, it was agreed at the meeting that these will be refined, as required, through visitor surveys carried out in the interim period. However, the current zones of influence as defined in the Local Plan HRA reports are as follows:

***Table 1***

| European designated site | Zone of influence (Km) | Based on site specific evidence such as visitor surveys? |
|---|---|---|
| Essex Estuaries SAC | 24 | Yes - some |
| Hamford Water SPA / Ramsar | 8 | Yes - some |
| Stour and Orwell Estuaries SPA and Ramsar | 13 | Yes - some |
| Colne Estuary SPA and Ramsar | 24 | Yes - some |
| Blackwater Estuary SPA and Ramsar | 8 | Yes - some |
| Dengie SPA and Ramsar | Not yet determined* | Not applicable |
| Crouch and Roach Estuaries Ramsar and SPA | 10 | No |

[2] Listed or proposed Wetlands of International Importance under the Ramsar Convention (Ramsar) sites are protected as a matter of Government policy. Paragraph 118 of the National Planning Policy Framework applies the same protection measures as those in place for European sites

| | | |
|---|---|---|
| Foulness Estuary SPA and Ramsar | Not yet determined* | Not applicable |
| Benfleet and Southend Marshes SPA and Ramsar | 10 | No |
| Thames Estuary and Marshes SPA and Ramsar | 10 | No |

** Note: where a zone of influence has not yet been identified, we advise that 13 km should be used in the interim period on a precautionary basis*

---

It is recognised that a considerable proportion of the residential allocations in your local plans will already be coming forward as planning applications, prior to the adoption of the Essex RAMS.

**It is therefore important to ensure that any recreational impacts from these residential allocations which fall within the identified zones of influence are considered in terms of the Habitats Regulations.**

Natural England has already developed a set of Impact Risk Zones (IRZs) which helps guide planning authorities on the scale of residential development that we should be consulted on, in part to assess impacts from increased recreational disturbance. For example, the Stour Estuary residential IRZs are as follows:

- ***Within 50 m*** – we should be consulted on all planning applications (including all residential development) except householder applications
- ***Within 200 m*** – we should be consulted on residential development of 10 units or more within an existing settlement or all residential development outside an existing settlement
- ***Within 1 km*** – we should be consulted on residential development of 50 units or more within an existing settlement or all residential development outside an existing settlement
- ***Within 2 km*** – we should be consulted on residential development of 50 units or more within an existing settlement or 10 units outside an existing settlement
- ***Within 5 km*** – we should be consulted on 50 units or more outside an existing settlement

**We advise that Natural England should continue to be consulted in line with the current IRZ arrangements for each site in order to provide bespoke advice on these applications.**

However, for new residential development which falls outside the current IRZ consultation arrangements but within the zones of influence shown in Table 1 (subject to review), we advise that the following interim protocol should be followed to ensure consistency and fairness in securing strategic level mitigation for these developments:

**Interim approach to avoidance and mitigation measures**

- Appropriate funding should be collected on the basis that it can be used to fund strategic measures at the relevant European designated sites, proportionate to the level of housing development.

- A delivery mechanism for the agreed measures must be secured and the measures implemented from the first occupation of dwellings, thereby ensuring that the level of recreational disturbance is not increased by future residential development.

- Your councils may wish to consider identifying and funding specific projects which can be delivered in the interim period to increase the resilience of European designated sites to recreational pressures. Identifying projects to be funded now can provide certainty and reduce the risk of receiving funds without a delivery mechanism in place. Natural England would be happy to work with you to help identify potential 'off-site' mitigation projects (i.e. in and around European designated sites) which could be delivered using developer contributions for recreational disturbance impacts prior to the adoption of the Essex RAMS.

- It should be ensured that emerging Local Plans have a policy that sets out how likely recreational disturbance impacts from new residential development will be mitigated. This should include a policy commitment to the production and implementation of the Essex RAMS.

- In the absence of a relevant policy or a Local Plan in place, an alternative approach would be to consider developing an Interim Policy Statement, or similar mechanism. This letter may help inform any such interim policy statement.

We would be happy to discuss this further. If you require any further clarification then please do not hesitate to contact us.

Yours sincerely

S. Fraser

Sarah Fraser
Senior Adviser – West Anglia Team

Date: 16 August 2018
Our ref: 244199

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Tendring District Council
Thurrock Borough Council
Uttlesford District Council
Essex Place Services

**BY EMAIL ONLY**

Dear All

**Emerging strategic approach relating to the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) – Revised interim advice to ensure new residential development and any associated recreational disturbance impacts on European designated sites are compliant with the Habitats Regulations[1]**

This letter provides Natural England's revised interim advice further to that issued on 16th November 2017. This advice is provided to ensure that any residential planning applications coming forward ahead of the Essex Coast RAMS which have the potential to impact on coastal European designated sites are compliant with the Habitats Regulations. It specifically relates to additional recreational impacts that may occur on the interest features of the following European designated sites:

- Essex Estuaries Special Area of Conservation (SAC)
- Hamford Water Special Protection Area (SPA) and Ramsar site[2]
- Stour and Orwell Estuaries SPA and Ramsar site (Stour on the Essex side only)
- Colne Estuary SPA and Ramsar site
- Blackwater Estuary SPA and Ramsar site
- Dengie SPA and Ramsar site
- Crouch and Roach Estuaries SPA and Ramsar site
- Foulness Estuary SPA and Ramsar site
- Benfleet and Southend Marshes SPA and Ramsar site
- Thames Estuary and Marshes SPA and Ramsar site (Essex side only)

[1] Conservation of Habitats and Species Regulations 2017, as amended (commonly known as the 'Habitats Regulations')

[2] Listed or proposed Wetlands of International Importance under the Ramsar Convention (Ramsar) sites are protected as a matter of Government policy. Paragraph 176 of the National Planning Policy Framework applies the same protection measures as those in place for European sites

For further information on these sites, please see the Conservation Objectives and Information Sheets on Ramsar Wetlands which explain how each site should be restored and/or maintained.

**Recreational 'Zones of Influence' (Zols)**

As part of the work required to inform the Essex Coast RAMS evidence base, visitor surveys have been undertaken to determine the distances that visitors will travel from their residences to visit the European designated sites to undertake recreation. Following collation and analysis of the survey data, the Zols currently agreed by the Essex Coast RAMS Steering Group are as follows:

*Table 1:*

| European designated site | Underpinning SSSIs[3] | Zols (km) |
|---|---|---|
| Stour and Orwell Estuaries SPA and Ramsar | Orwell Estuary SSSI<br>Stour Estuary SSSI<br>Cattawade Marshes SSSI | 13 |
| Hamford Water SPA and Ramsar | Hamford Water SSSI | 8 |
| Colne Estuary SPA and Ramsar | Colne Estuary SSSI | 9.7 |
| Blackwater Estuary SPA and Ramsar | Blackwater Estuary SSSI | 22 |
| Dengie SPA and Ramsar | Dengie SSSI | 20.8 |
| Crouch and Roach Estuaries Ramsar and SPA | Crouch and Roach Estuaries SSSI | 4.5 |
| Foulness Estuary SPA and Ramsar | Foulness SSSI | 13 |
| Essex Estuaries SAC | Blackwater Estuary SSSI<br>Colne Estuary SSSI<br>Crouch and Roach Estuaries SSSI<br>Dengie SSSI<br>Foulness SSSI | -[2] |
| Benfleet and Southend Marshes SPA and Ramsar | Benfleet and Southend Marshes SSSI | 4.1[1] |
| Thames Estuary and Marshes SPA and Ramsar | Mucking Flats and Marshes SSSI | 8.1 |

[2] ***Note 1:*** *The Essex Estuaries comprise the Colne Estuary, Blackwater Estuary, Dengie, Crouch and Roach Estuaries and Foulness Estuary and so follow the respective Zols throughout.*

[1] ***Note 2:*** *The Benfleet and Southend Marshes Zol is to be confirmed following summer visitor surveys.*

---

In the context of your duty as competent authority under the provisions of the Habitats Regulations[4], it is anticipated that new residential development within these Zols constitutes a likely significant effect (LSE) on the sensitive interest features of the above designated sites through increased recreational pressure, either when considered 'alone' or 'in combination'. As you will be aware, the Essex Coast RAMS is a large-scale strategic project which involves all of the Essex authorities listed above working together to help mitigate these effects. Once adopted, the RAMS will comprise a package of strategic mitigation measures to address such effects, which will be costed and funded through developer

[3] Underpinning SSSIs are listed here as these are what the IRZs are aligned to

[4] Conservation of Habitats and Species Regulations 2017, as amended (commonly known as the 'Habitats Regulations'). Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/

contributions. However, it is recognised that a considerable proportion of the residential allocations in your local plans will already be coming forward as planning applications, prior to the adoption of the Essex Coast RAMS. In the interim period until the RAMS is in place and the necessary developer contributions are known, it is therefore important that any recreational impacts from residential schemes such as these are considered in terms of the Habitats Regulations through a project-level Habitats Regulations Assessment (HRA). We offer the following advice to guide you on this:

**Consultation arrangements**

Natural England has already developed a set of Impact Risk Zones (IRZs) which helps guide planning authorities on the types and scale of development that we should be consulted on. **We advise that we should continue to be consulted in line with these arrangements (i.e. where there are other IRZs are triggered in addition to the Essex Coast RAMS)**

We will shortly be refining the residential IRZs for the above designated sites to align with Essex Coast RAMS project and capture new residential development which falls within the ZoIs shown in Table 1 above; these updates are currently scheduled for September 2018 and relate to the following development types:

- New dwellings of 1+ units (excludes replacement dwellings and extensions)
- Houses in Multiple Occupancy (HMOs)
- Student Accommodation
- Residential care homes and residential institutions (excludes nursing homes)
- Residential caravan sites (excludes holiday caravans and campsites)
- Gypsies, travellers and travelling show people plots

We advise that the applications in scope for consideration should include all new applications as well as those with outline planning permission where this issue has not previously been assessed through the HRA process.

To help you screen applications prior to our IRZs being updated, we have included some maps in **ANNEX A** to this letter to show the current Essex Coast RAMS ZoI.

**Approach to avoidance and mitigation measures for recreational disturbance**

We have included within **ANNEX B** to this letter a suggested HRA record template which can be used to record the conclusions of both the Screening and Appropriate Assessment stages of HRAs **for planning applications within scope of the Essex Coast RAMS for which recreational disturbance to the above sites is the only HRA issue**. The use of this template is not mandatory but we have provided it in an attempt to streamline the process and make it as straightforward and consistent as possible for the authorities involved in the RAMS.

For any queries relating to the specific advice in this letter only, please contact Jack Haynes on 0208 02 64857 or at jack.haynes@naturalengland.org.uk.In the context of the above advice, we would be happy to provide you with some training on the use of our IRZs, the HRA process, the use of the HRA record template etc. through our charged Discretionary Advice Service (DAS), further details on which are available here. The way to progress your request is to complete a DAS Request Form, including the training request, and send it to our consultations hub (consultations@naturalengland.org.uk).

Yours sincerely

**Jack Haynes, Lead Adviser, Natural England**

**Figure A1.1**

**ANNEX A – Essex Coast RAMS 'zone of influence' (Zol) maps**

**Tendring, Colchester, Maldon, Rochford, Castle Point, Southend** – The whole of the LPA area is within the Zol so all relevant development is in scope of the RAMS

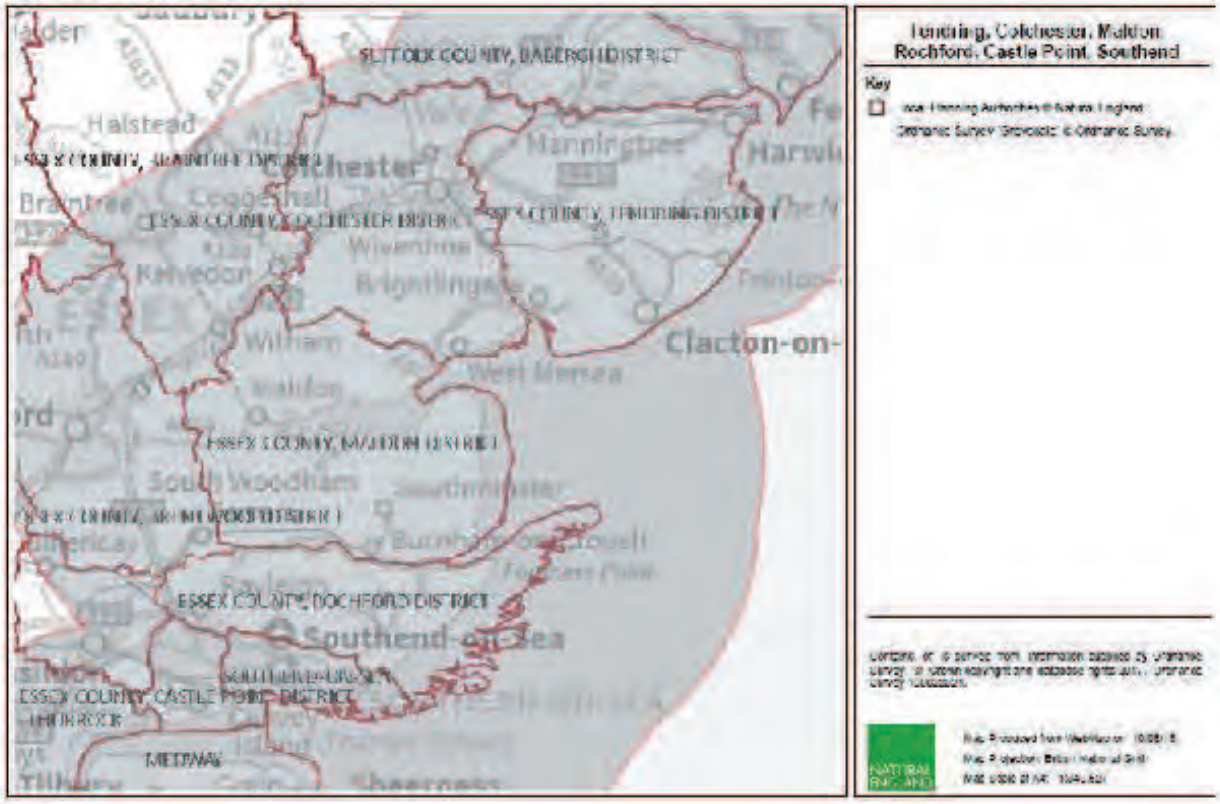


**Figure A1.2**

**Braintree** – Relevant development within the shaded area is in scope of the RAMS

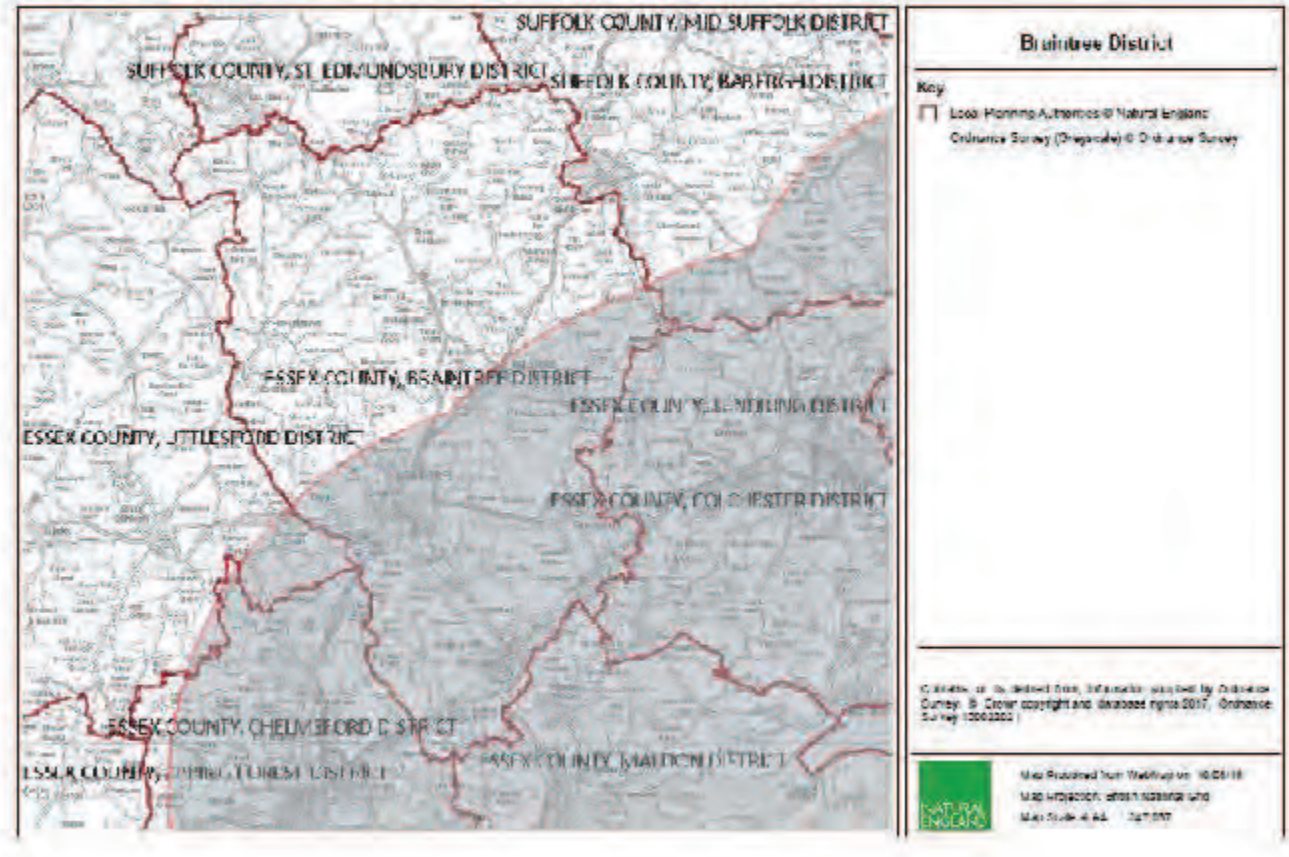


**Figure A1.3**

**Uttlesford** – Relevant development within the shaded area is in scope of the RAMS

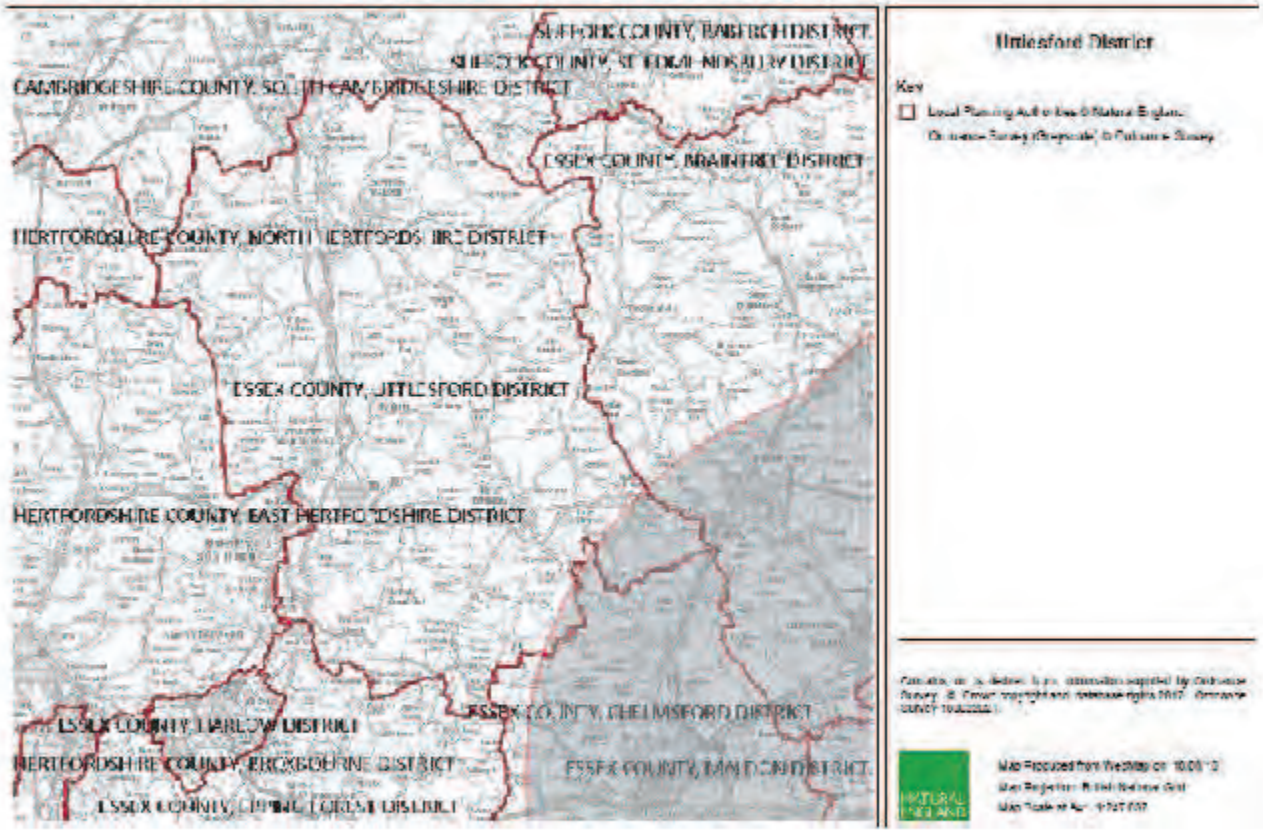


**Figure A1.4**

**Chelmsford** – Relevant development within the shaded area is in scope of the RAMS

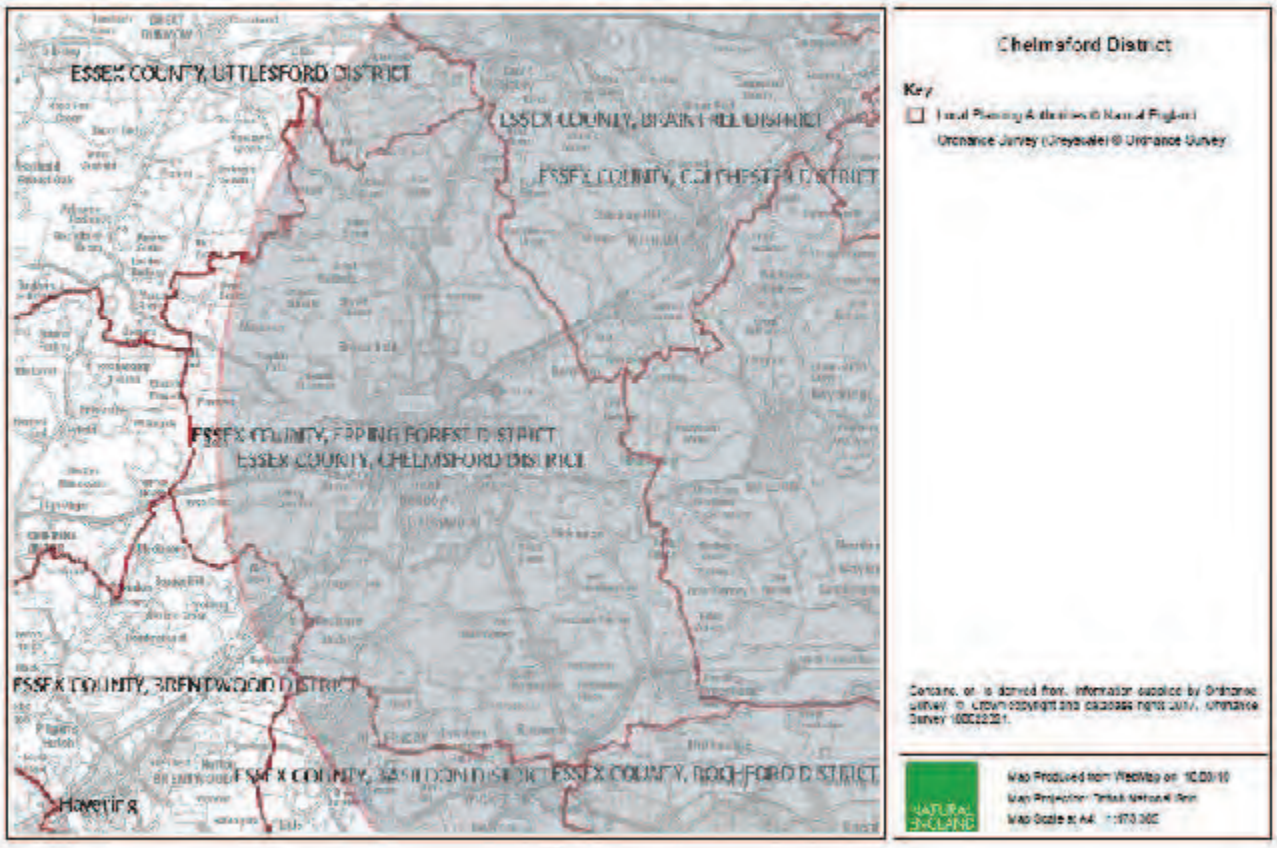


**Figure A1.5**

**Basildon** – Relevant development within the shaded area is in scope of the RAMS

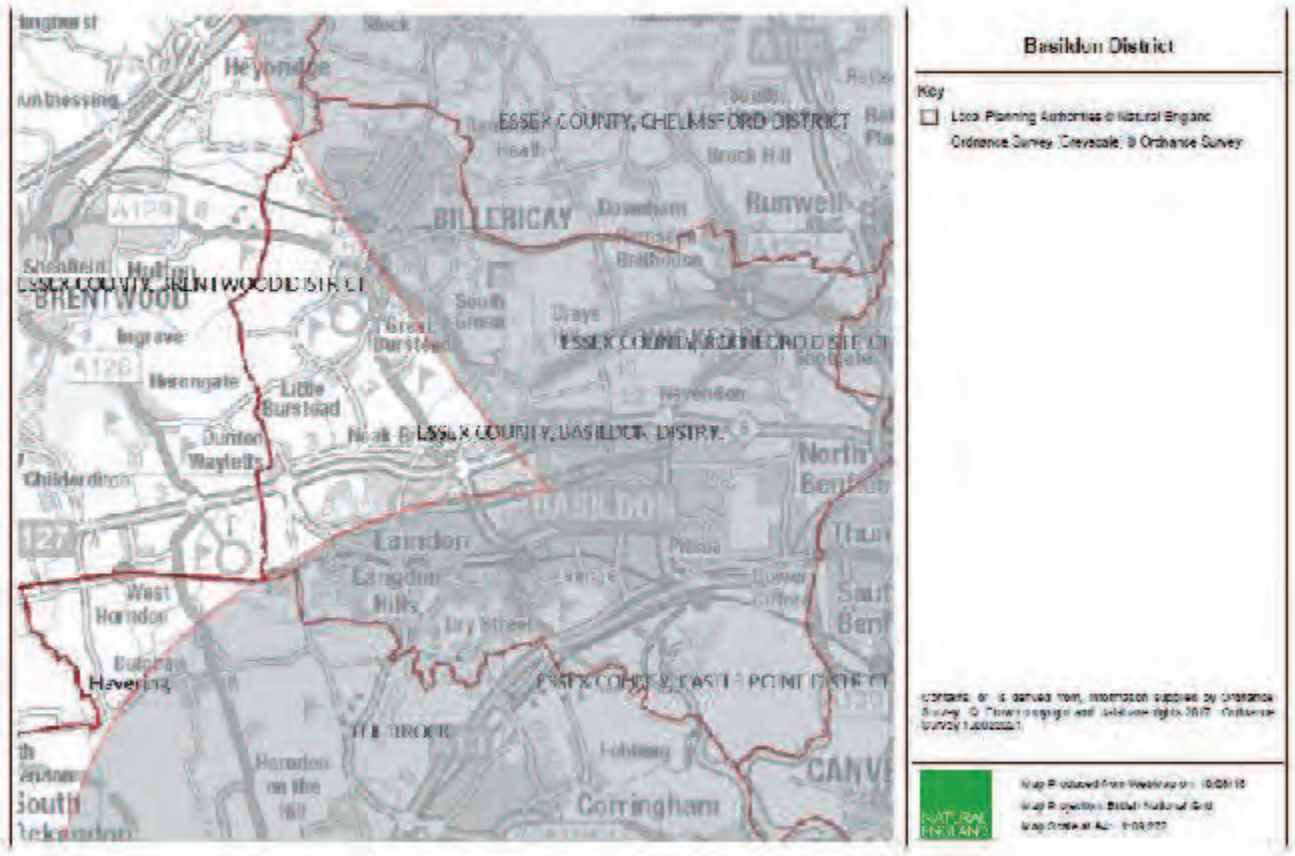


**Figure A1.6**

**Brentwood** – Relevant development within the shaded area is in scope of the RAMS *(Note: the ZoI clips the southeast corner of the district)*

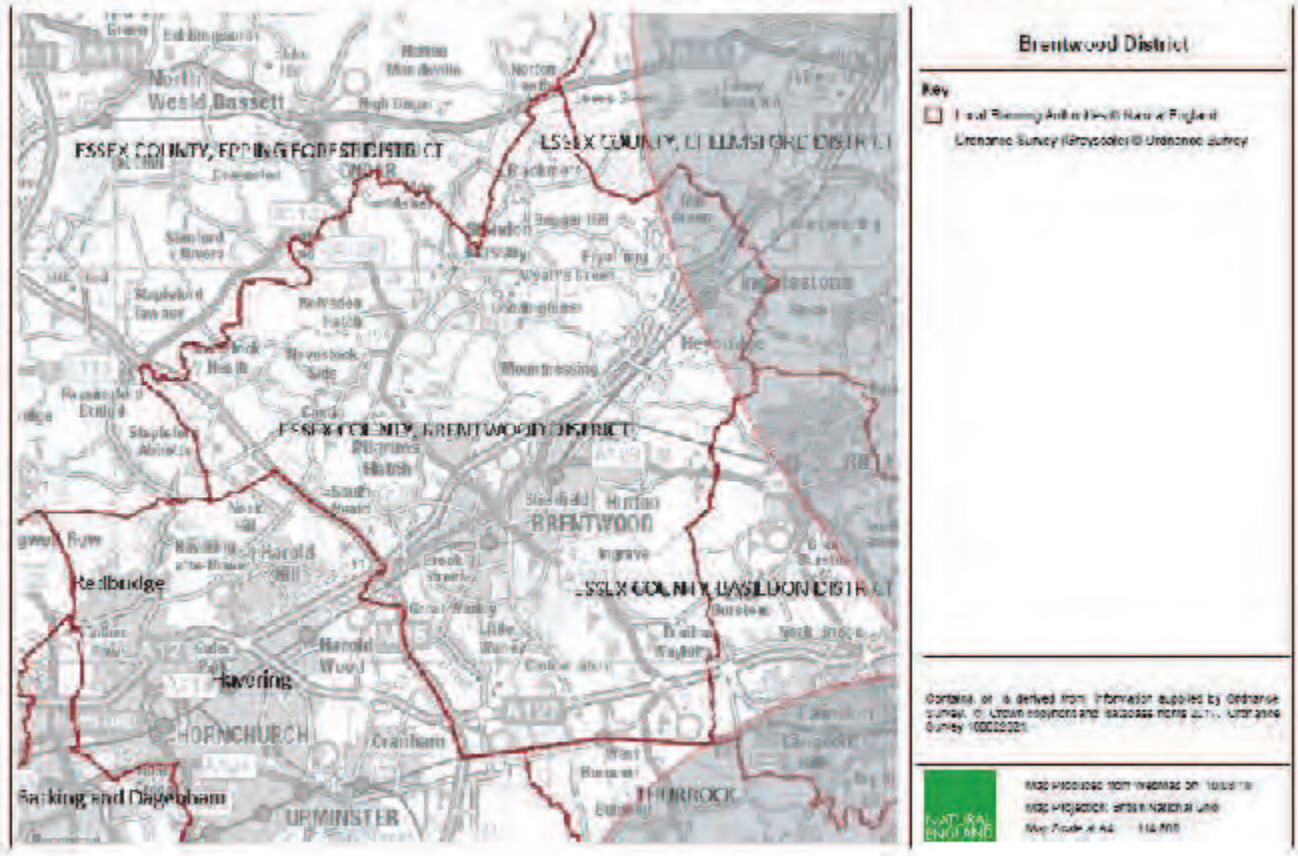
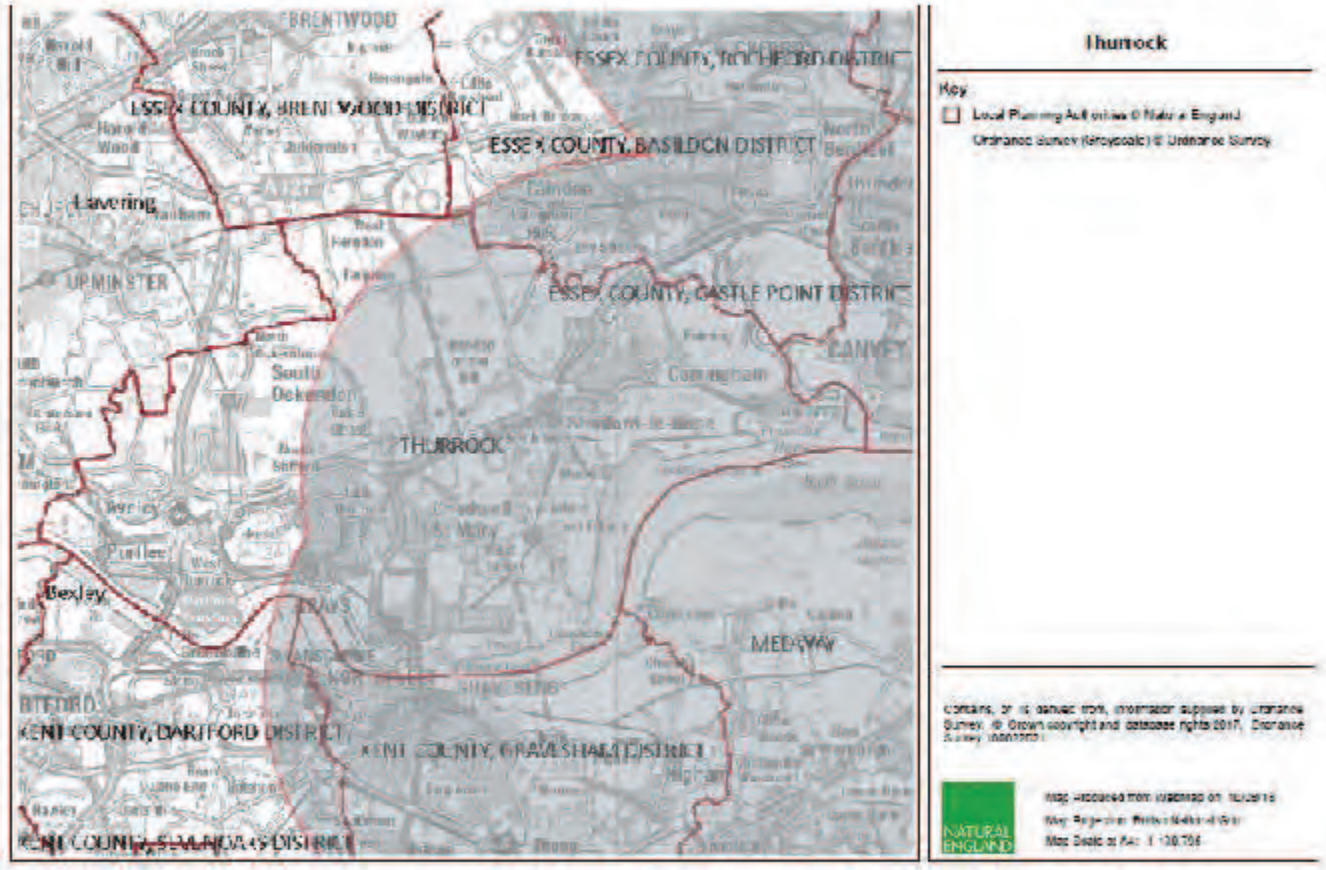


**Figure A1.7**

**Thurrock** – Relevant development within the shaded area is in scope of the RAMS

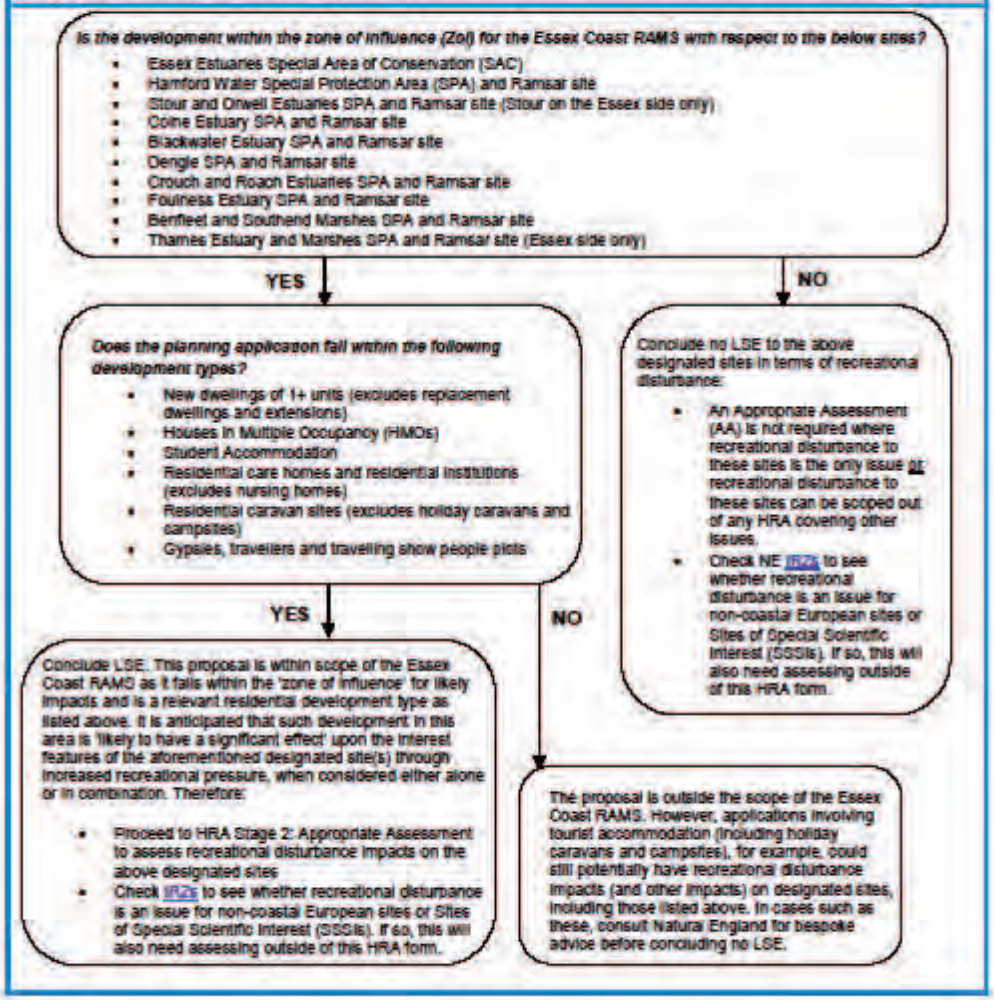


**Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) Habitat Regulation Assessment (HRA) Record**

| Application details | |
|---|---|
| Local Planning Authority: | |
| Case officer | |
| Application reference: | |
| Application description: | |
| Application address: | |
| Status of Application: | |
| Grid Ref: | |

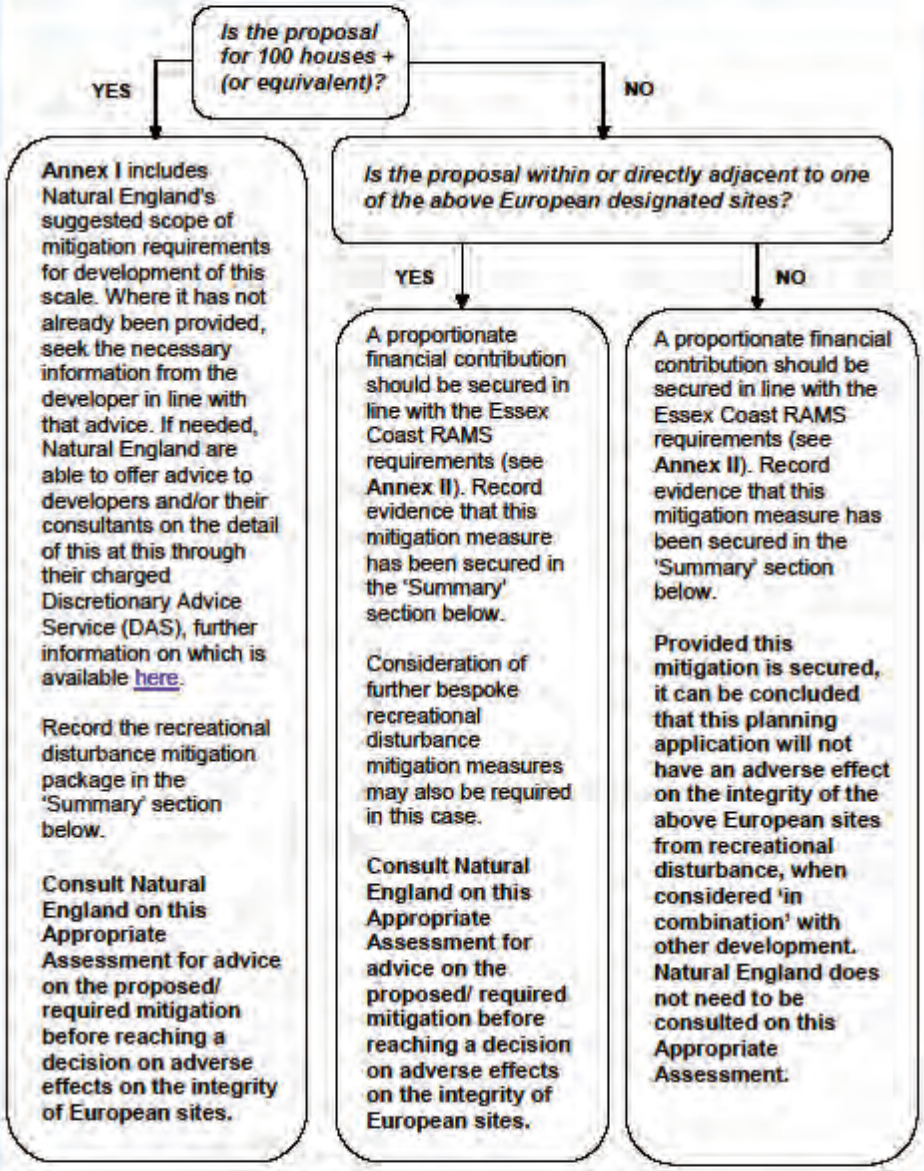
**HRA Stage 1: screening assessment**

**Test 1 – the significance test:** Based on the development type and proximity to European designated sites, a judgement should be made as to whether the development constitutes a 'likely significant effect' (LSE) to a European site in terms of increased recreational disturbance



**HRA Stage 2: Appropriate Assessment**

**Test 2 – the integrity test:** The applicant must provide sufficient evidence to allow the Appropriate Assessment to be made, which is the stage at which avoidance and/or mitigation measures can be considered



| **Summary of the Appropriate Assessment :** To be carried out by the Competent Authority (the local planning authority) in liaison with Natural England (where necessary) |
| --- |
| **Summary of recreational disturbance mitigation package**<br><br>[INSERT]<br><br>**Conclusion**<br><br>*Having considered the proposed avoidance and mitigation measures above, [INSERT LPA] conclude that with mitigation the project will not have an Adverse Effect on the Integrity of the European sites included within the Essex Coast RAMS.*<br><br>*Having made this appropriate assessment of the implications of the plan or project for the site(s) in view of that (those) site(s)'s conservation objectives, and having consulted Natural England and fully considered any representation received (where necessary), the authority may now agree to the plan or project under regulation 63 of the Conservation of Habitats and Species Regulations 2017.* |
| **Local Planning Authority Case Officer comments, signed and dated:** |
| |

**Annex I – Natural England's recommendations for larger scale residential developments within the Essex Coast RAMS zone of influence (100 units +, or equivalent, as a guide)**

Developments of this scale should include provision of well-designed open space/green infrastructure, proportionate to its scale. Such provisions can help minimise any predicted increase in recreational pressure to the European sites by containing the majority of recreation within and around the development site boundary away from European sites. We advise that the Suitable Accessible Natural Green Space (SANGS) guidance here can be helpful in designing this; it should be noted that this document is specific to the SANGS creation for the Thames Basin Heaths, although the broad principles are more widely applicable. As a minimum, we advise that such provisions should include:

- High-quality, informal, semi-natural areas
- Circular dog walking routes of 2.7 km[5] within the site and/or with links to surrounding public rights of way (PRoW)
- Dedicated 'dogs-off-lead' areas
- Signage/information leaflets to householders to promote these areas for recreation
- Dog waste bins
- A commitment to the long term maintenance and management of these provisions

Natural England would be happy to advise developers and/or their consultants on the detail of this at the pre-application stage through our charged Discretionary Advice Service (DAS), further information on which is available here.

However, the unique draw of the above European sites means that, even when well-designed, 'on-site' provisions are unlikely to fully mitigate impacts when all residential development within reach of the coast is considered together 'in combination'. We therefore advise that consideration of 'off-site' measures (i.e. in and around the relevant European designated site(s)) is also required as part of the mitigation package for predicted recreational disturbance impacts in these cases.

As such, in the interim period before the RAMS is adopted, a financial contribution should also be agreed with and collected from the developer, prior to commencement, on the basis that it can be used to fund strategic 'off site' measures (i.e. in and around the relevant European designated site(s)). These measures should be targeted towards increasing the relevant European site(s) resilience to recreational pressure and be in line with aspirations of the emerging RAMS. As an example in this interim period, this could include funding towards existing wardening schemes at the relevant European designated site(s). A suitable delivery mechanism for the measures must be agreed to secure them and ensure they are implemented from the first occupation of dwellings. Alternatively, we understand that it may be acceptable at the outline planning stage to include a suitably-worded planning condition which secures full adherence with the emerging Essex Coast RAMS at the Reserved Matters stage.

Once the RAMS has been adopted, a financial contribution should be secured from these developments prior to commencement.

**Annex II – Natural England's recommendations for smaller scale residential developments within the Essex Coast RAMS zone of influence (0-99 units, or equivalent, as a guide) which are not within/directly adjacent to a European designated site**

Whilst the provision of well-designed open space/green infrastructure on site or contributions towards strategic green infrastructure in your district is to be welcomed for developments of this scale, a proportionate financial contribution in line with/to the Essex Coast RAMS should be

[5] Taken from *Jenkinson, S., (2013), Planning for dog ownership in new developments: reducing conflict – adding value. Access and greenspace design guidance for planners and developers*

secured as a minimum to help fund strategic 'off site' measures.

As such, in the interim period before the RAMS is adopted, a financial contribution should be agreed with and collected from the developer, prior to commencement, on the basis that it can be used to fund strategic 'off site' measures (i.e. in and around the relevant European designated site(s)). These measures should be targeted towards increasing the relevant European site(s) resilience to recreational pressure and be in line with aspirations of the emerging RAMS. As an example in this interim period, this could include funding towards existing wardening schemes at the relevant European designated site(s). A suitable delivery mechanism for the measures must be agreed to secure them and ensure they are implemented from the first occupation of dwellings. Alternatively, we understand that it may be acceptable at the outline planning stage to include a suitably-worded planning condition which secures full adherence with the emerging Essex Coast RAMS at the Reserved Matters stage.

Once the RAMS has been adopted, a financial contribution should be secured from these developments prior to commencement.

## Appendix 2: Visitor Survey Methodology

The survey form to be used at each site has been included within Appendix 3 of this document and contains all the proposed questions for each highlighted site.

The visitor survey methodology for these surveys has been adapted from the Visitor Survey for Brantham regeneration area, The Landscape Partnership Ltd, Oct 2015, at Natural England's recommendation.

1. The surveys for each site are to be undertaken over a three week period. Specific days will be chosen in order to cover a larger demographic.
2. The surveyors will ask a set of questions to visitors passing their designated location. Visitors who decline interviews will also be recorded. Visitors who have been previously interviewed are not interviewed again. Surveyors will be asked to note the total number of people which pass while interviews are in progress.
3. Timings and locations of the surveys will be planned so that there is suitable coverage. This is to ensure that visitors with specific habits are not missed from the survey.
4. Surveys will begin at 0730 each day, to record early visitors. The survey will continue throughout the day until 1700, with surveyors taking 30 minute breaks every 2 hours. This equates to four two hour sessions at each site.
5. Surveyors will have short breaks during the day for welfare purposes, lunch and to travel between survey locations as part of the surveyor rotation. Surveyors are asked to interview any visitors they encounter while travelling between locations.
6. The survey window would be better to include some school term time dates and Bank Holidays if this is practicable during the survey period.
7. The questionnaire can be found within Appendix 3. The questionnaire will need to be agreed with the Local Planning Authorities, as well as with assistance from Natural England before the surveying starts. The current questions cover a range of topics which may change if objectives for the survey alter.
8. Surveyors are asked to remain in position, even during rainy days, to ensure visitors during all weathers are captured.

## Appendix 3: Winter visitor survey questionnaire

This is an example questionnaire for Leigh-on-Sea, specific locations and geographical features were changed for each location.

**Visitor Questionnaire**
This questionnaire is to help work out how much difference new residential development might make to protected sites and species in the area. In particular, people using the coast might lead to disturbance of the birds on the estuary, beaches and saltmarsh.

**1. What is your main activity when using the area?**
a. Dog walking always on lead
b. Dog walking sometimes or always off lead
c. Exercise e.g. jogging
d. Walking
e. Bird/nature watching
f. Bait digging
g. Cycling
h. Playing
i. Outing with the children
j. Wildfowling
k. Water sports: please specify type
l. Other (please specify)

**2. How often do you come to this location?**
a. Daily
b. Most days (180+ visits)
c. 1 to 3 times a week (40-180 visits)
d. 2 to 3 times per month (15-40 visits)
e. Once a month (6-15 visits)
f. Less than once a month (2-5 visits)
g. Don't know
h. First visit
i. On holiday / day visit in area

**3. Have you come from home or are you visiting / on holiday in the area? What is your postcode? (Just for making sure we understand the results properly and won't be used for anything else or given to anyone)**
a. From Home
b. On holiday / day visit in area
c. Town
d. Postcode / partial postcode / town_____

**4. What made you come here today rather than other places?**
a. Close to home
b. Easy parking
c. Free parking
d. Good area to take the dog for a walk
e. Space and facilities for natural play
f. Peaceful
g. Welcoming and safe
h. Familiar
i. Good choice of routes / places to walk

j. Estuary views
k. Wildlife
l. Sense of wilderness
m. Site history
n. Other_____

**5. How do you normally travel to the site?**

7.1 On foot
7.2 Bicycle
7.3 Public transport
7.4 Car
7.5 Other,_____
7.6 Don't know / no answer

**6. If you arrived by car, where did you park?**

a. Mayflower car park
b. Belton Bridge car park
c. Other formal car park
d. Layby
e. Roadside parking
f. Other
g. Not sure / Don't know

**7. Refer to map. Where did you enter the site?**

a. A – Leigh Marina
b. B – Belton Bridge / Osbourne Bros Café
c. C – High Street / The Mayflower
d. D – Leigh Cliffs East via bridge
e. E – Along seafront from Chalkwell / Westcliff-on-Sea
f. Other – specify
g. Not sure

**8. Do you normally visit at a certain time of day?**

a. Before 9am
b. Between 9am and 12
c. Between 12 and 3pm
d. Between 3 – 6pm
e. After 6pm
f. It varies
g. Don't know / first visit

**9. How long have you spent / will you spend along the seafront today?**

a. Less than 1 hour
b. 1 – 2 hours
c. 2 – 3 hours
d. More than 3 hours

**10. Do you plan your visit in relation to the tide?**

a. Yes
b. No

**11. Is there a time of year when you tend to visit more often?**

a. No, all year round
b. Spring (Mar-May)
c. Summer (Jun-Aug)
d. Autumn (Sept-Nov)
e. Winter (Dec-Feb)

f. Don't know
g. Only visited once

**12. What would make you want to visit a new park for recreation if created in the area (if needed to relieve pressure on protected sites)?**

a. New paths
b. Room for running around
c. Dogs off lead area
d. Play equipment
e. Shelter from wind
f. Sculptures
g. Attractive landscaping
h. Cycling routes
i. Wildlife
j. Free parking
k. Views over the estuary
l. Anything else? specify:

**13. Are you aware that the river and shore is very important for wildlife, particularly water birds for most of the year?**

a. Yes
b. No

**14. If you indicated yes to the above question, can you detail the designation / designations?**

_____

**15. Group size**

a. Number of people_____
b. Number of dogs on lead_____
c. Number of dogs off lead_____
d. Number of pushchair / wheelchair/ buggy

Interview time (24hr clock):
Interviewer:

## Appendix 4: Winter Visitor Survey Results 2018/19

**Table A4.1: Survey dates and location**

| Survey Location | Weekday | Weekend |
|---|---|---|
| Leigh-on-Sea – SE&BM | 07.02.18 | 28.02.18 |
| Gunners Park – SE&BM | 12.02.18 | 04.02.18 |
| Burnham-on-Crouch – C&R | 06.02.18 | 28.01.18 |
| North Fambridge – C&R | 12.02.18 | 11.02.18 |
| Northey Island – BW | 16.02.18 | 11.02.18 |
| Tollesbury Wick – BW | 23.02.18 | 25.02.18 |
| St Peters Chapel – D | 22.02.18 | 18.02.18 |
| | 08.03.18 | 10.03.18 |
| Coalhouse Fort – T | 06.02.18 | 04.02.18 |
| Thurrock Thames EWT – T | 13.02.18 | 10.02.18 |
| Cudmore Grove – C | 22.02.18 | 25.02.18 |
| Wivenhoe Barrier – C | 01.03.18 | 04.03.18 |

**Table A4.2: Number of survey responses per Habitats site 2018/19**

| SPA | Site | Weekday | Weekend | Total |
|---|---|---|---|---|
| Benfleet and Southend Marshes | *Gunners Park* | 34 | 85 | 119 |
| | *Cinder Path* | 71 | 143 | 214 |
| | Total | 105 | 228 | 333 |
| Crouch and Roach Estuaries | *Burnham-on-Crouch* | 60 | 43 | 103 |
| | *Blues House Farm* | 15 | 25 | 40 |
| | Total | 75 | 68 | 143 |

| | | | | |
|---|---|---|---|---|
| Blackwater Estuary | *Northey Island* | 10 | 14 | 24 |
| | *Tollesbury* | 10 | 39 | 49 |
| | Total | 20 | 53 | 73 |
| Dengie | *St. Peters Chapel 1* | 17 | 37 | 54 |
| | *St. Peters Chapel 2* | 7 | 16 | 23 |
| | Total | 24 | 53 | 77 |
| Thames Estuary and Marshes | *Coalhouse Fort* | 10 | 23 | 33 |
| | *Thameside Nature Park* | 32 | 17 | 49 |
| | Total | 42 | 40 | 82 |
| Colne Estuary | *Cudmore Grove* | 23 | 29 | 52 |
| | *Wivenhoe Barrier* | 33 | 38 | 71 |
| | Total | 56 | 67 | 123 |

**Table A4.3: Passers-by and water activity per survey location for 2018/19**

| SPA | Site | Weekday | | Weekend | | Total | |
|---|---|---|---|---|---|---|---|
| | | Passers by | Water activity | Passers by | Water activity | Passers by | Water activity |
| Benfleet and Southend Marshes | *Gunners Park* | 78 | 0 | 127 | 1 | 205 | 1 |
| | *Cinder Path* | 181 | 6 | 434 | 2 | 615 | 8 |
| | Total | 259 | 6 | 561 | 3 | 820 | 9 |
| Crouch and Roach Estuaries | *Burnham-on-Crouch* | | | 317 | 22 | 317 | 22 |
| | *North Fambridge* | | | 15 | 1 | 15 | 1 |
| | Total | | | 332 | 23 | 332 | 23 |
| Blackwater Estuary | *Northey Island* | 3 | 0 | 3 | 0 | 6 | 0 |
| | *Tollesbury* | 21* | 0 | 1 | 10 | 22 | 10 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total | 24 | 0 | 4 | 10 | 28 | 10 |
| Dengie | *St. Peters Chapel 1* | 4 | 2 | 8 | 0 | 12 | 0 |
| | *St. Peters Chapel 2* | 4 | 0 | | | 4 | 0 |
| | Total | 8 | 2 | 8 | 0 | 16 | 0 |
| Thames Estuary and Marshes | *Coalhouse Fort* | 19 | 17 | 0 | 7 | 19 | 24 |
| | *Thameside Nature Park* | | | 46* | 7 | 46 | 7 |
| | Total | 19 | 17 | 46 | 14 | 65 | 31 |
| Colne Estuary | *Cudmore Grove* | 4 | 0 | 15 | 0 | 19 | 0 |
| | *Wivenhoe Barrier* | 18 | 0 | 21 | 0 | 39 | 0 |
| | Total | 22 | 0 | 36 | 0 | 58 | 0 |
| * Tollesbury 10 in walking group / Thameside Nature Park 15 in walking group | | | | | | | |

## Appendix 5: Summer visitor surveys at the Blackwater Estuary and Benfleet & Southend Marshes

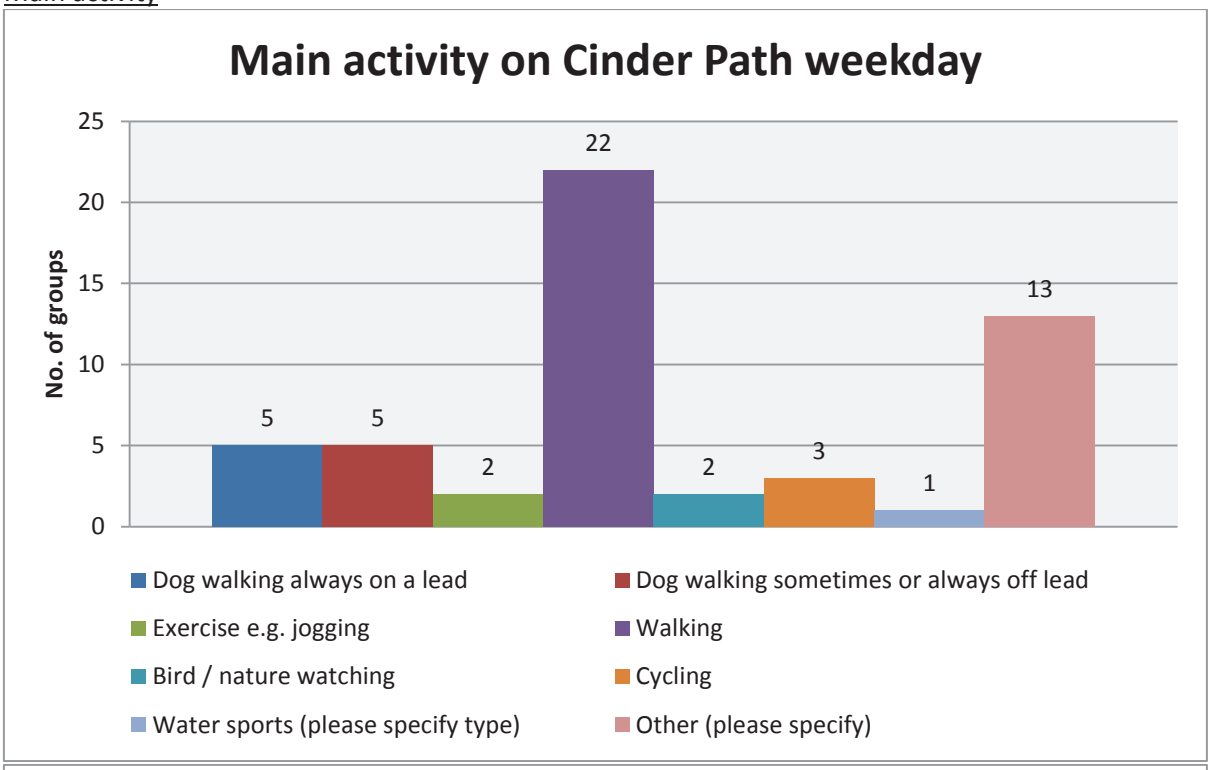
Southend summer survey results

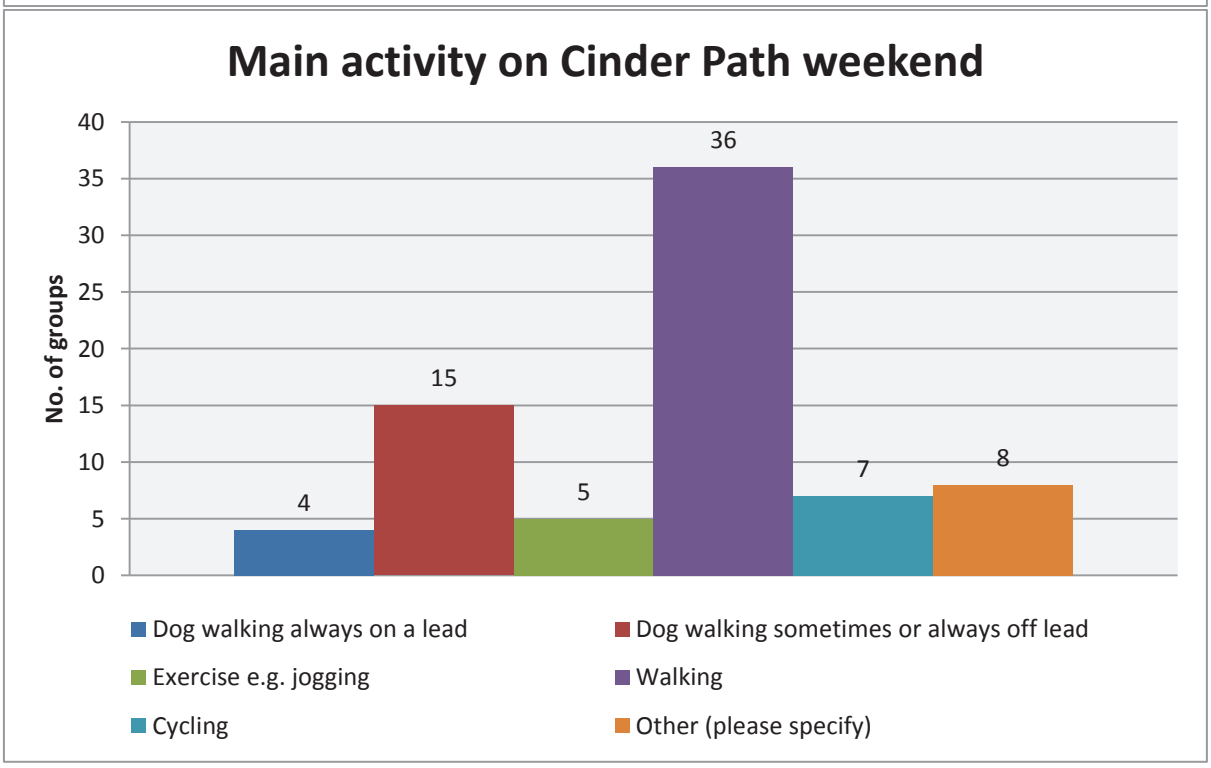
*Number of passers-by*

| Location | Weekday | Weekend | Total |
|---|---|---|---|
| Cinder Path | 72 | 179 | 251 |
| Two Tree Island | 72 | 99 | 171 |
| Total | **144** | **278** | **422** |

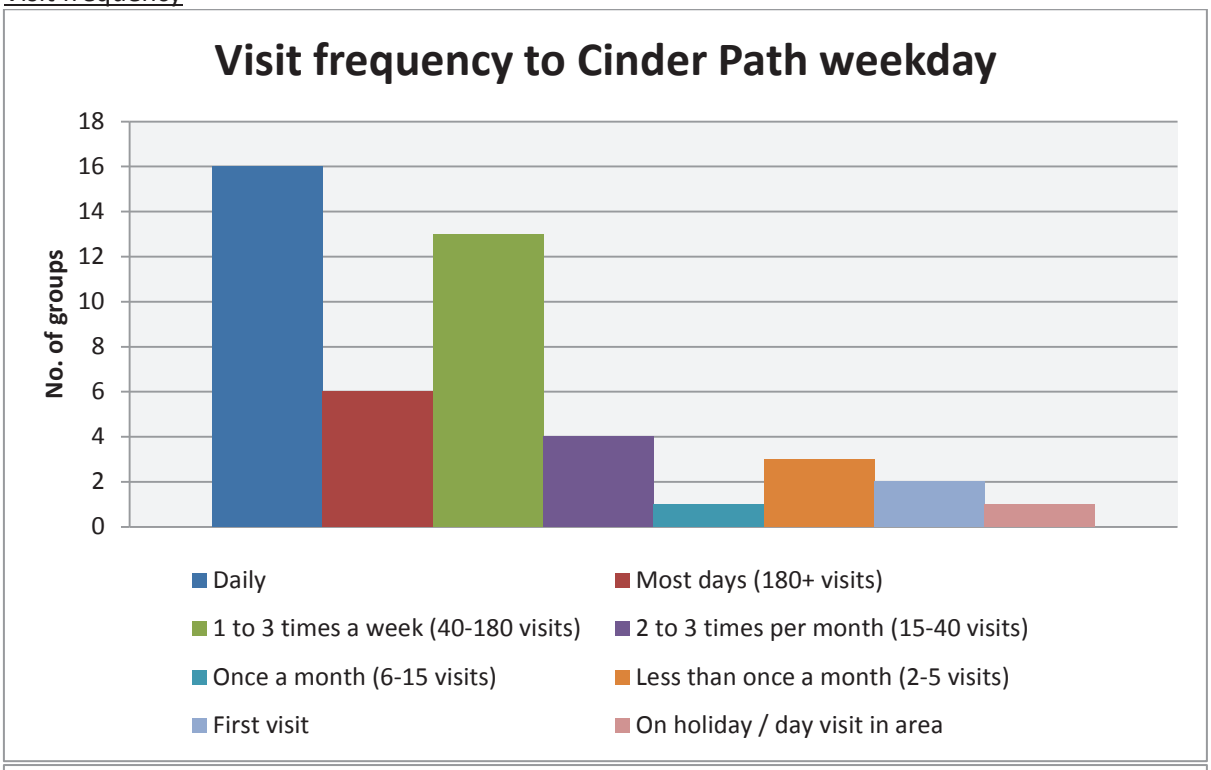
Cinder Path

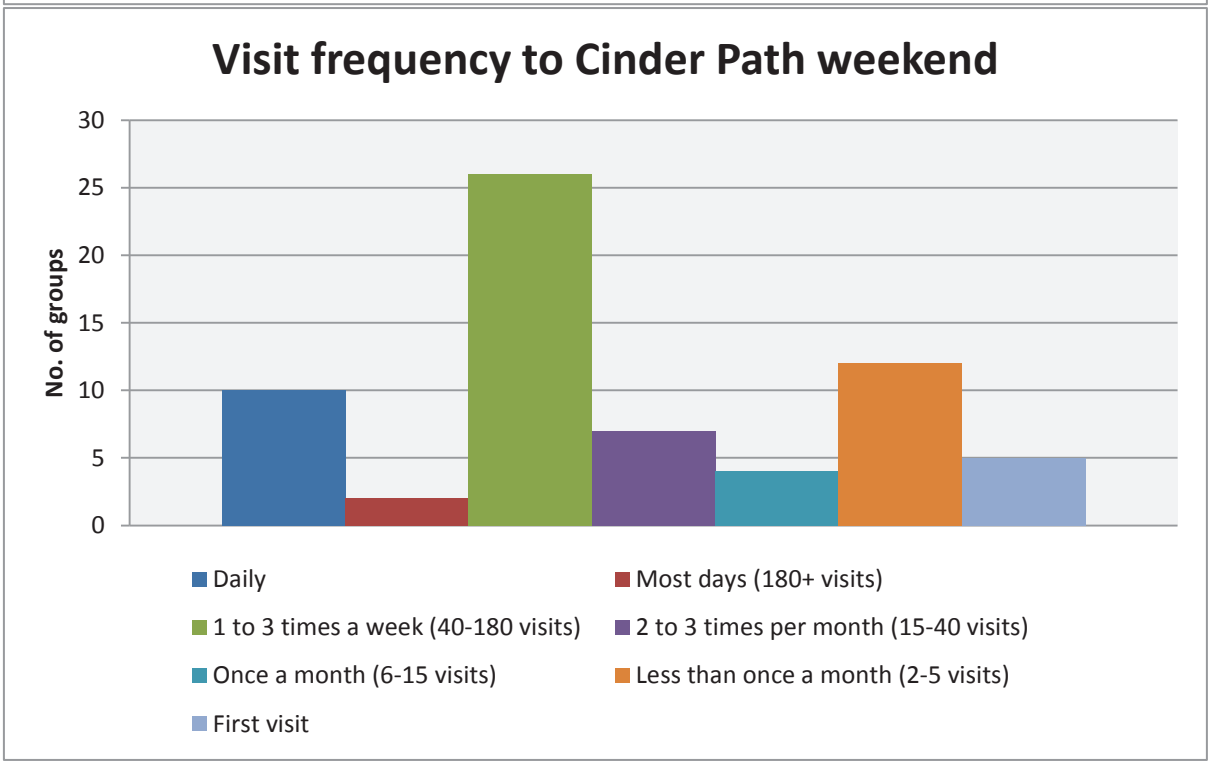
Main activity



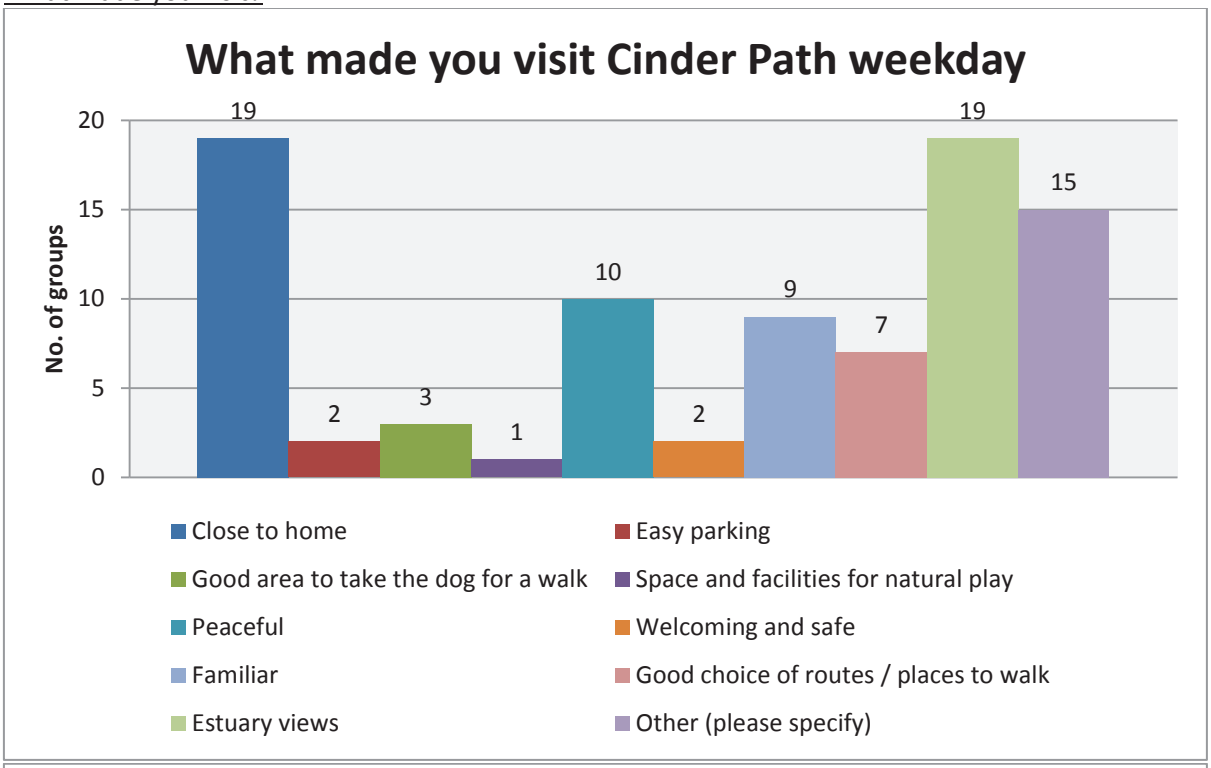



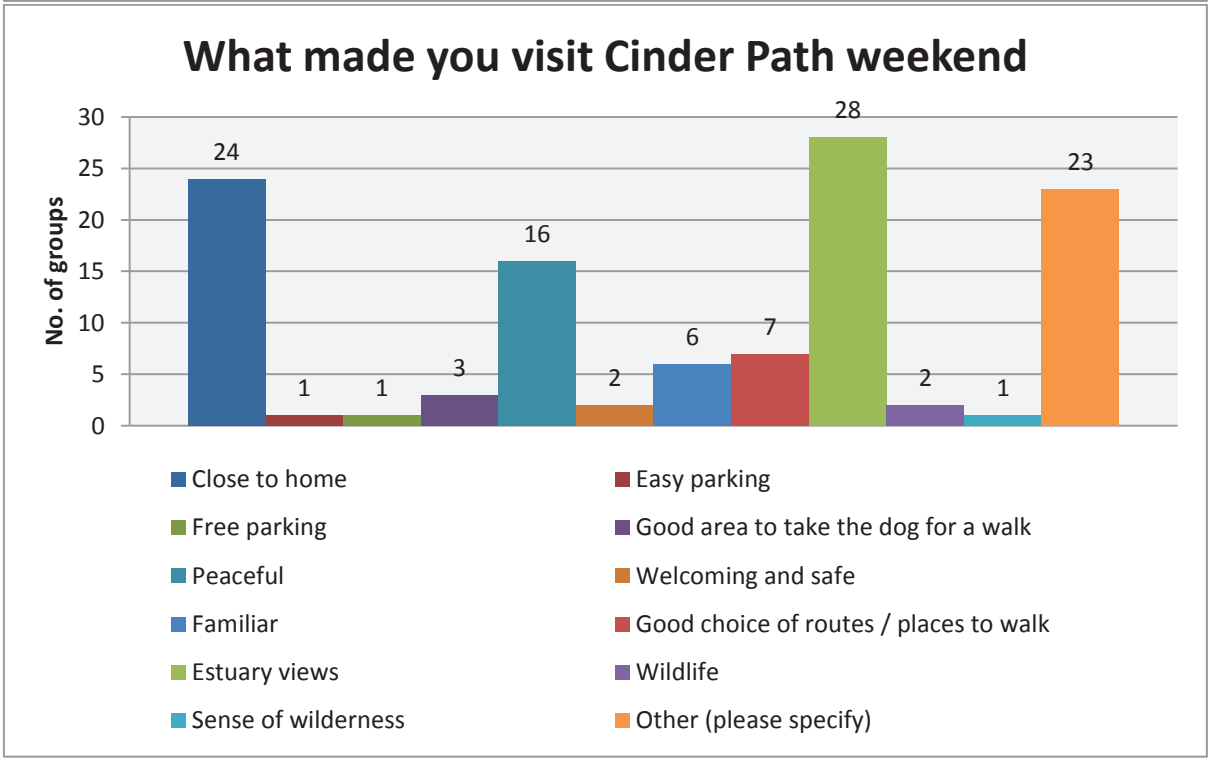
Visit frequency



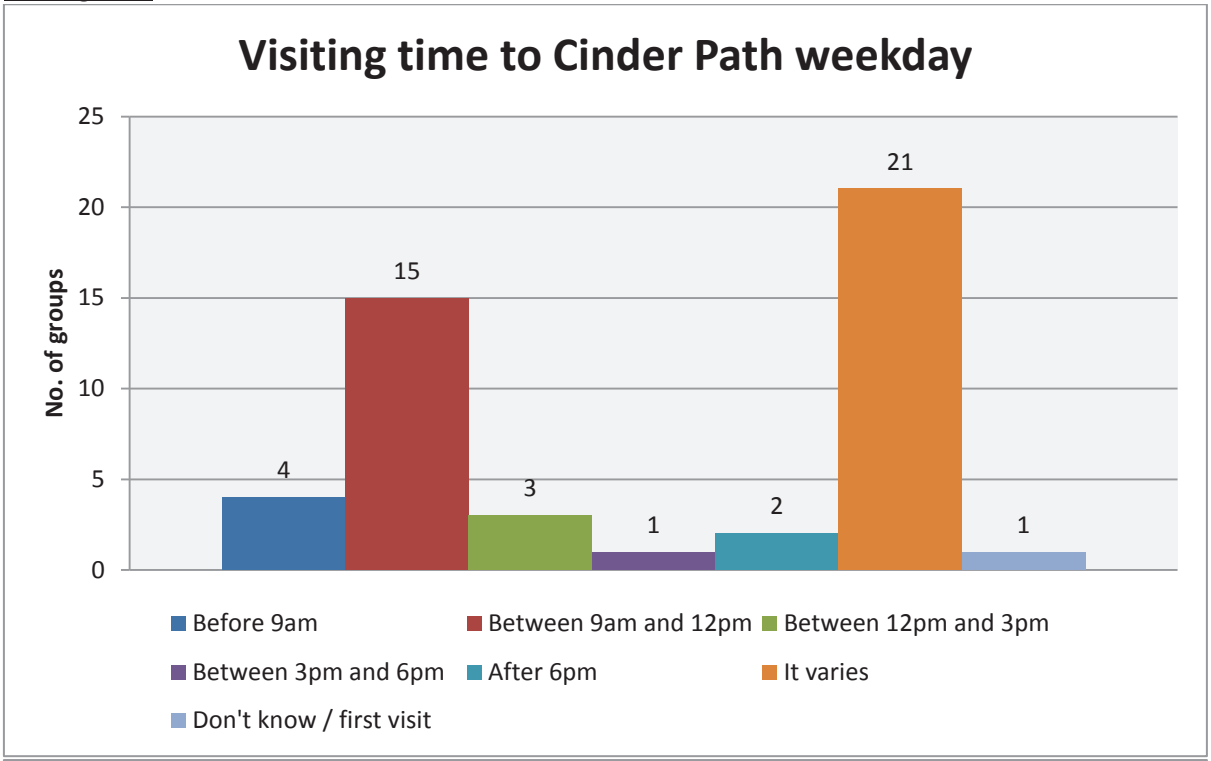



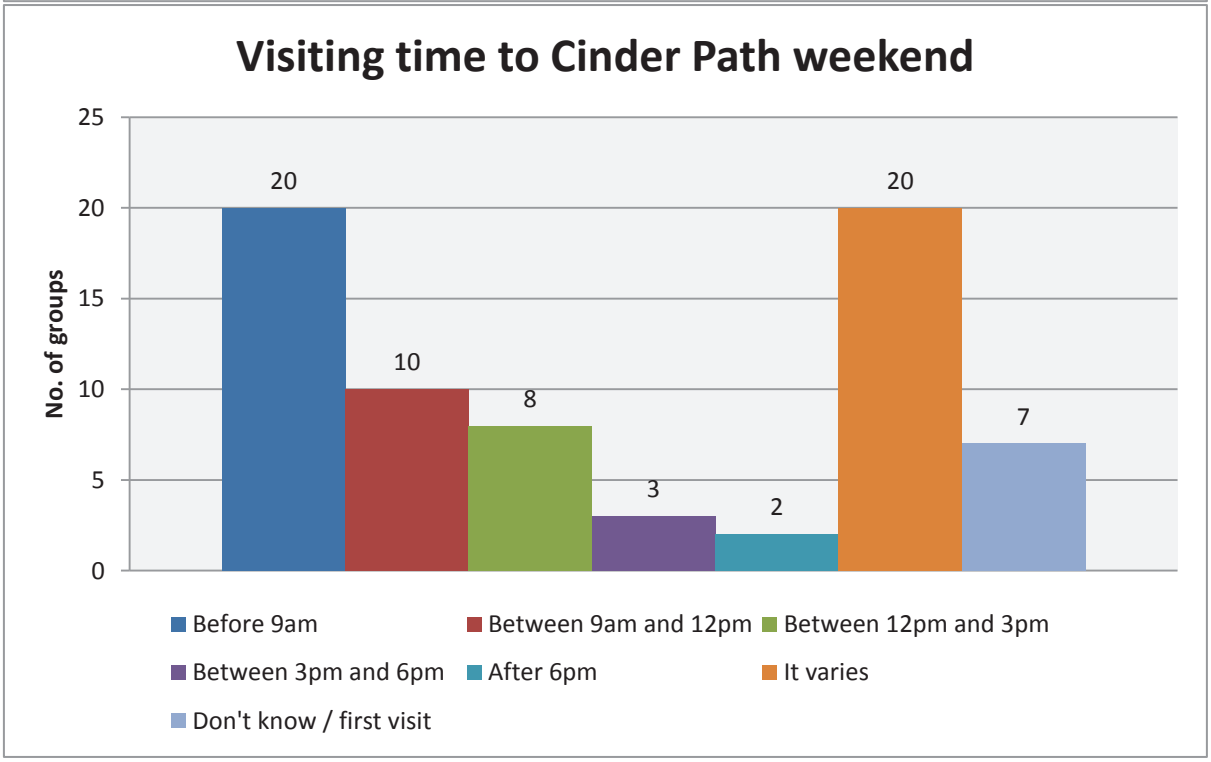
What made you visit?



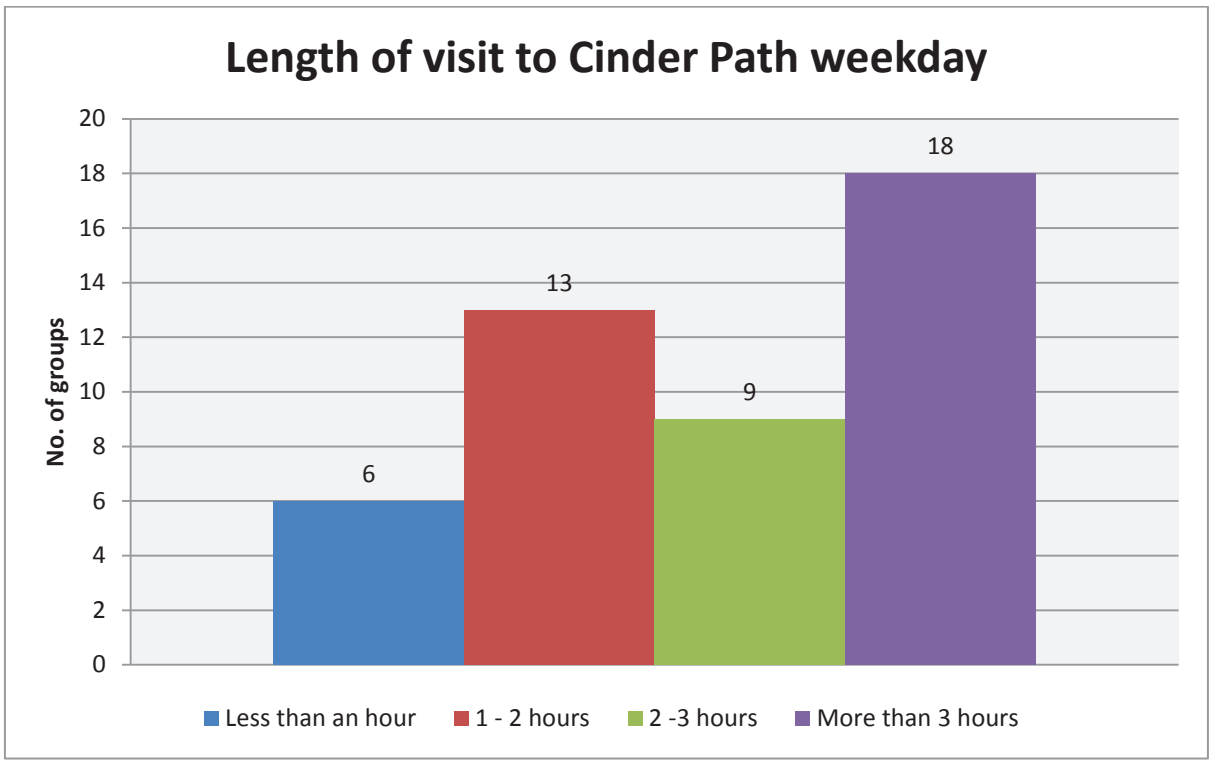



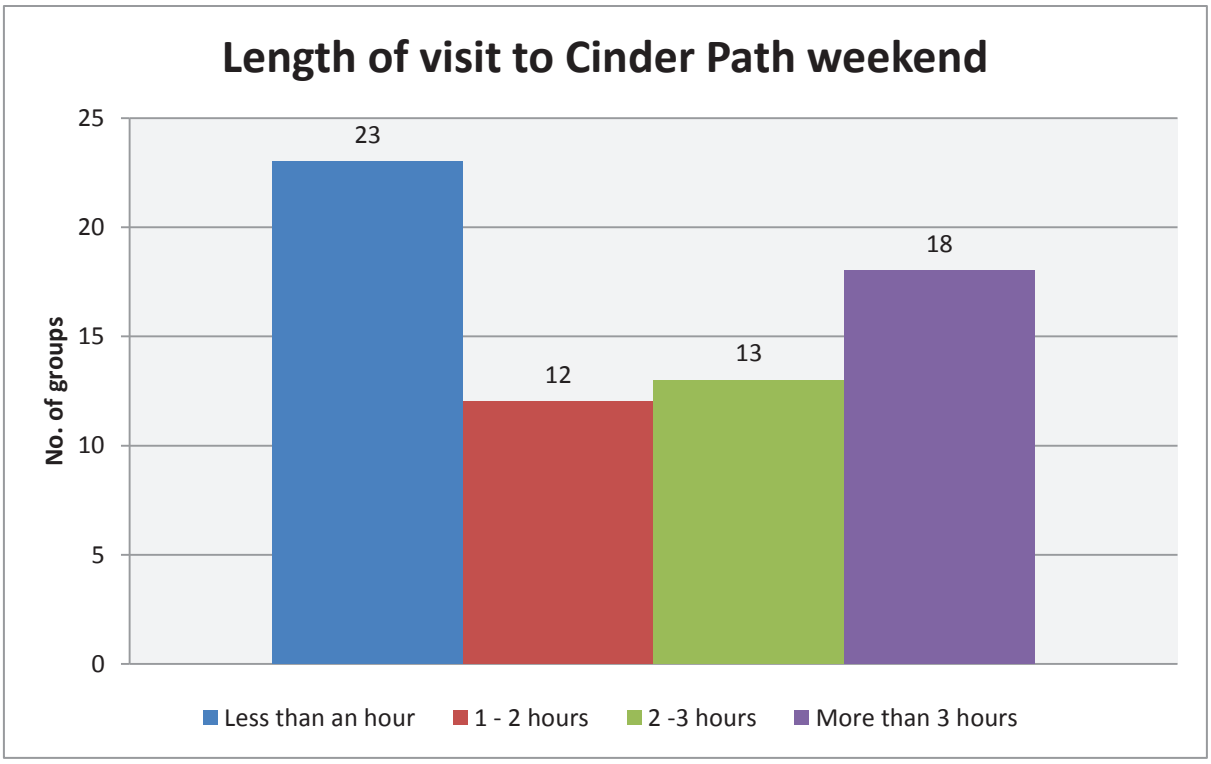
Visiting time



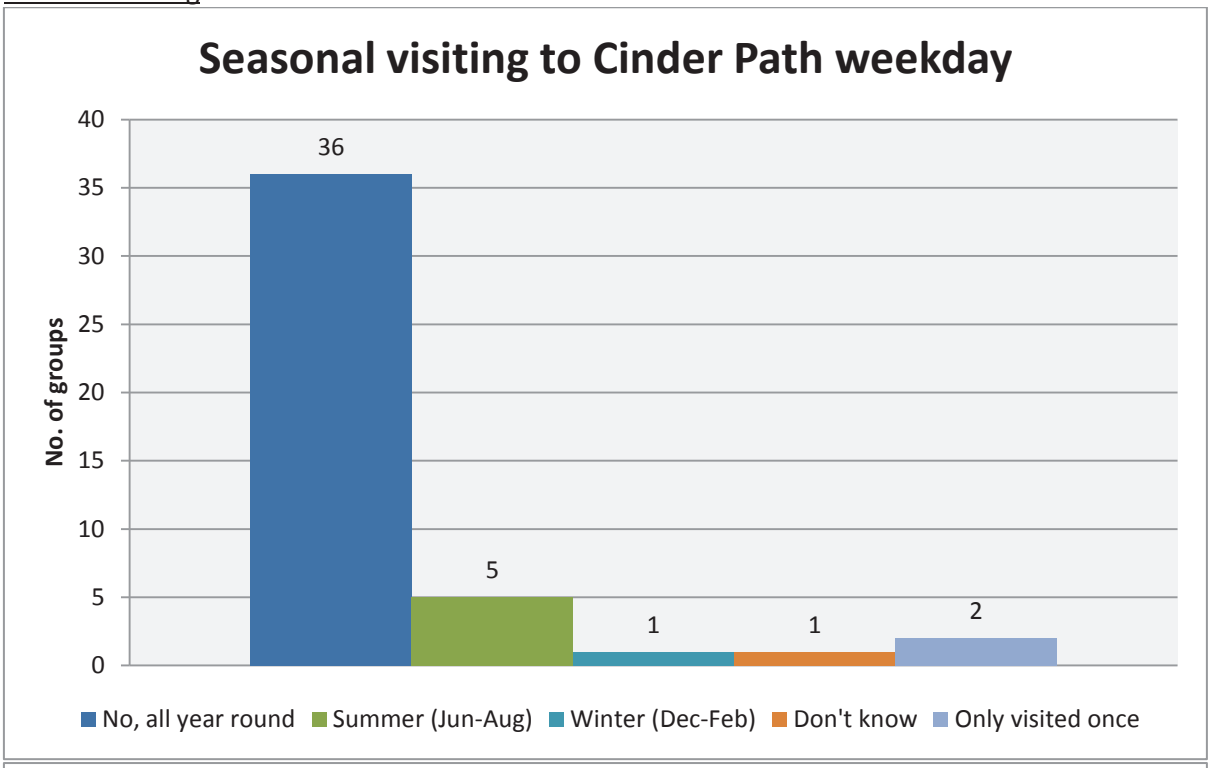



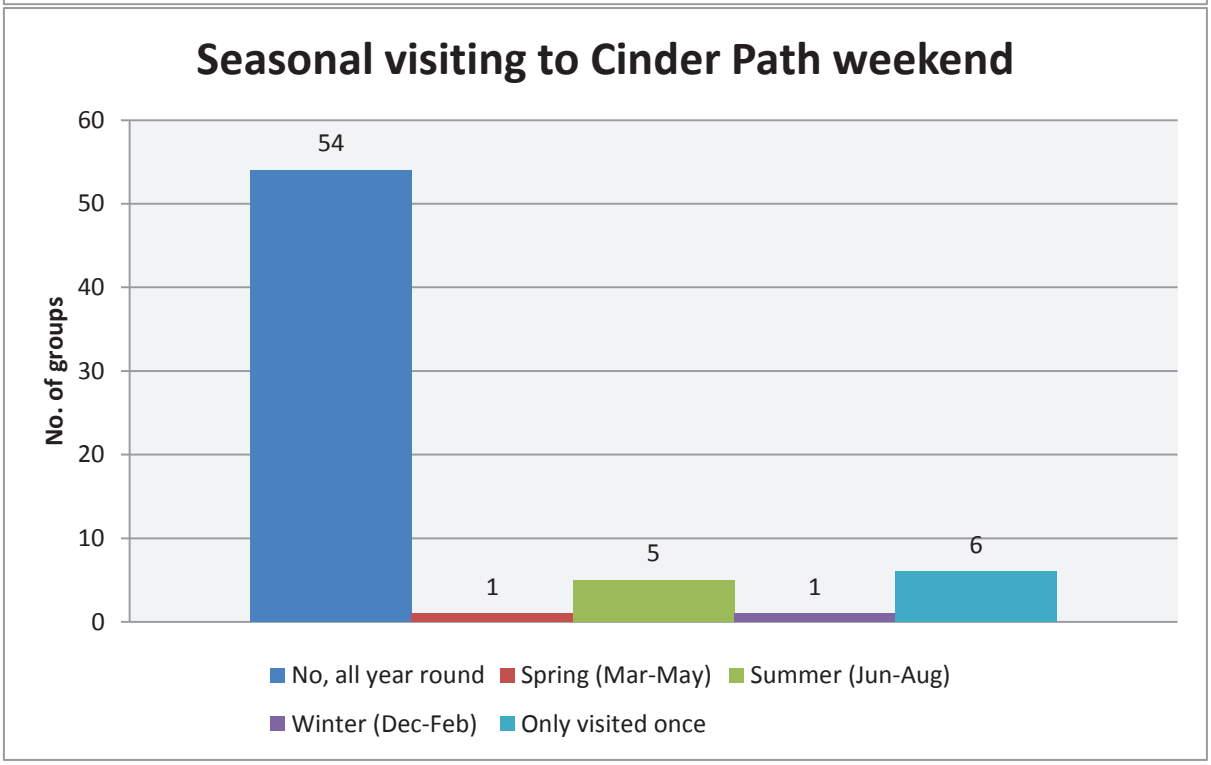
Length of visit



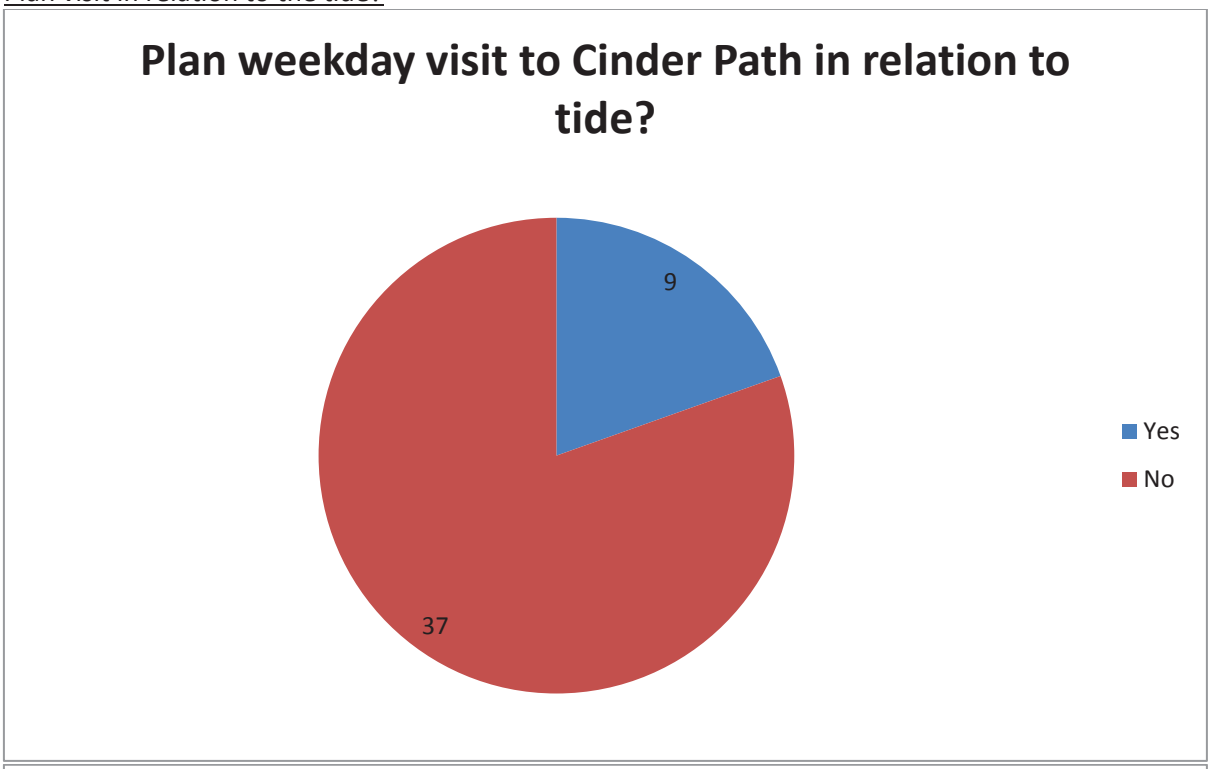



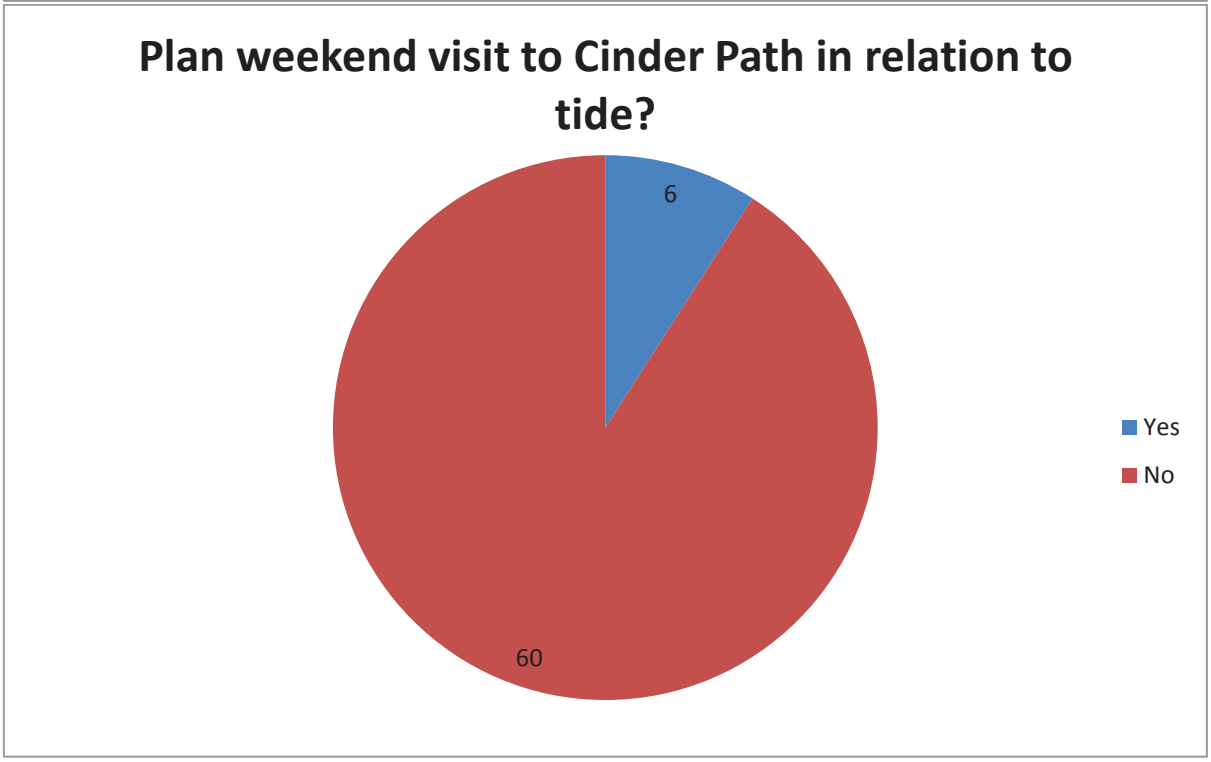
Seasonal visiting



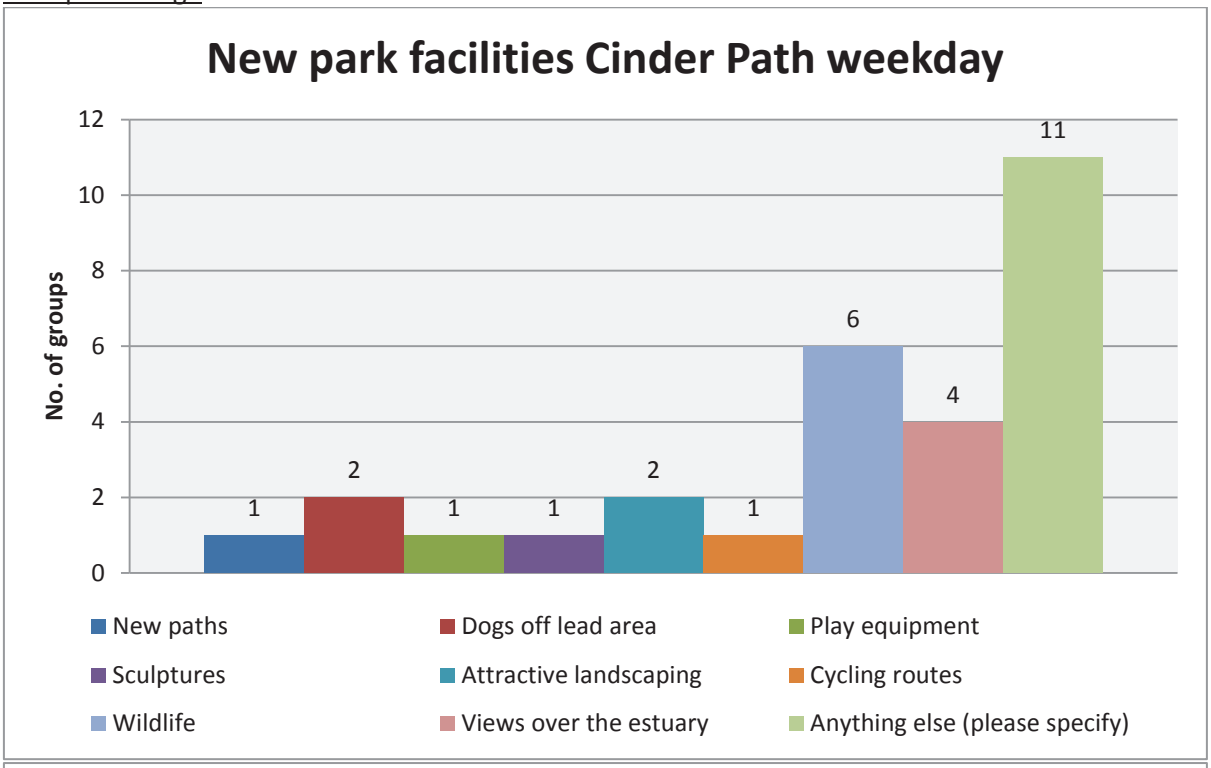



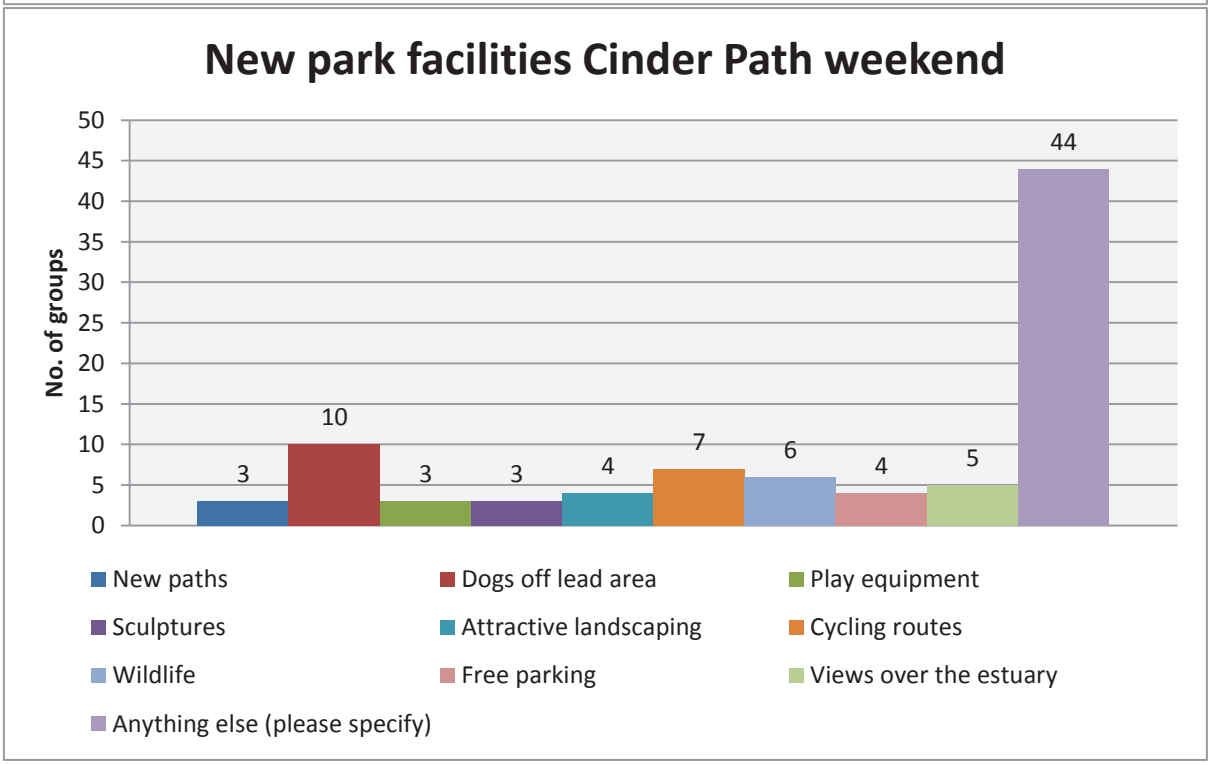
Plan visit in relation to the tide?



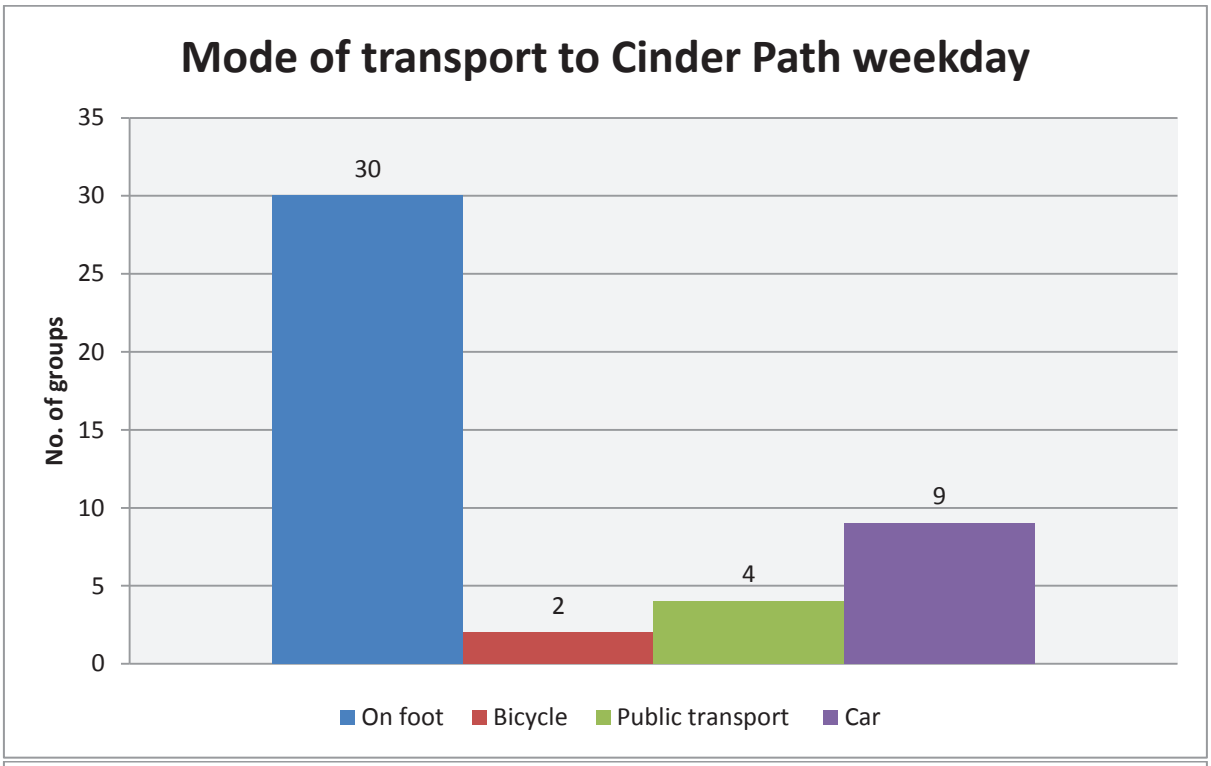



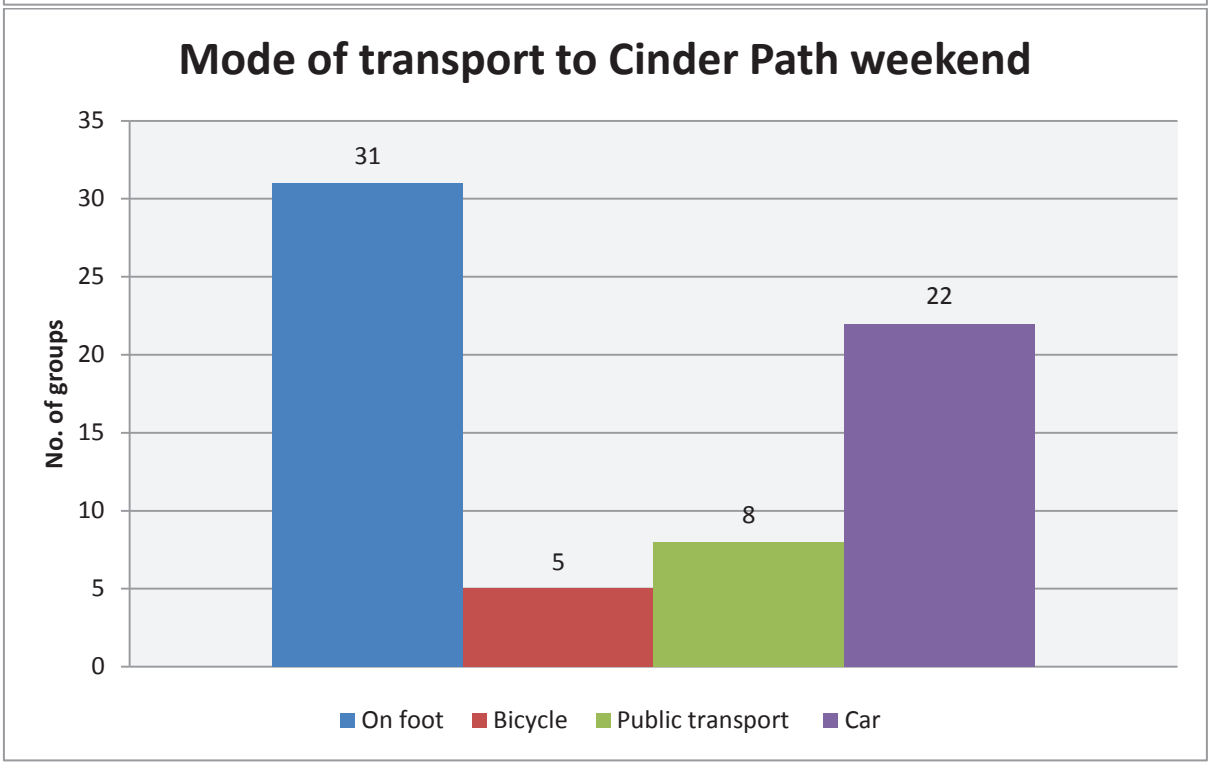
New park design



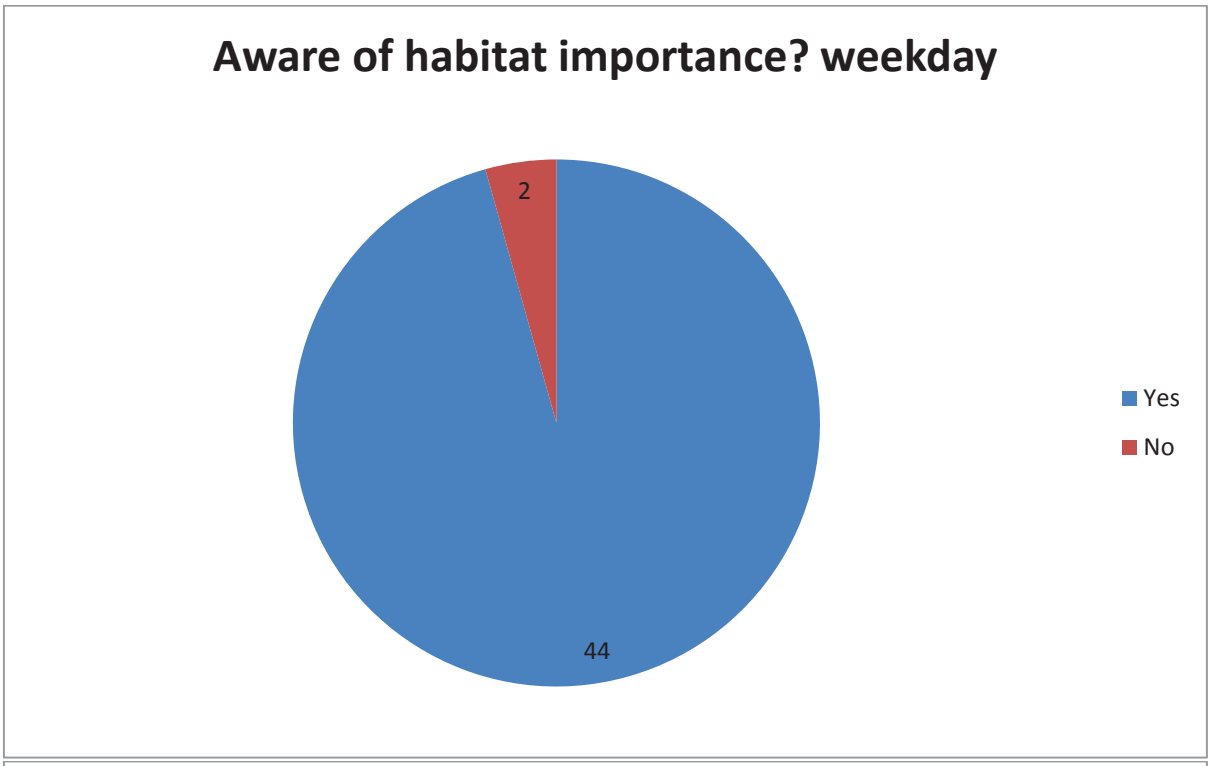



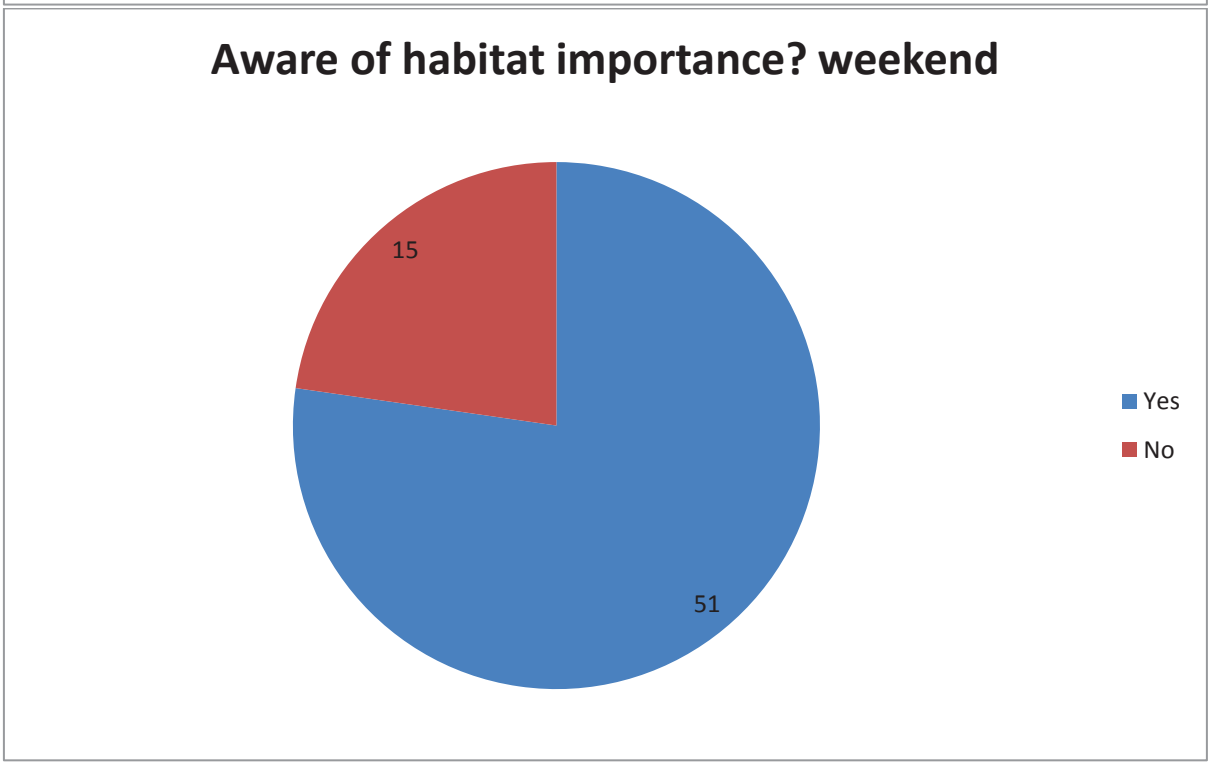
Mode of transport



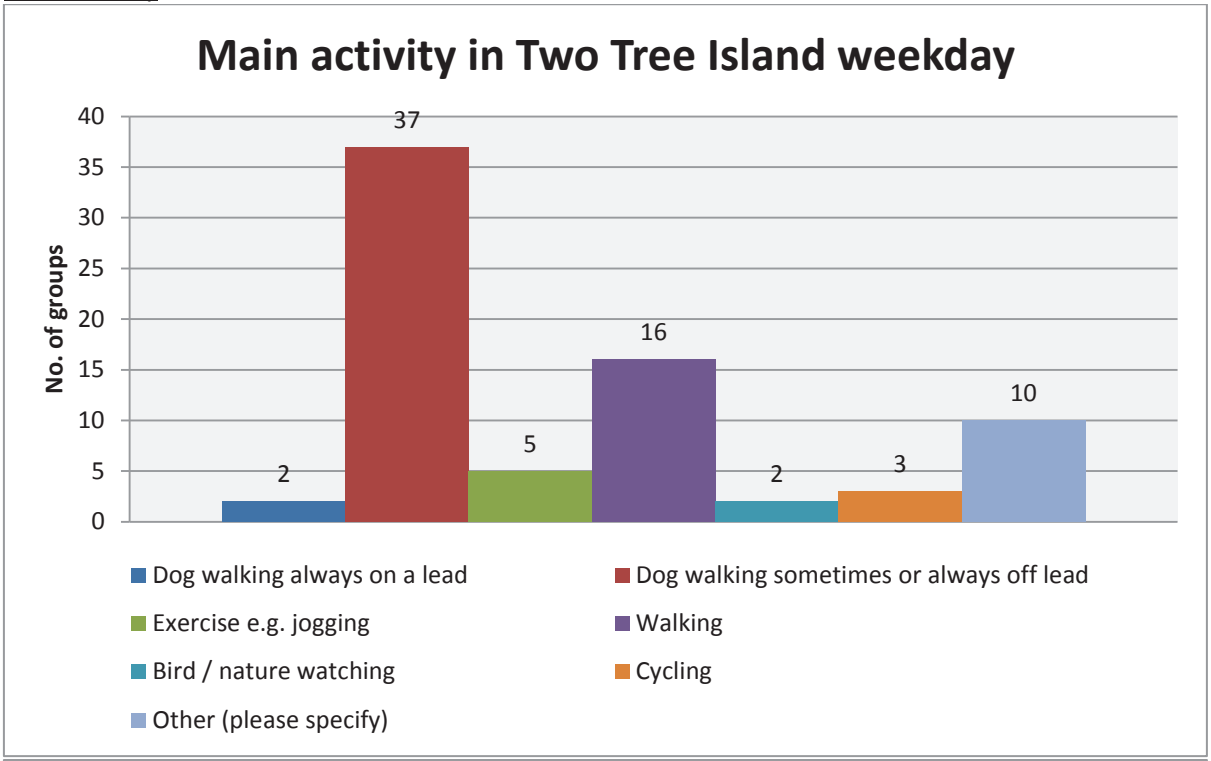



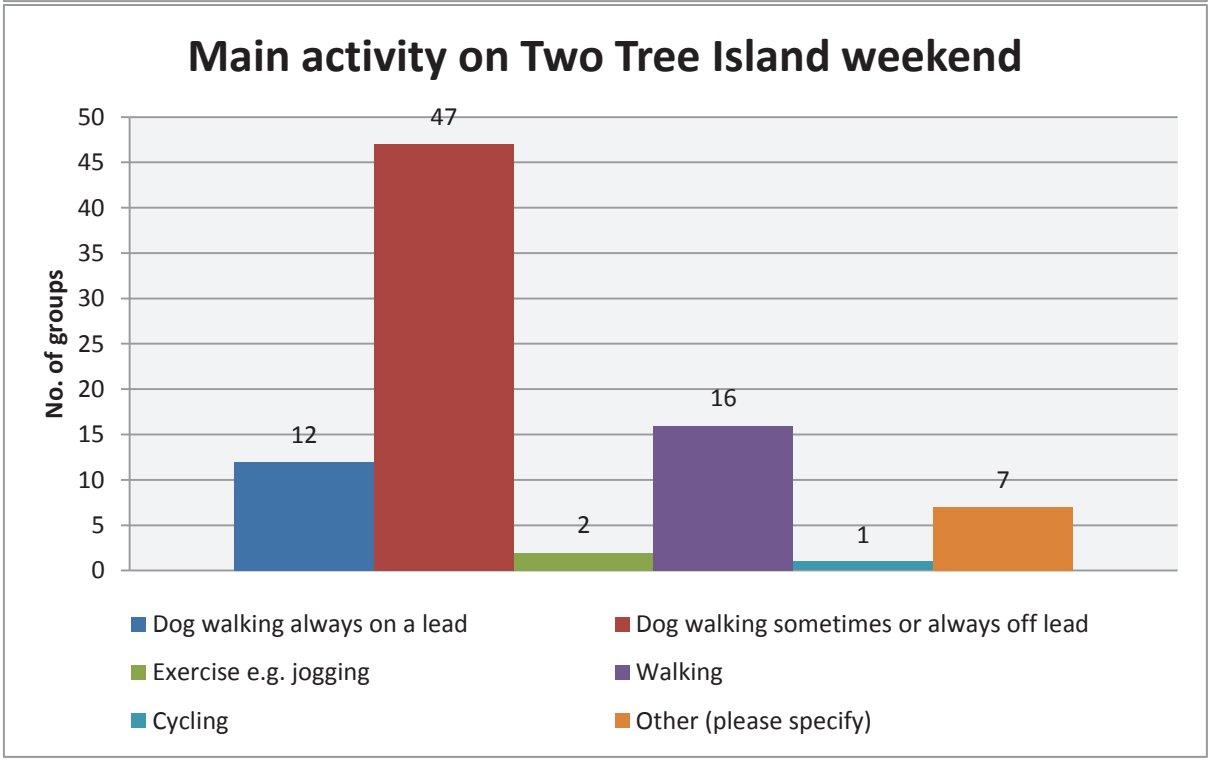

Aware of habitat importance


Aware of habitat importance? weekday
2
44
Yes
No

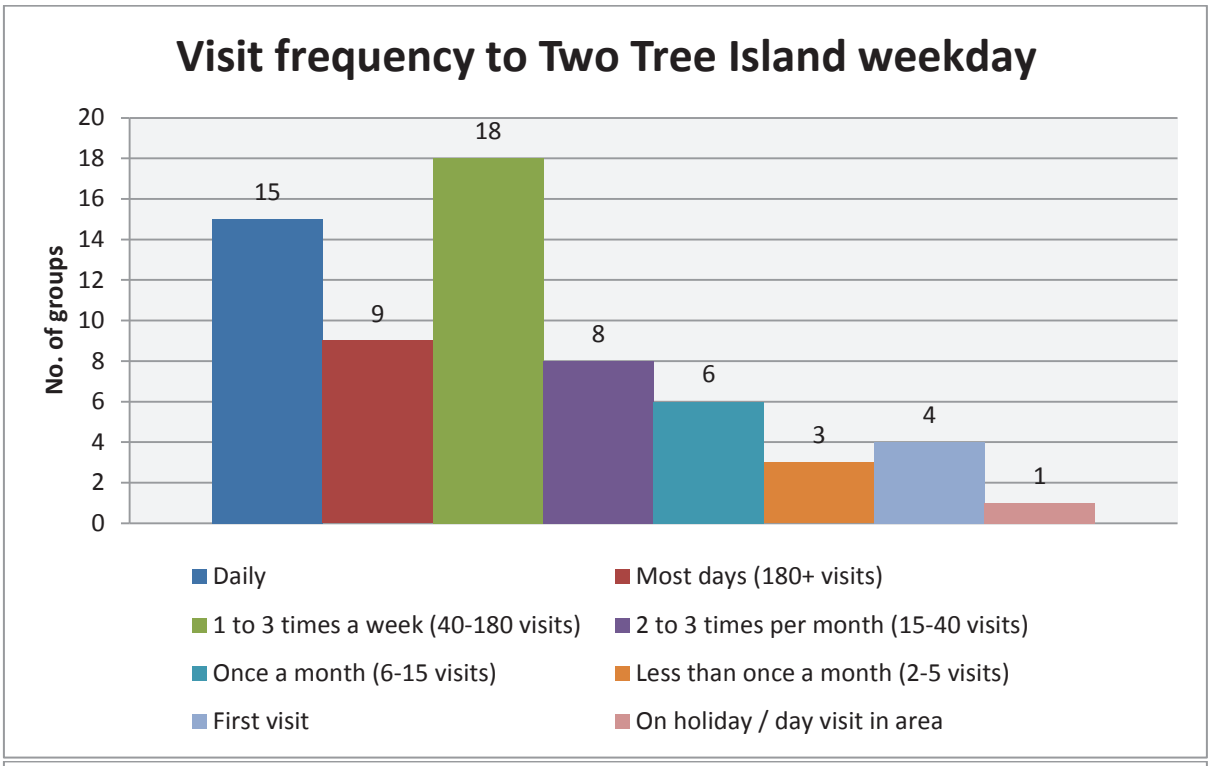

Aware of habitat importance? weekend
15
51
Yes
No

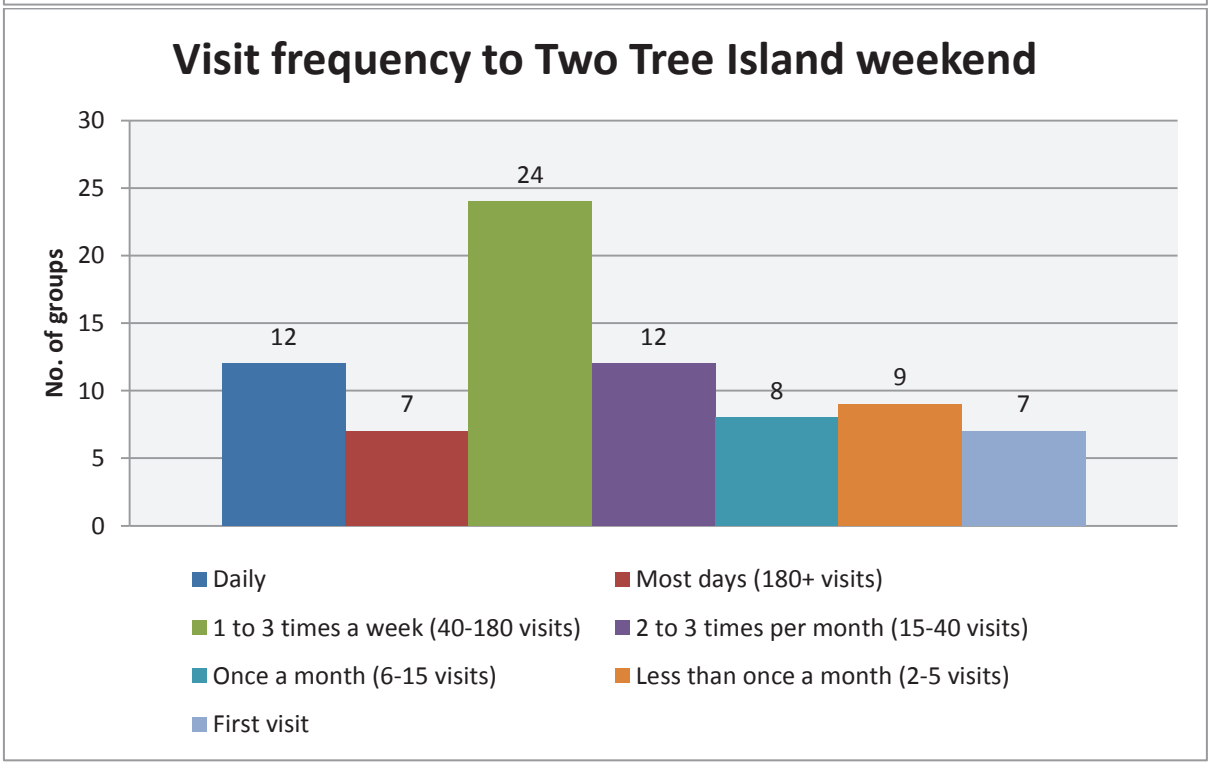
Two Tree Island
Main activity



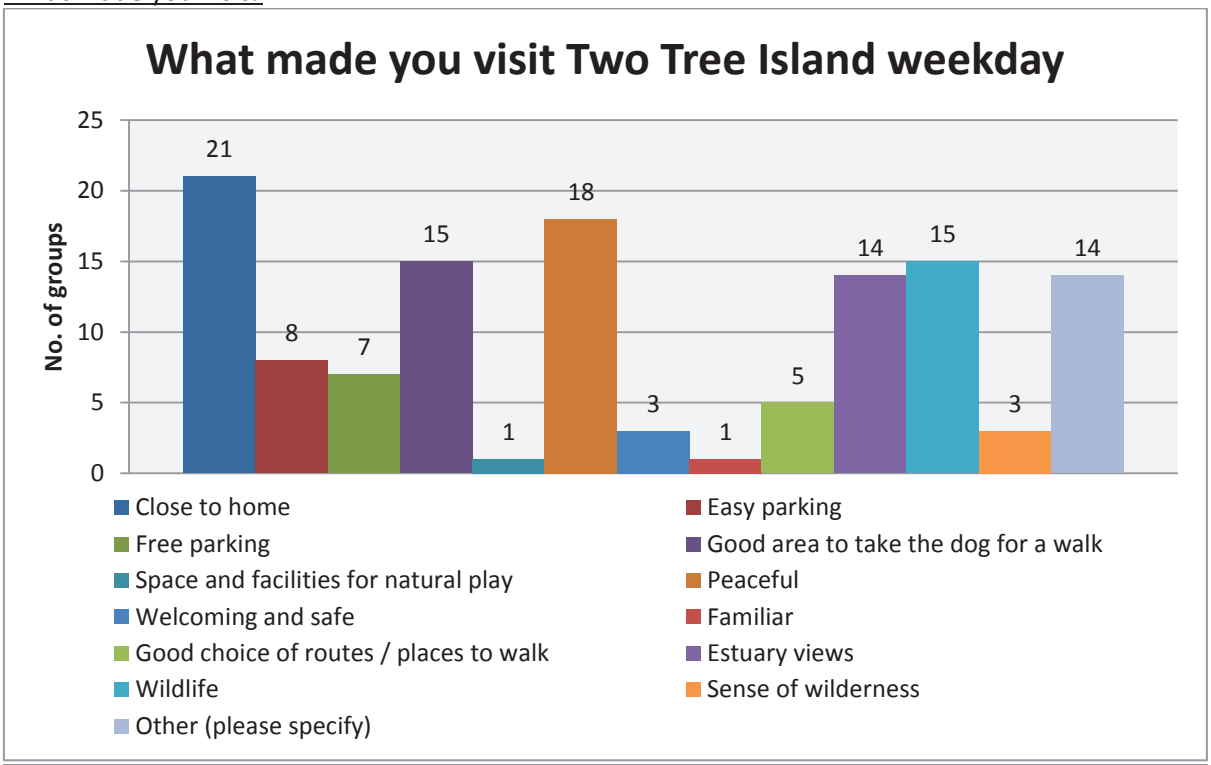



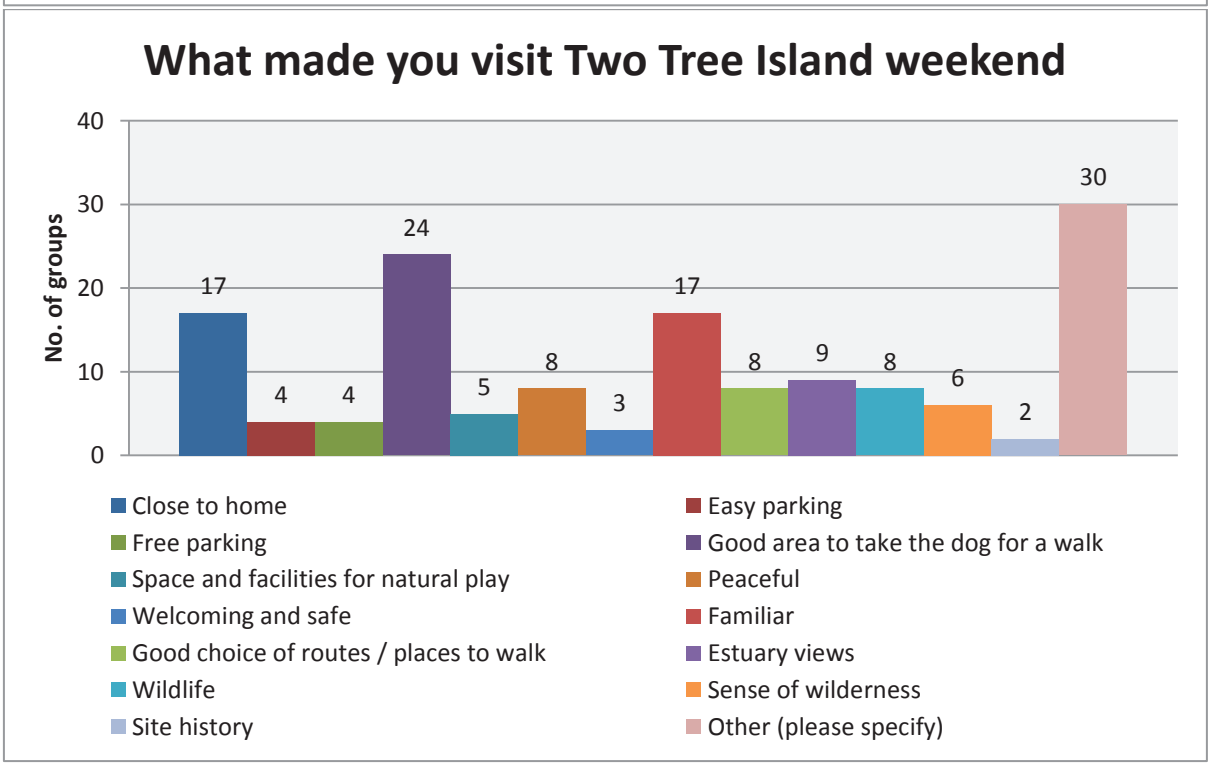

## Visit frequency


Visit frequency to Two Tree Island weekday
No. of groups
20
18
16
14
12
10
8
6
4
2
0
15
9
18
8
6
3
4
1
Daily
Most days (180+ visits)
1 to 3 times a week (40-180 visits)
2 to 3 times per month (15-40 visits)
Once a month (6-15 visits)
Less than once a month (2-5 visits)
First visit
On holiday / day visit in area

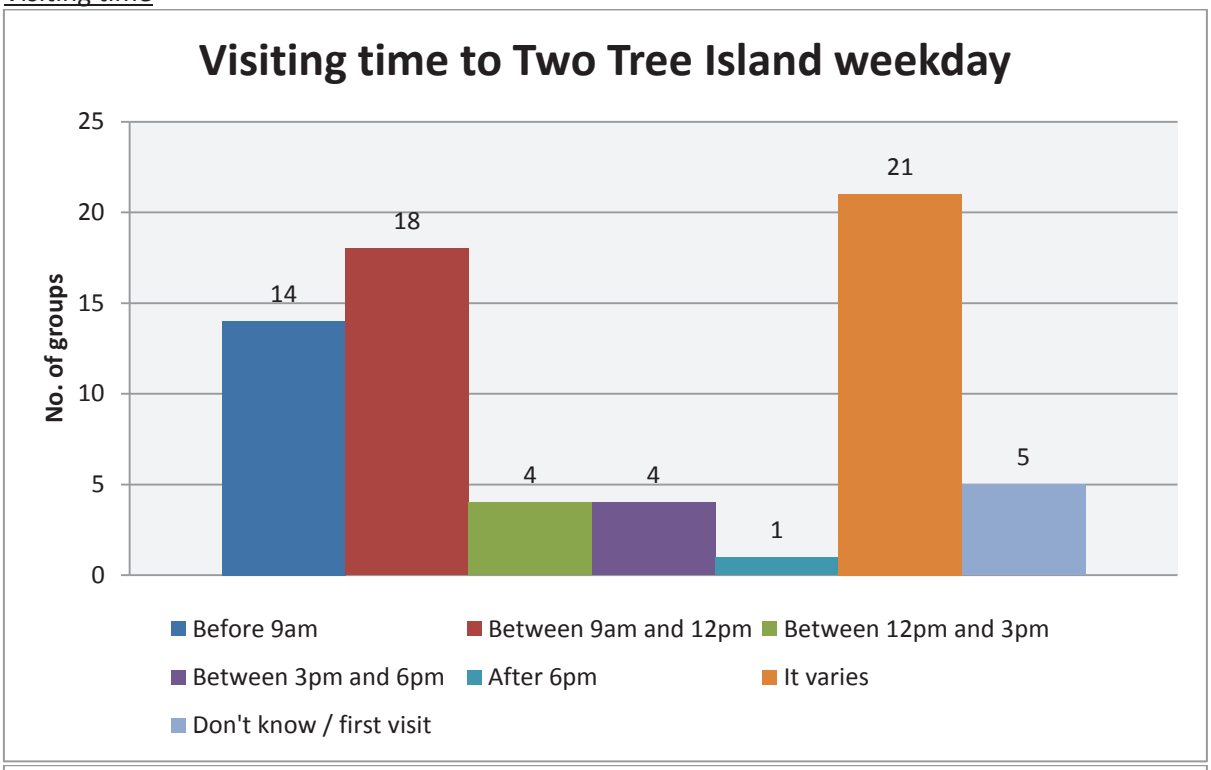

Visit frequency to Two Tree Island weekend
No. of groups
30
25
20
15
10
5
0
12
7
24
12
8
9
7
Daily
Most days (180+ visits)
1 to 3 times a week (40-180 visits)
2 to 3 times per month (15-40 visits)
Once a month (6-15 visits)
Less than once a month (2-5 visits)
First visit

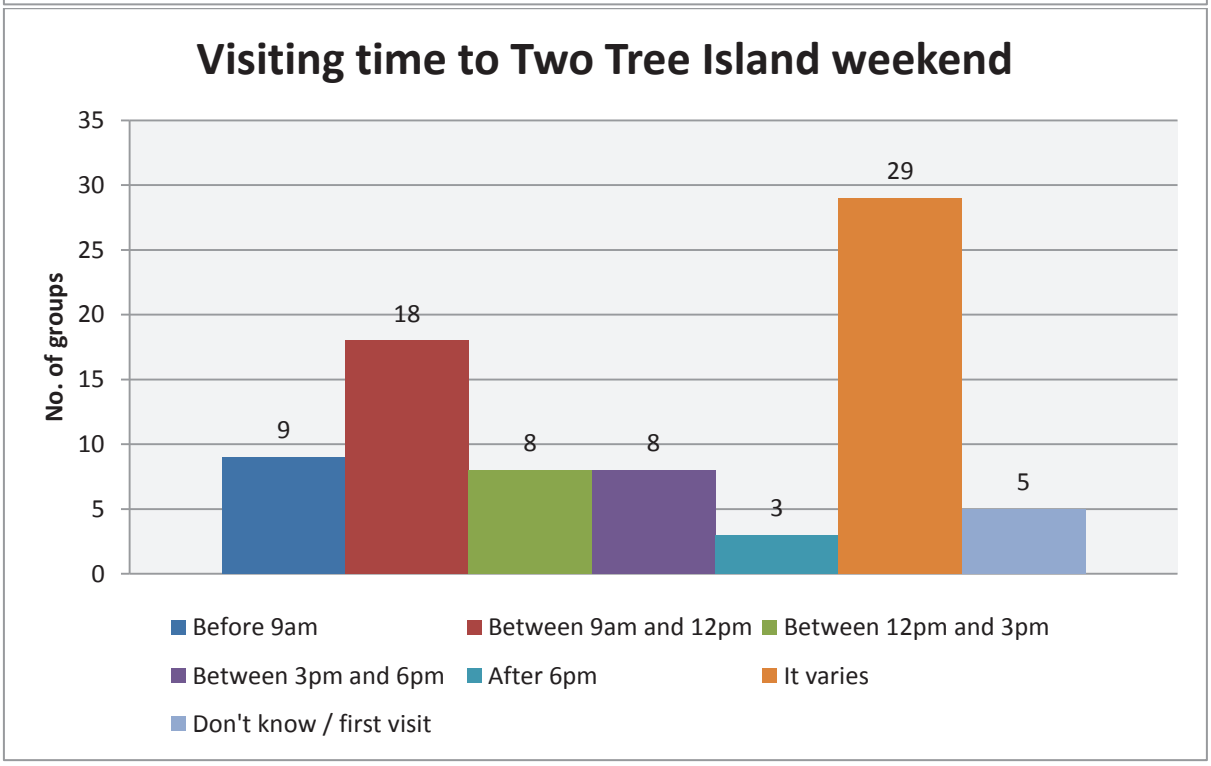
What made you visit?



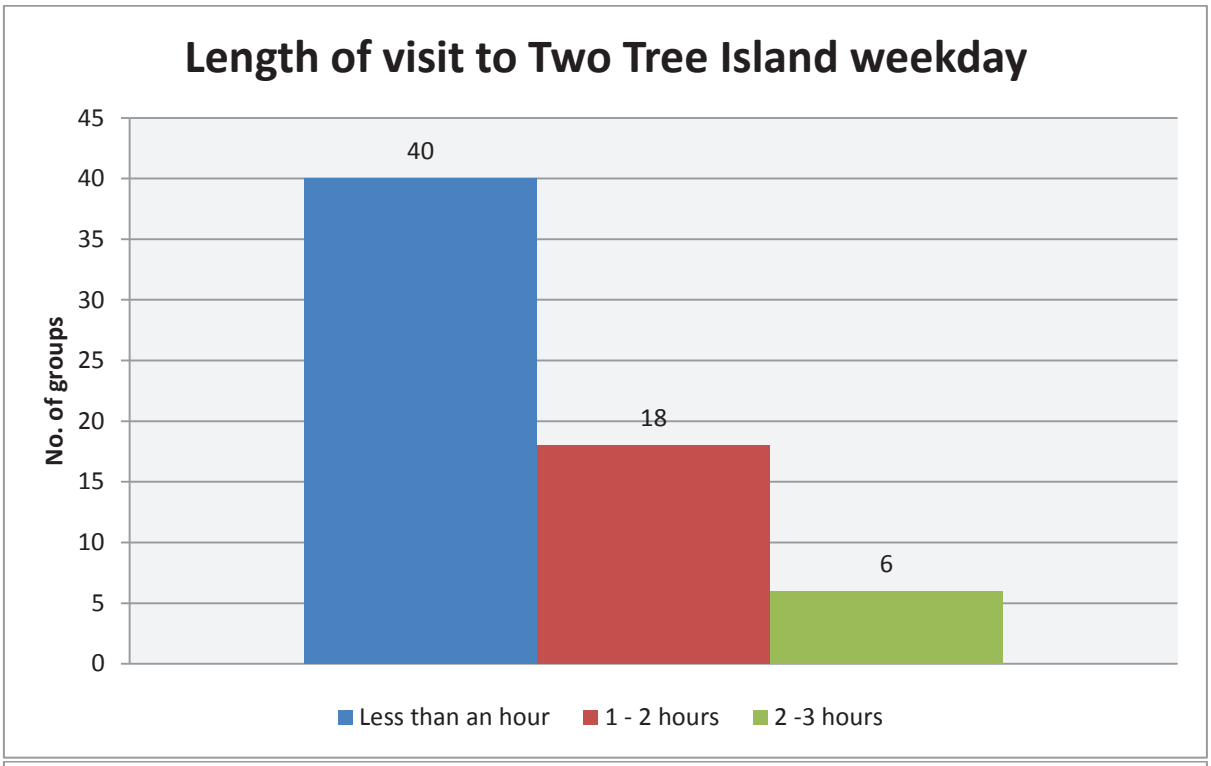



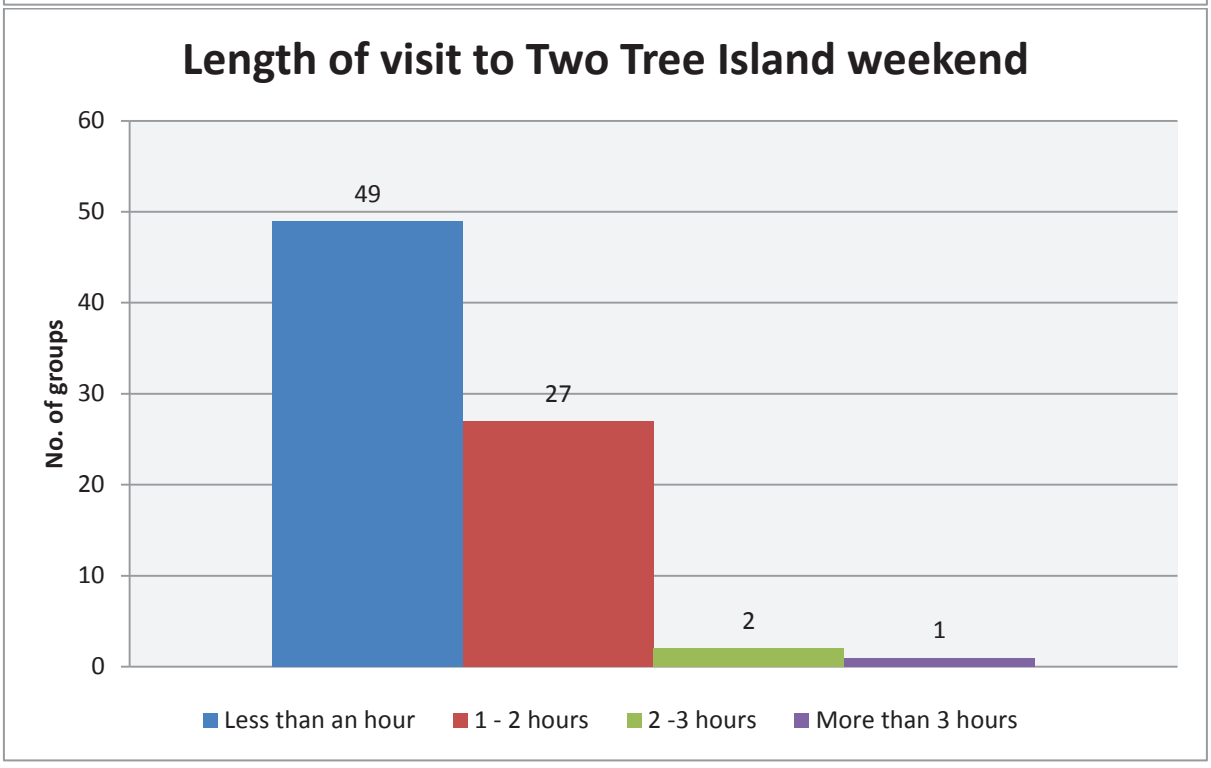
Visiting time



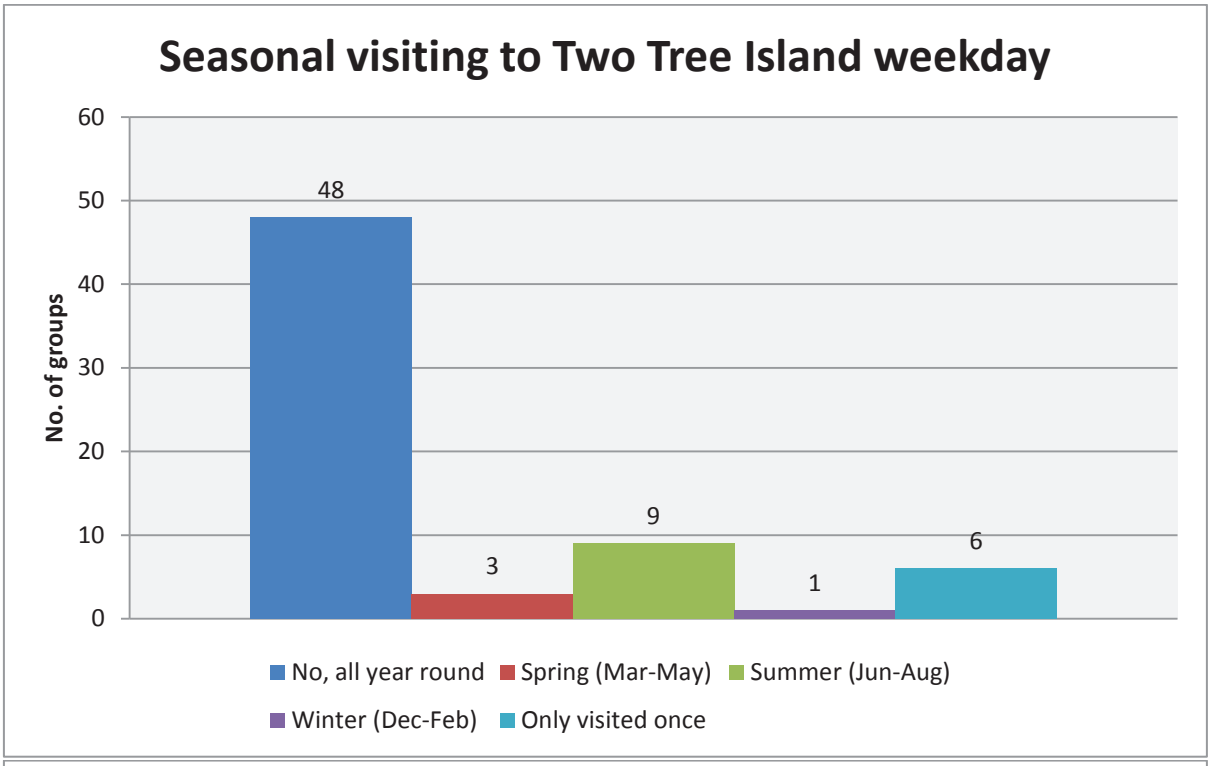



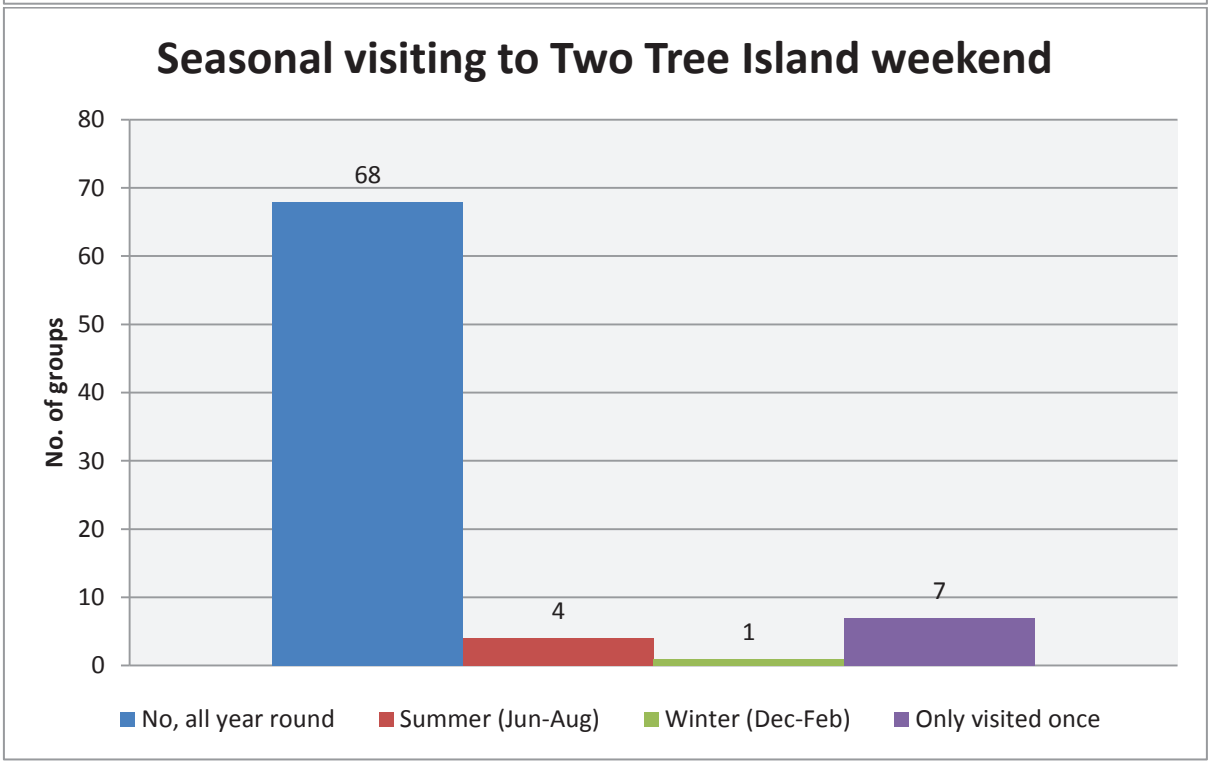
Length of visit



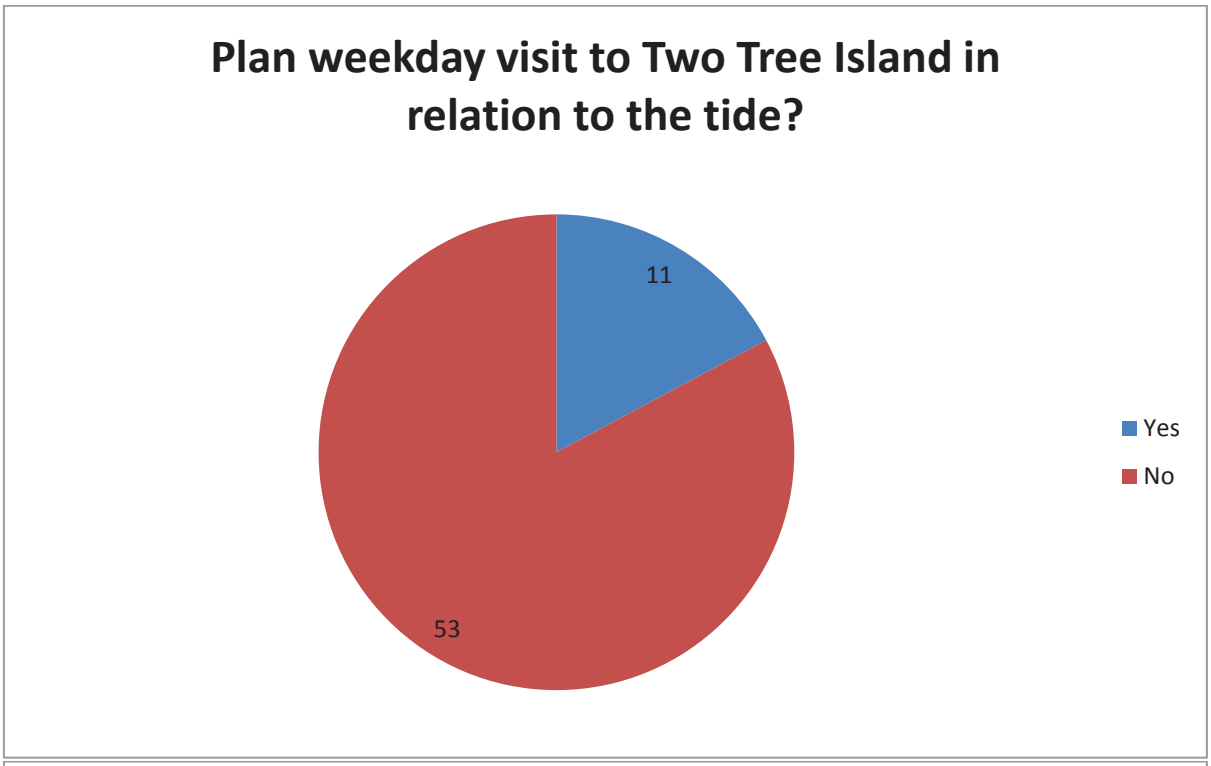



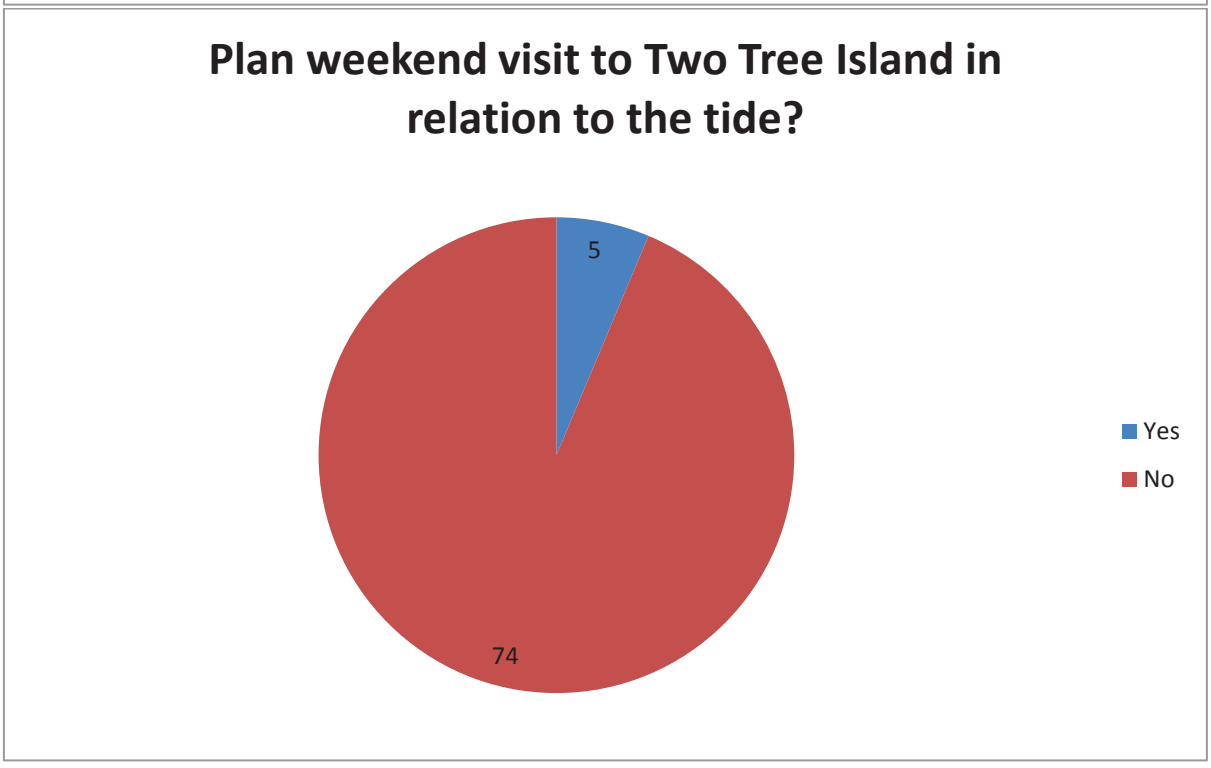
Seasonal visiting



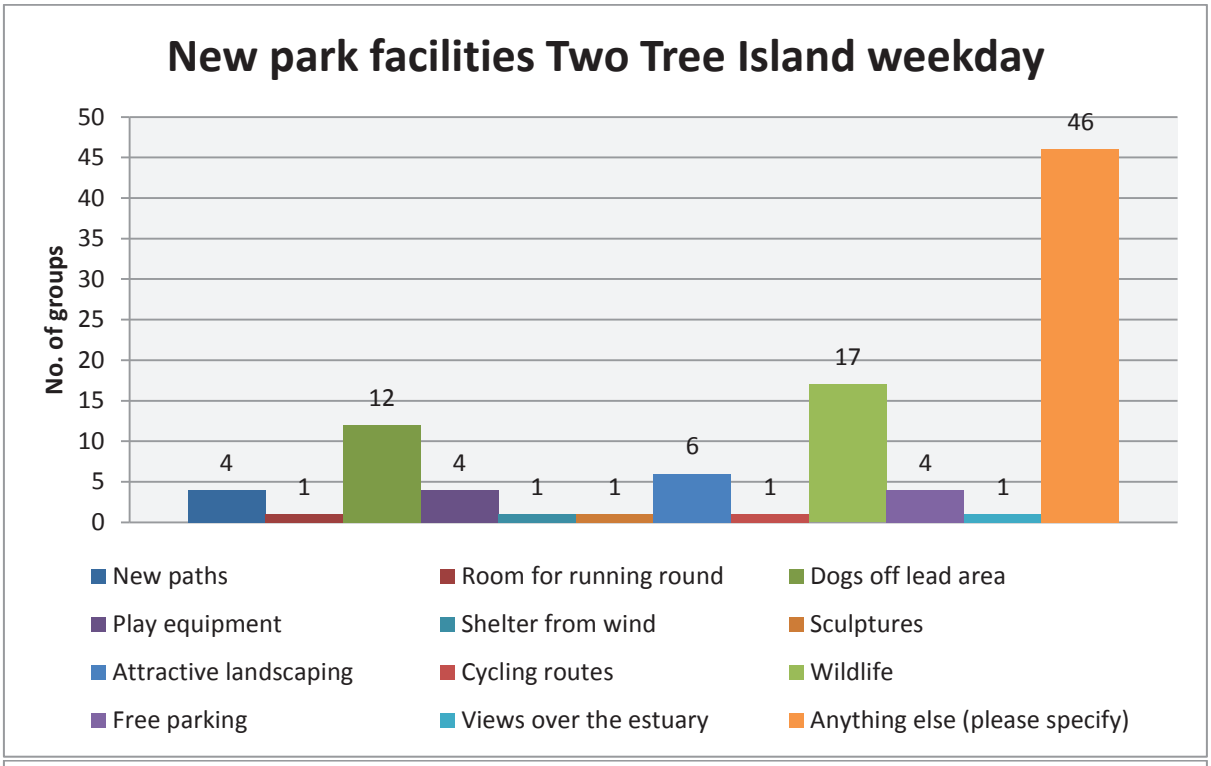



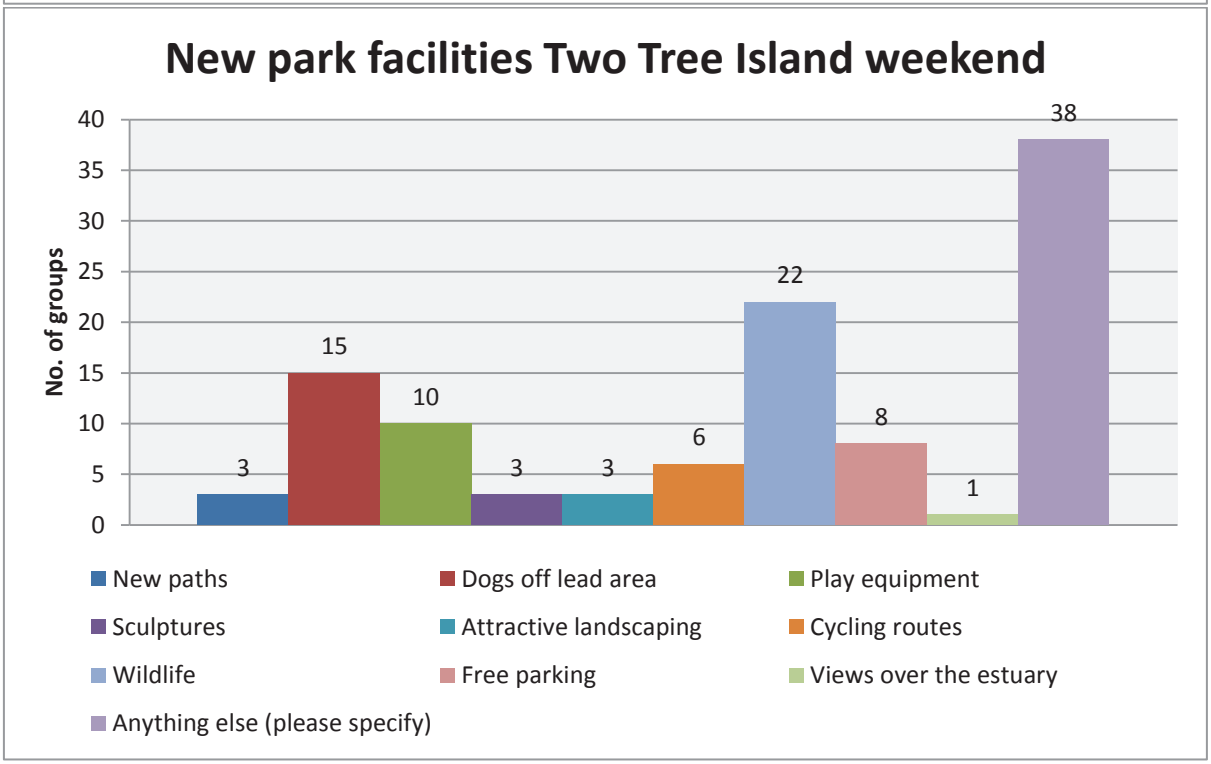
Plan visit in relation to the tide?



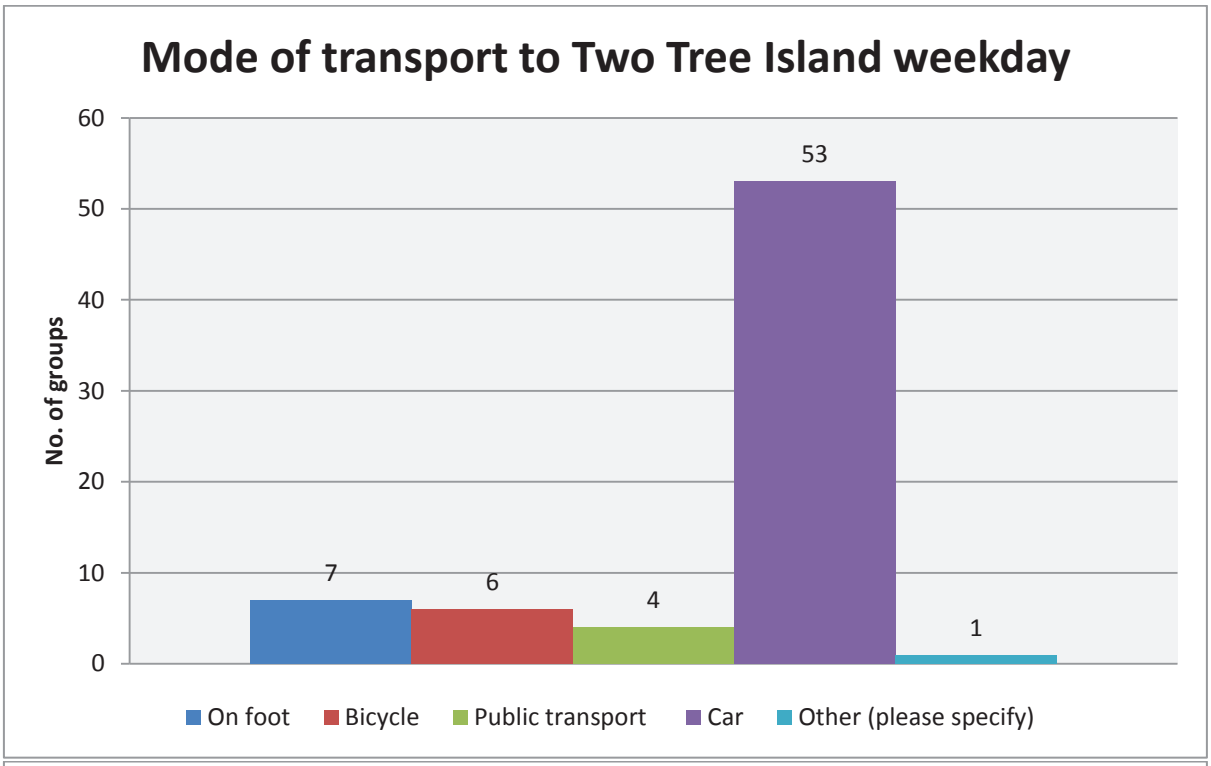



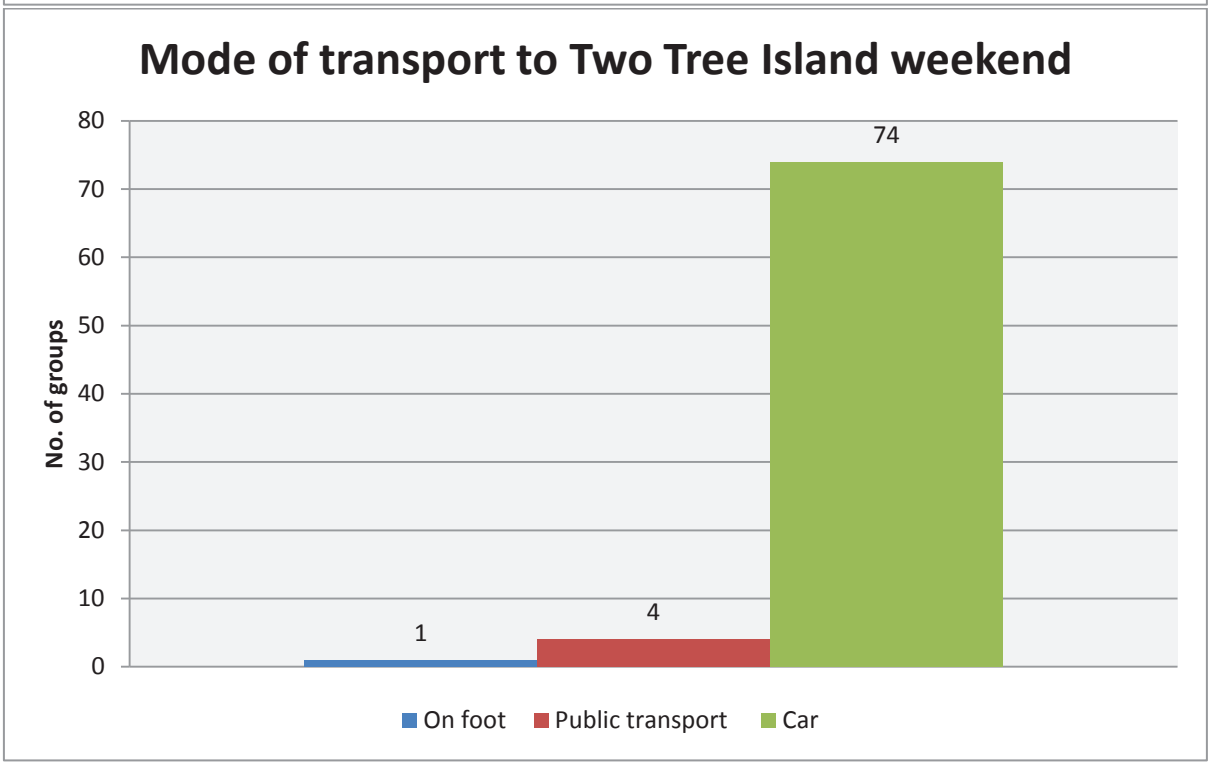
New park design



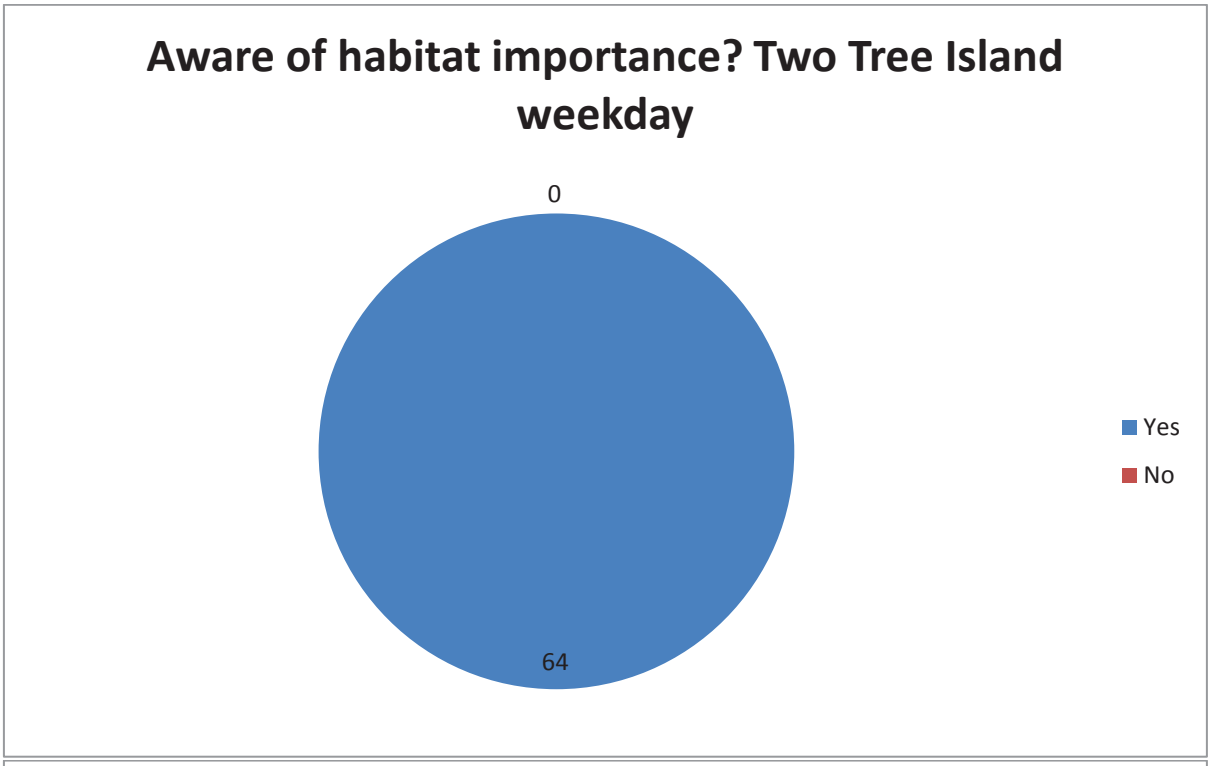



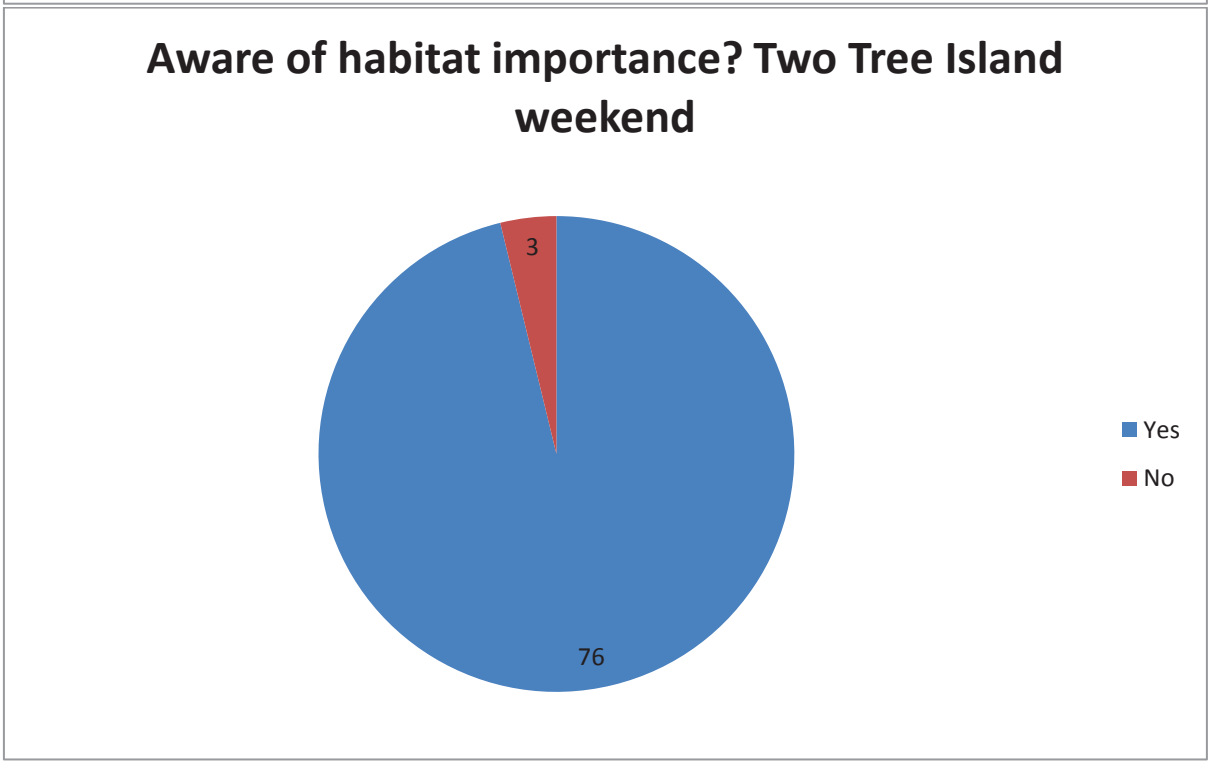
Mode of transport



Aware of habitat importance



## Appendix 6: Summer Survey Results

**Table A6.1: Number of survey responses per survey site**

| SPA | Site | Weekday | Weekend | Total |
|---|---|---|---|---|
| Blackwater Estuary | Bradwell Marina | 7 | 19 | 26 |
| | Tollesbury Wick | 16 | 38 | 54 |
| | Total | 23 | 57 | 80 |

**Table A6.2: Passers-by and water activity per survey site**

| SPA | Site | Weekday | | Weekend | | Total | |
|---|---|---|---|---|---|---|---|
| | | Passers-by | Water activity | Passers-by | Water activity | Passers-by | Water activity |
| Blackwater Estuary | Bradwell Marina | 17 * | 15 | 13 | 71 | 30 | 86 |
| | Tollesbury Wick | 0 | 7 | 20 | 25 | 20 | 32 |
| | Total | 17 | 22 | 33 | 96 | 50 | 118 |

* includes 12 cyclists

**Table A6.3: Dates of summer surveys**

| Survey site | Weekday | Weekend |
|---|---|---|
| Bradwell Marina | 24.05.2018 | 20.05.2018 |
| Tollesbury Wick | 31.05.2018 | 06.06.2018 |

Type of disturbance and bird responses

Response types

- No Response: no change in behaviour recorded at all
- Alert: birds become alert, changing behaviour (i.e. stopping feeding or standing alert if roosting)
- Walk/Swim: moving away from the source of disturbance without taking flight
- Minor Flight: short flights of less than 50m
- Major Flight: birds flushed and flying more than 50m

- Mobbing: applies to situations where birds believed to be nesting were repeatedly alarm calling and/or mobbing or undertaking distraction displays, suggesting that the disturbance was around the nest and/or chicks.

The tables below are the questionnaire results from the sites listed. The questionnaires were recorded both on a weekday and weekend.

**Table A6.4: Bradwell Marina weekday**

| Activity | Amount witnessed | Amount of birds disturbed | Response type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | No response | Alert | Walk/Swim | Minor flight | Major flight | Mobbing |
| Passers by | 17 (includes 12 cyclists) | 0 | | | | | | |
| Cycling | 12 | 0 | | | | | | |
| Motorboat | 5 | 0 | | | | | | |
| Sailing boat | 10 | 0 | | | | | | |
| Quad bike | 1 | 0 | | | | | | |

**Table A6.5: Bradwell Marina weekend**

| Activity | Amount witnessed | Amount of birds disturbed | Response type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | No response | Alert | Walk/Swim | Minor flight | Major flight | Mobbing |
| Passers by | 9 | 0 | | | | | | |
| Jogging | 1 | 0 | | | | | | |

| Activity | Amount witnessed | Amount of birds disturbed | Response type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | No response | Alert | Walk/Swim | Minor flight | Major flight | Mobbing |
| Cycling | 4 | 0 | | | | | | |
| Jet ski | 10 | 1 | | | | | 1 | |
| Speed boat | 4 | 0 | | | | | | |
| Kayaking | 2 | 0 | | | | | | |
| Sailing boat | 21 | 2 | | | | 2 | | |
| Motorboat | 34 | 11 | | | 4 | 6 | 1 | |

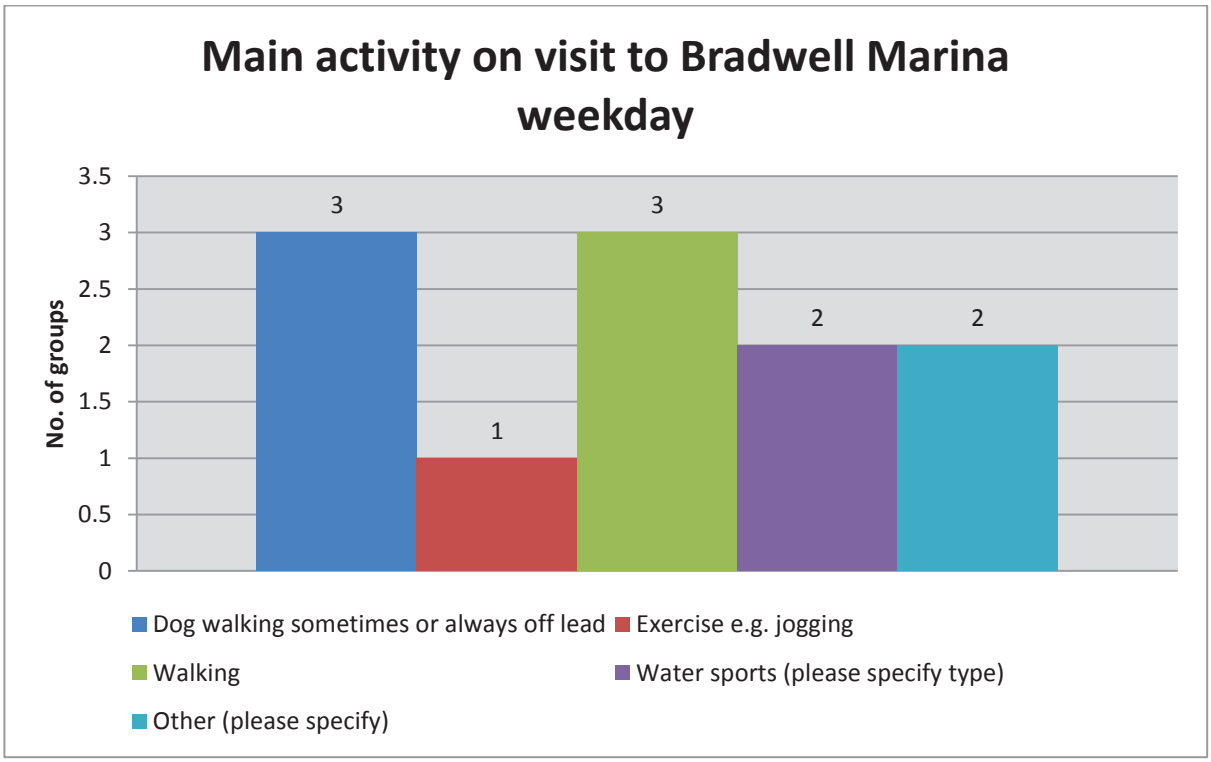
**Table A6.6: Tollesbury Wick weekday**

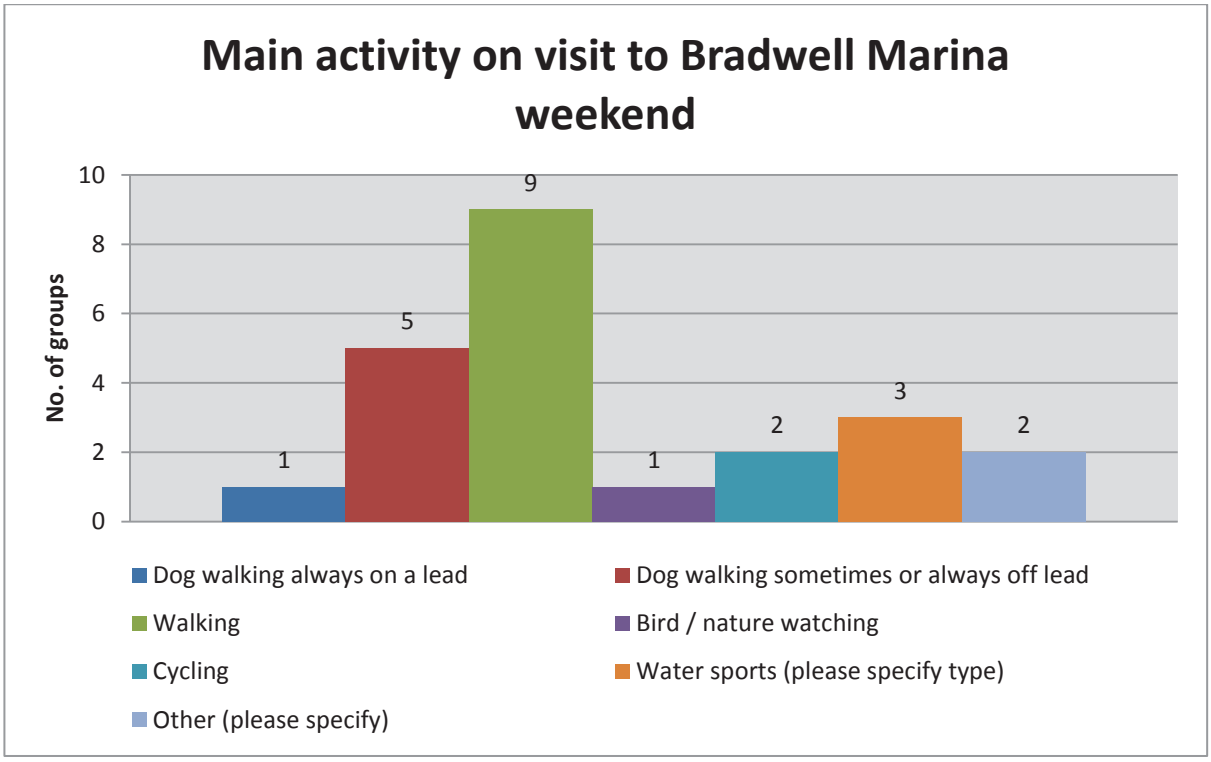
| Activity | Amount witnessed | Amount of birds disturbed | Response type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | No response | Alert | Walk/Swim | Minor flight | Major flight | Mobbing |
| Sailing boat | 7 | 0 | | | | | | |
| Passers by | 0 | 0 | | | | | | |

**Table A6.7: Tollesbury Wick weekend**

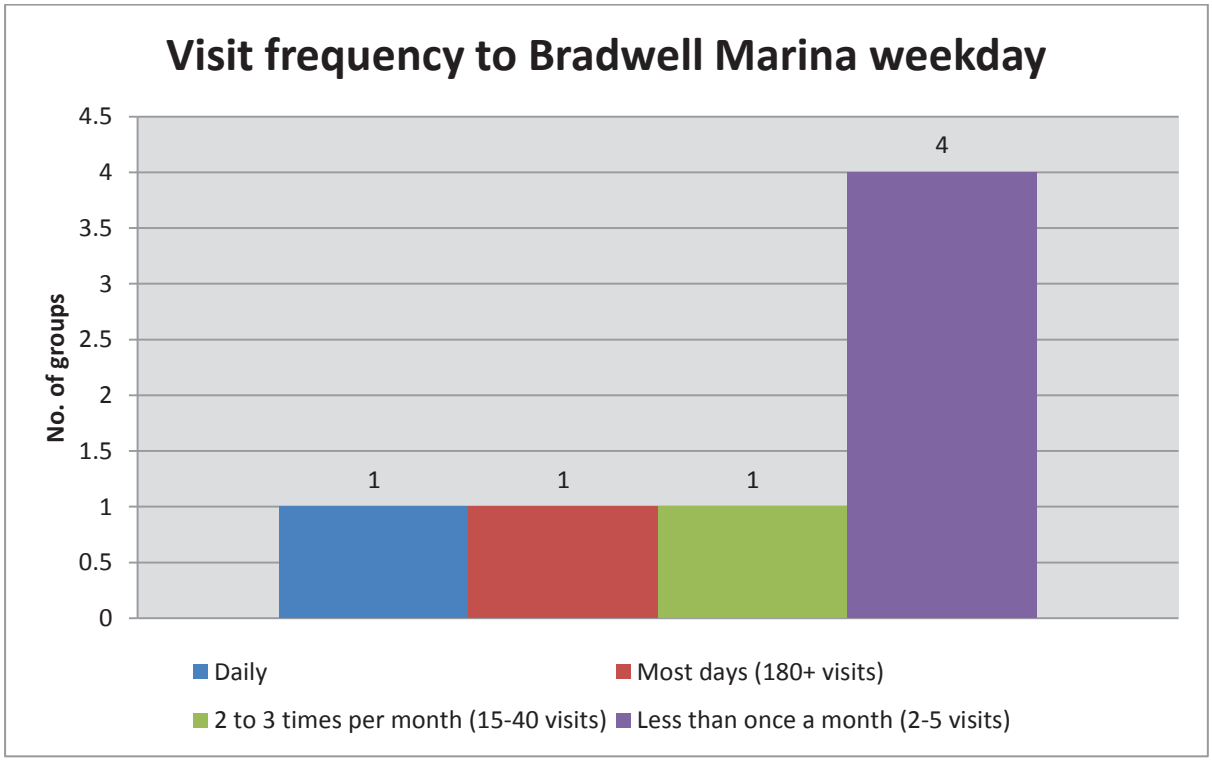
| Activity | Amount witnessed | Amount of birds disturbed | Response type | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | No response | Alert | Walk/Swim | Minor flight | Major flight | Mobbing |
| Yacht | 14 | 0 | | | | | | |
| Motorboats | 8 | 0 | | | | | | |
| Kayaks | 3 | 0 | | | | | | |
| Passers by | 20 | 0 | | | | | | |

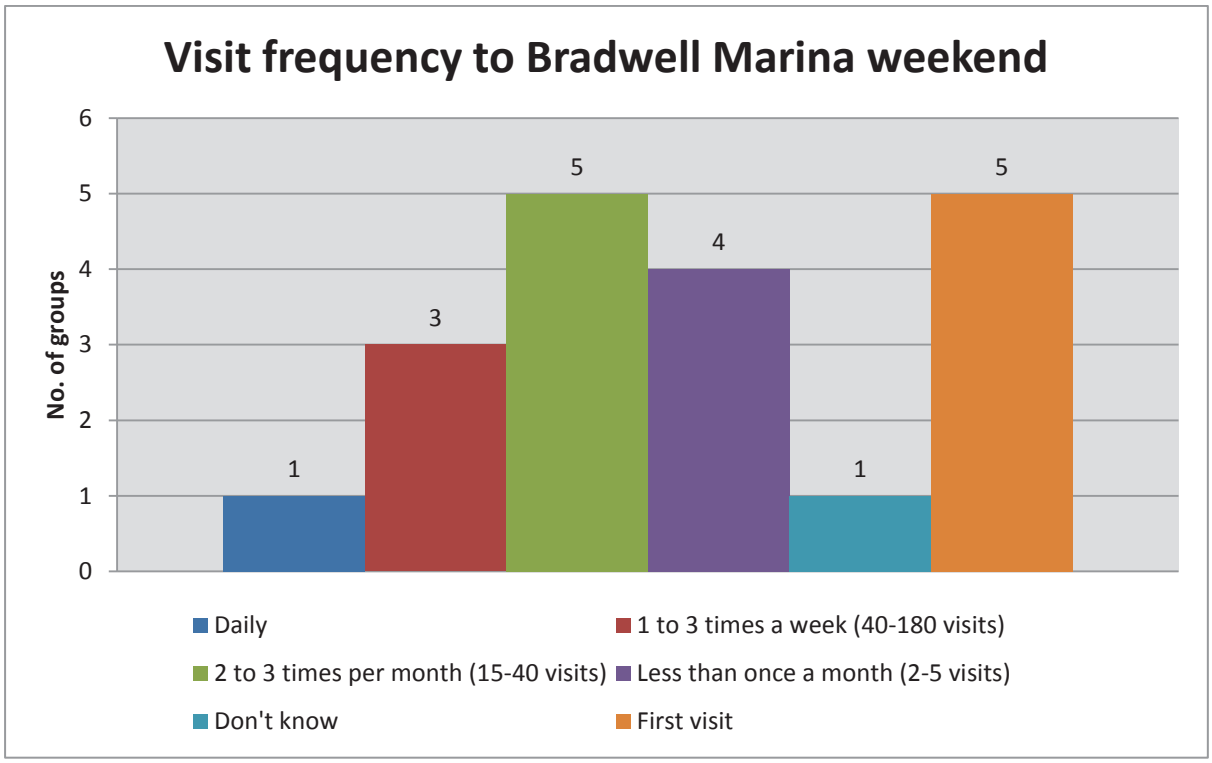
**Figures A6.1- A6.2: Graphs showing results for main activity**



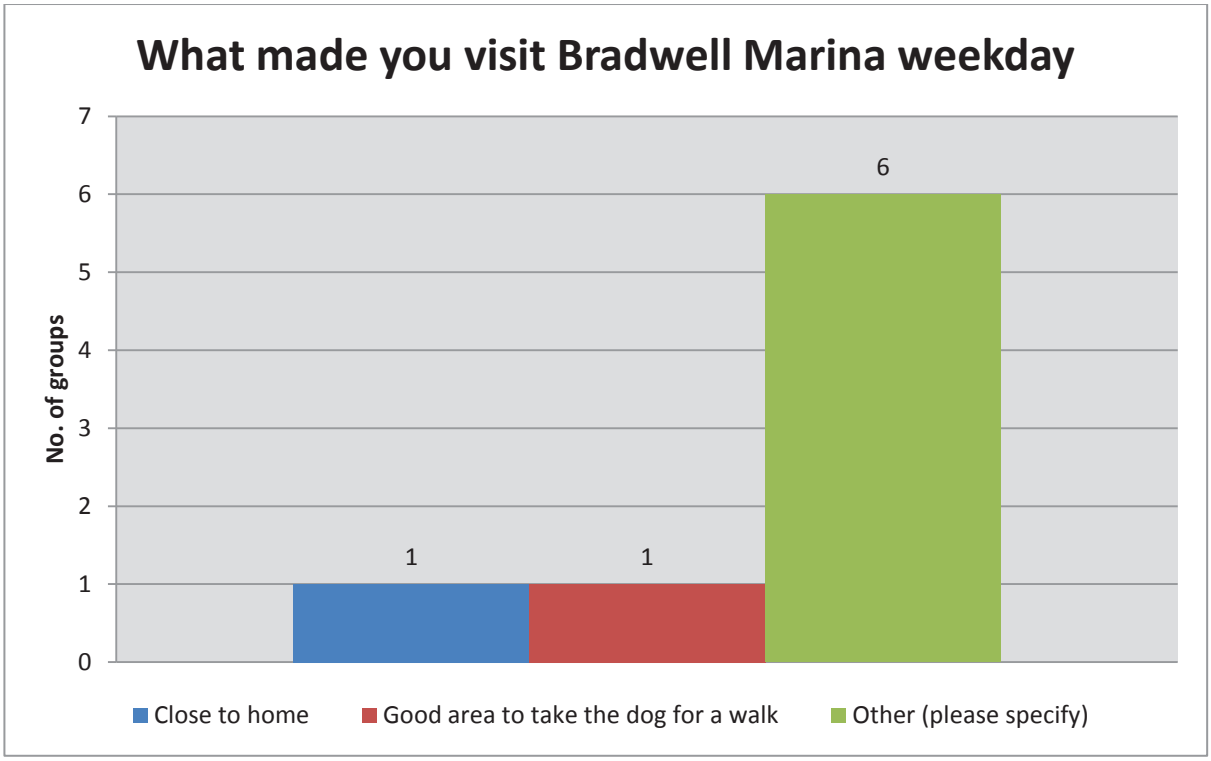



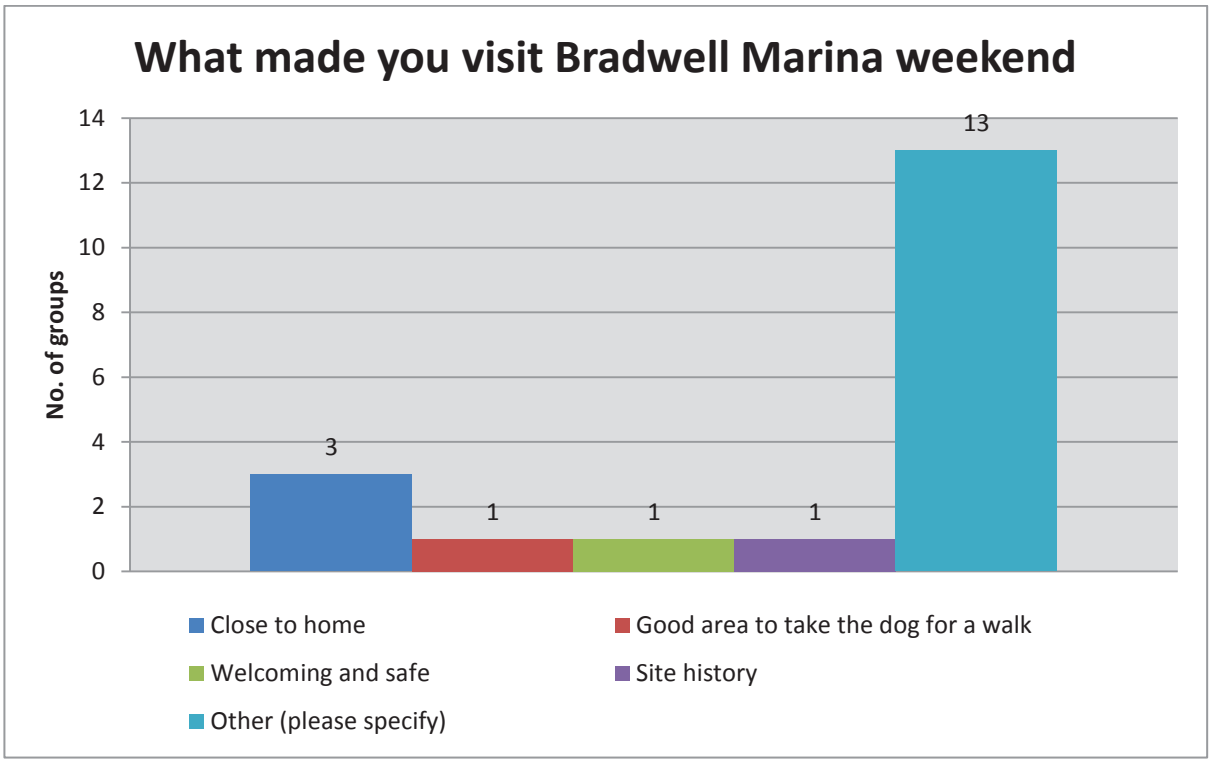
**Figures A6.3- A6.4: Graphs showing results for visit frequency**



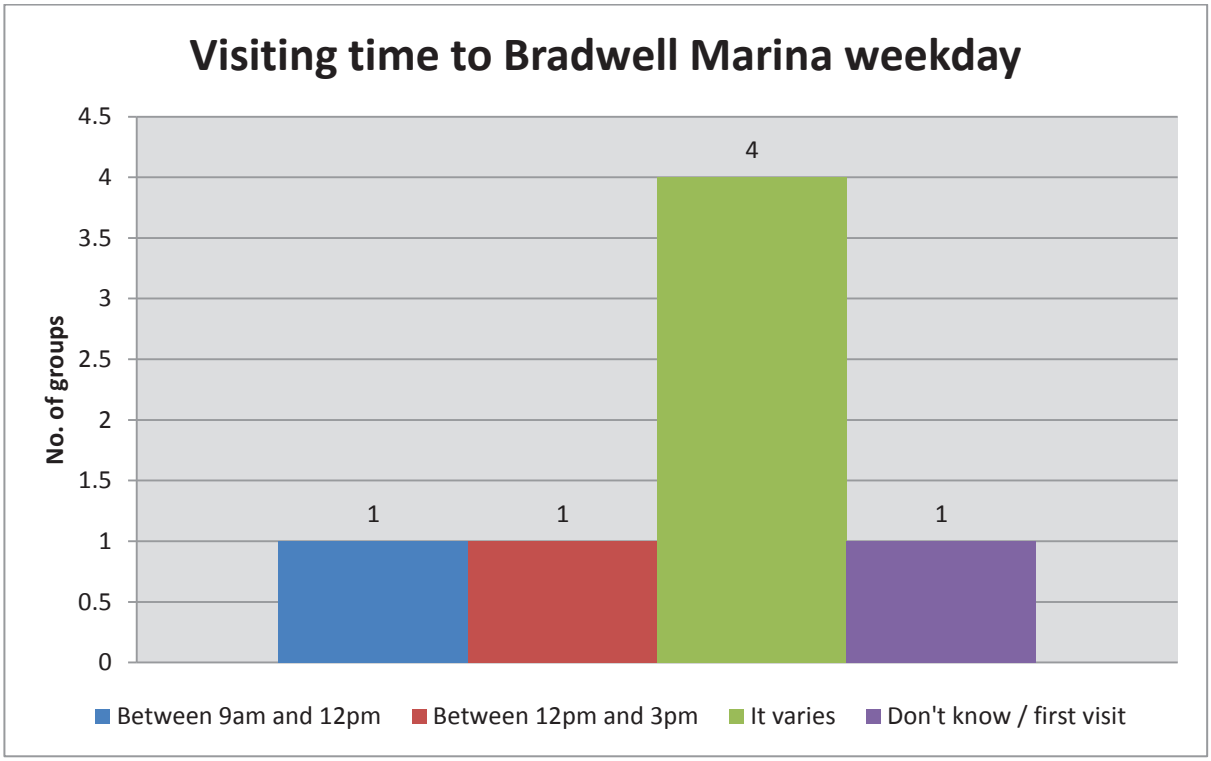



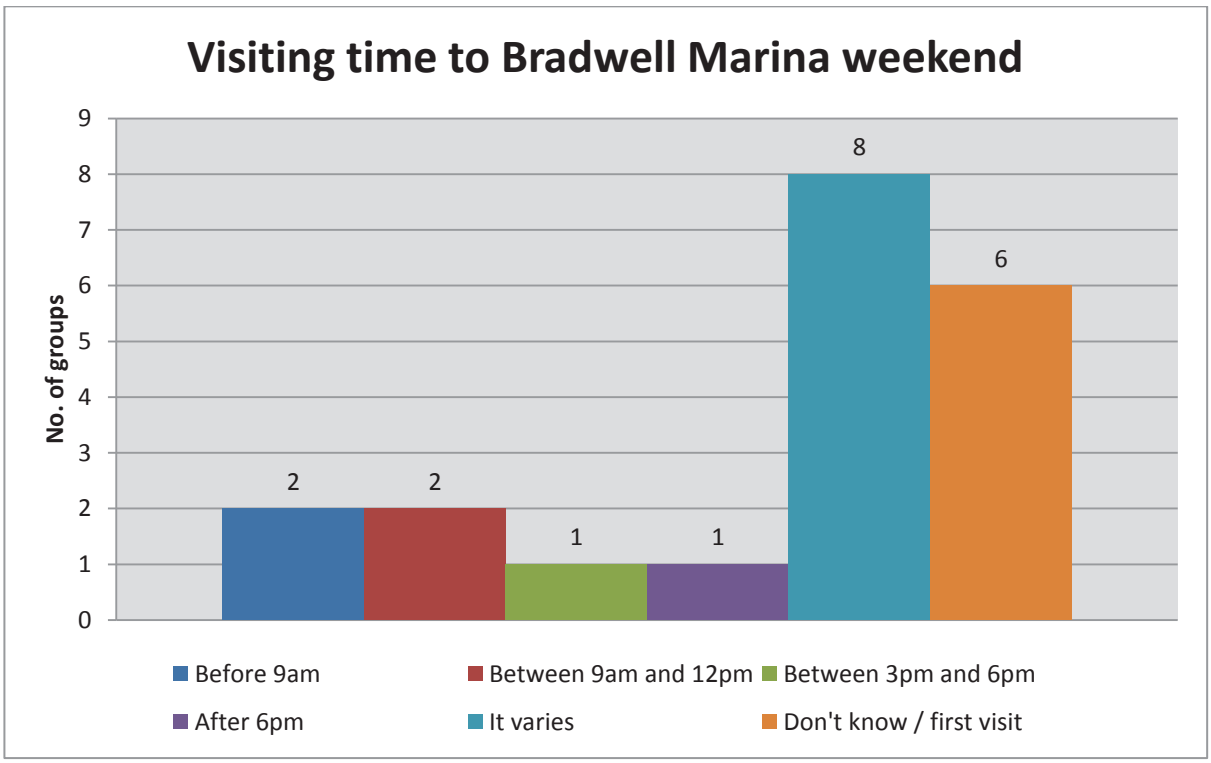
**Figures A6.5- A6.6: Graphs showing results for question 'What made you visit?'**



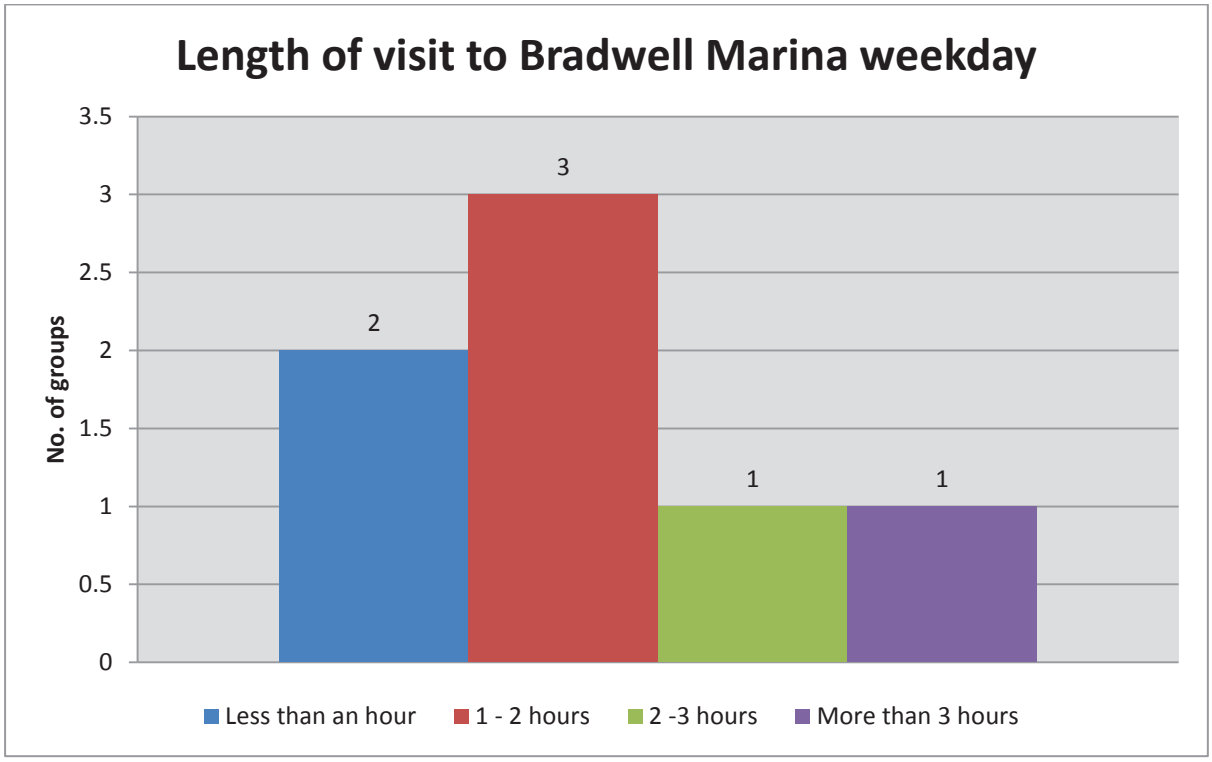



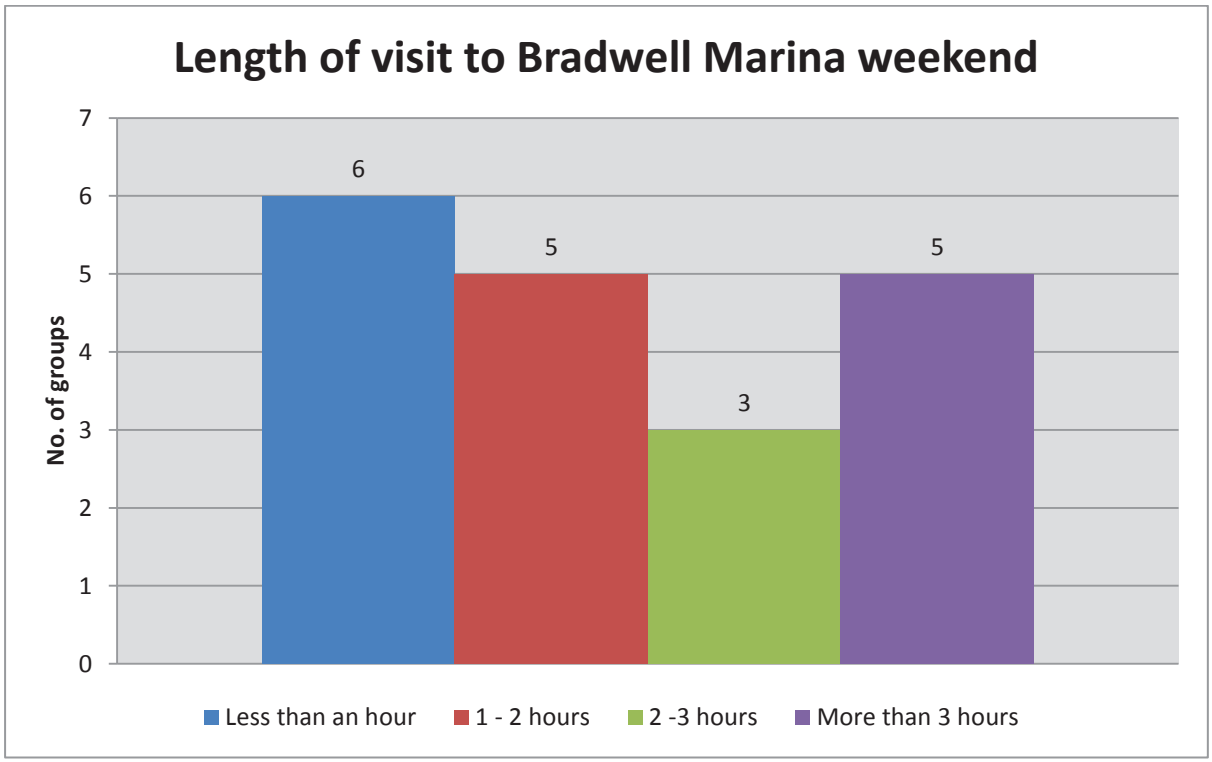
**Figures A6.7- A6.8: Graphs showing results for visiting time**



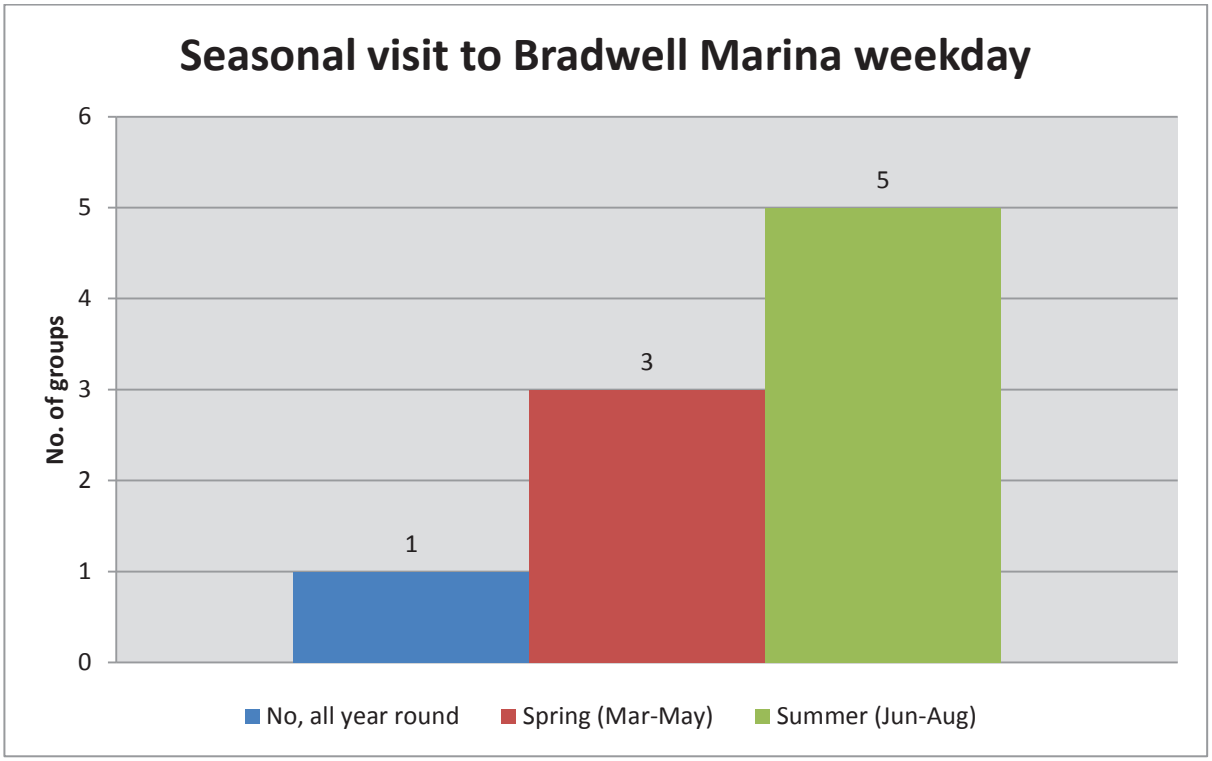



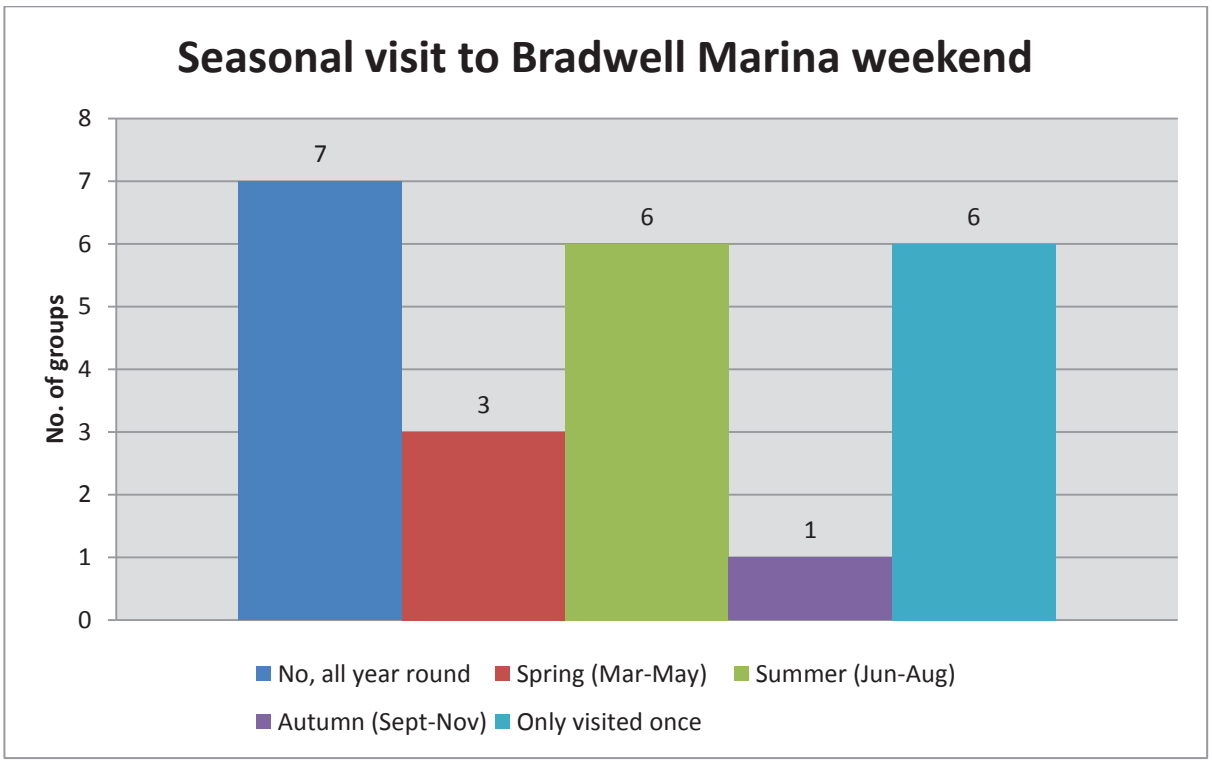
**Figures A6.9- A6.10: Graphs showing results for length of visit**



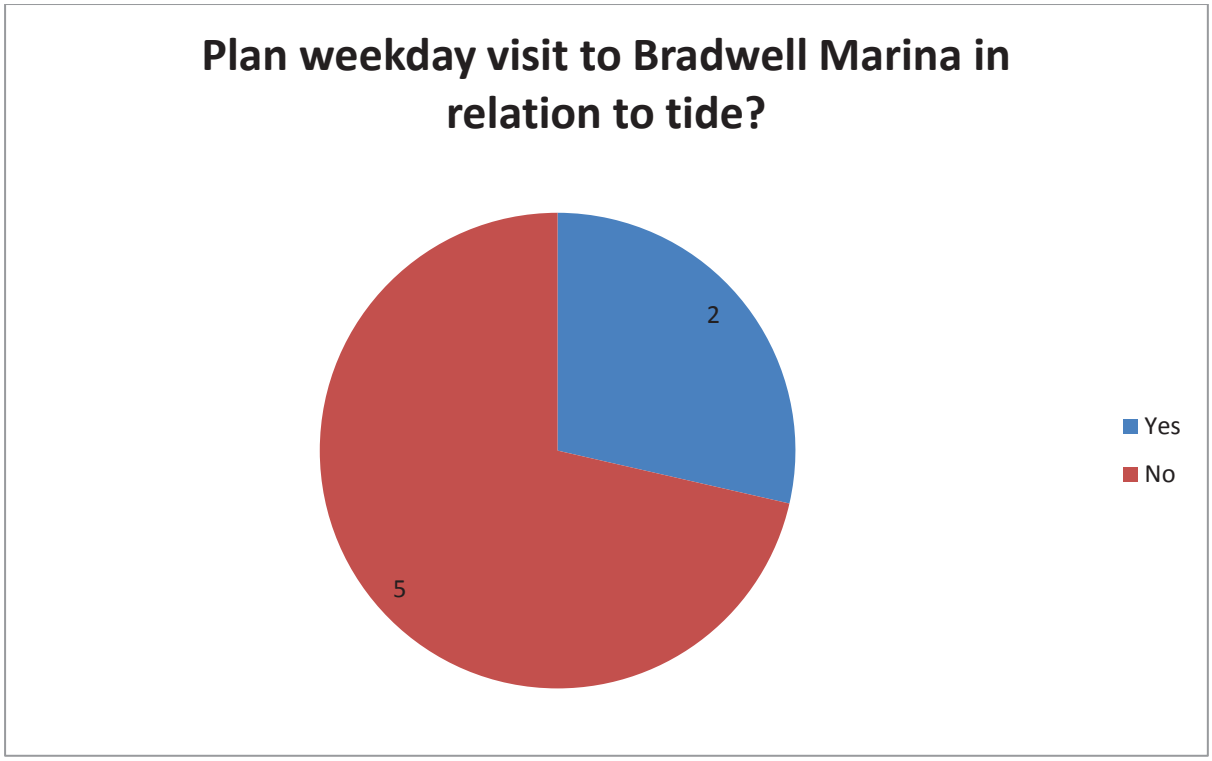



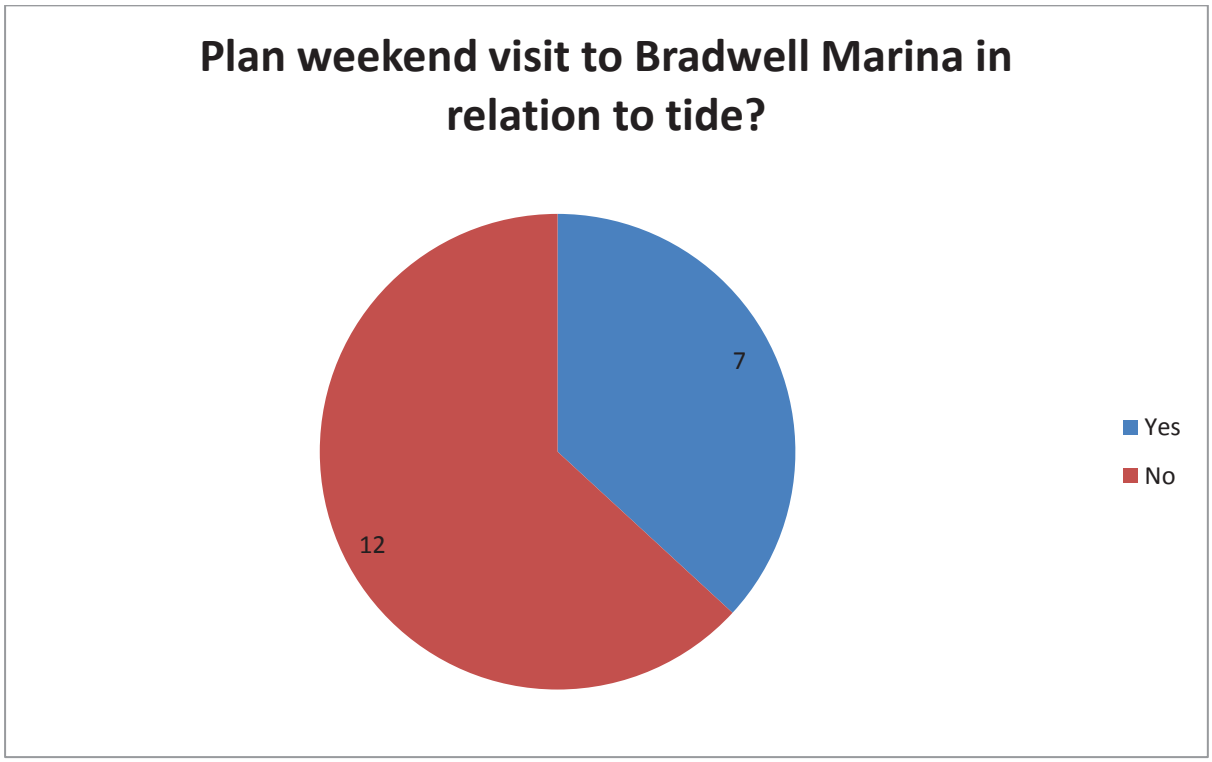
**Figures A6.11- A6.12: Graphs showing results for seasonal visiting**



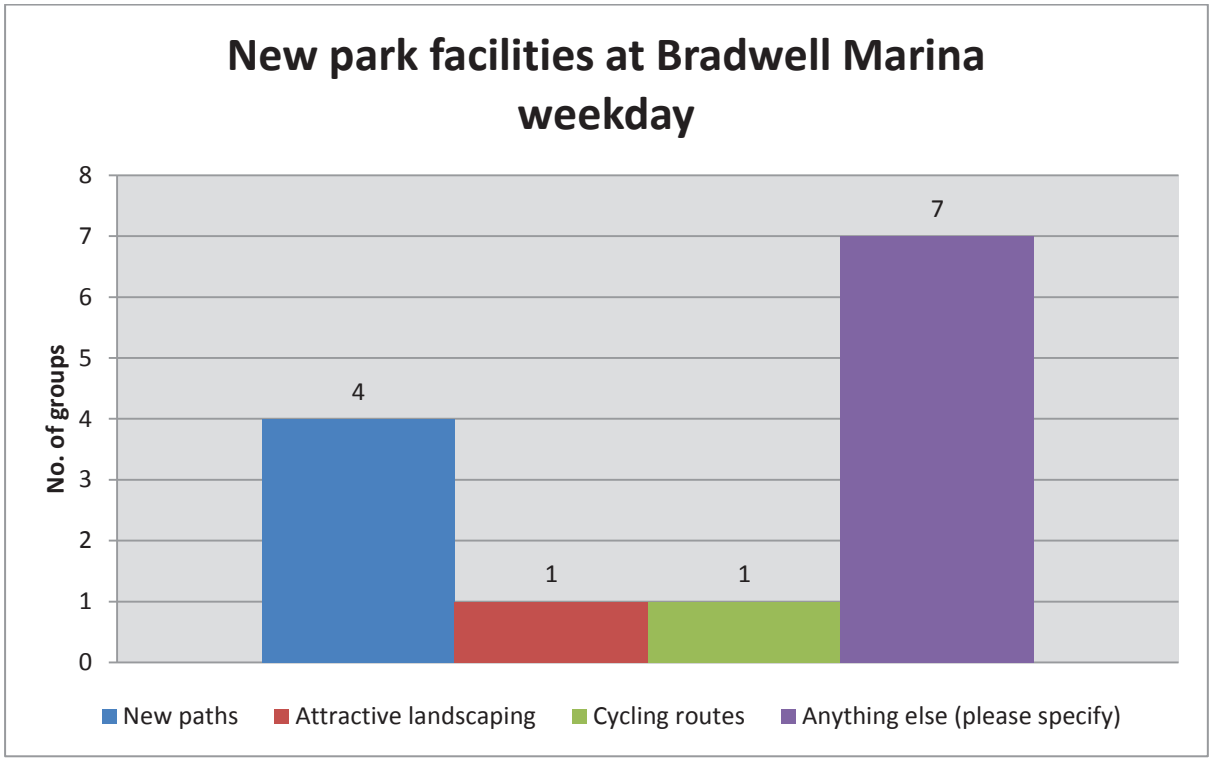



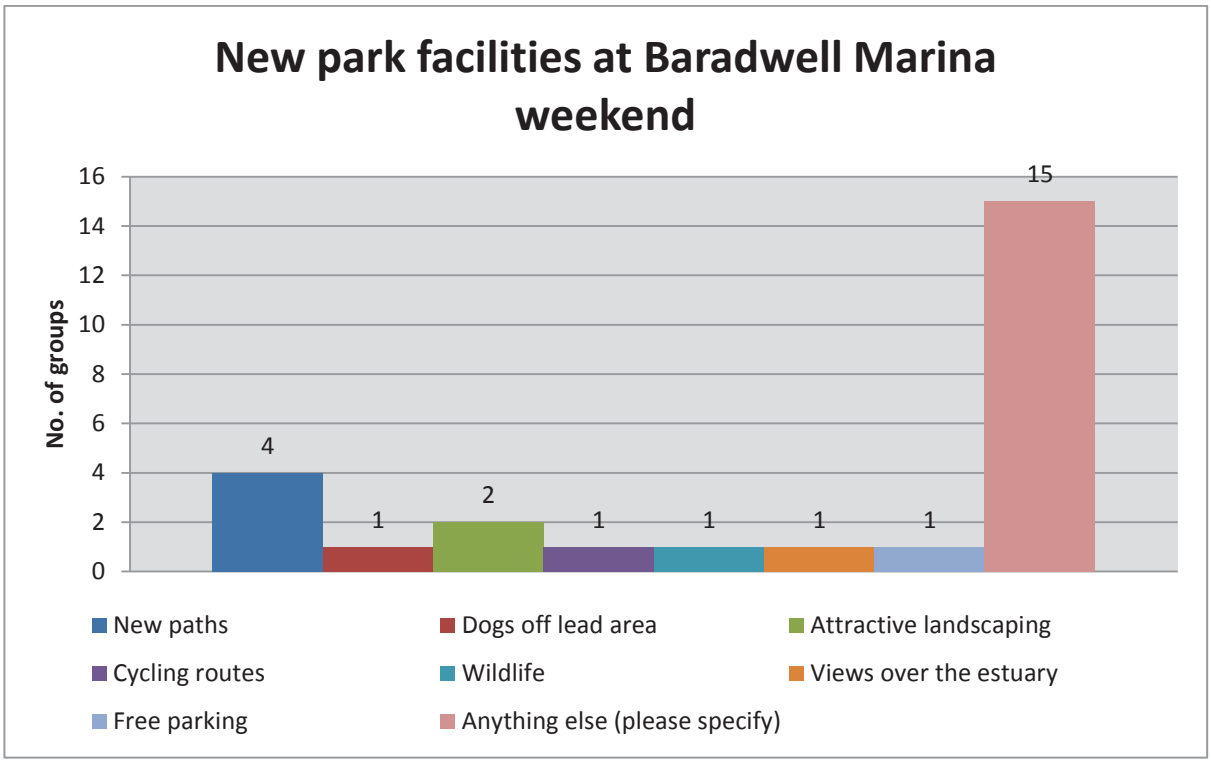
**Figures A6.13- A6.14: Graphs showing results for question 'Plan visit in relation to the tide?'**



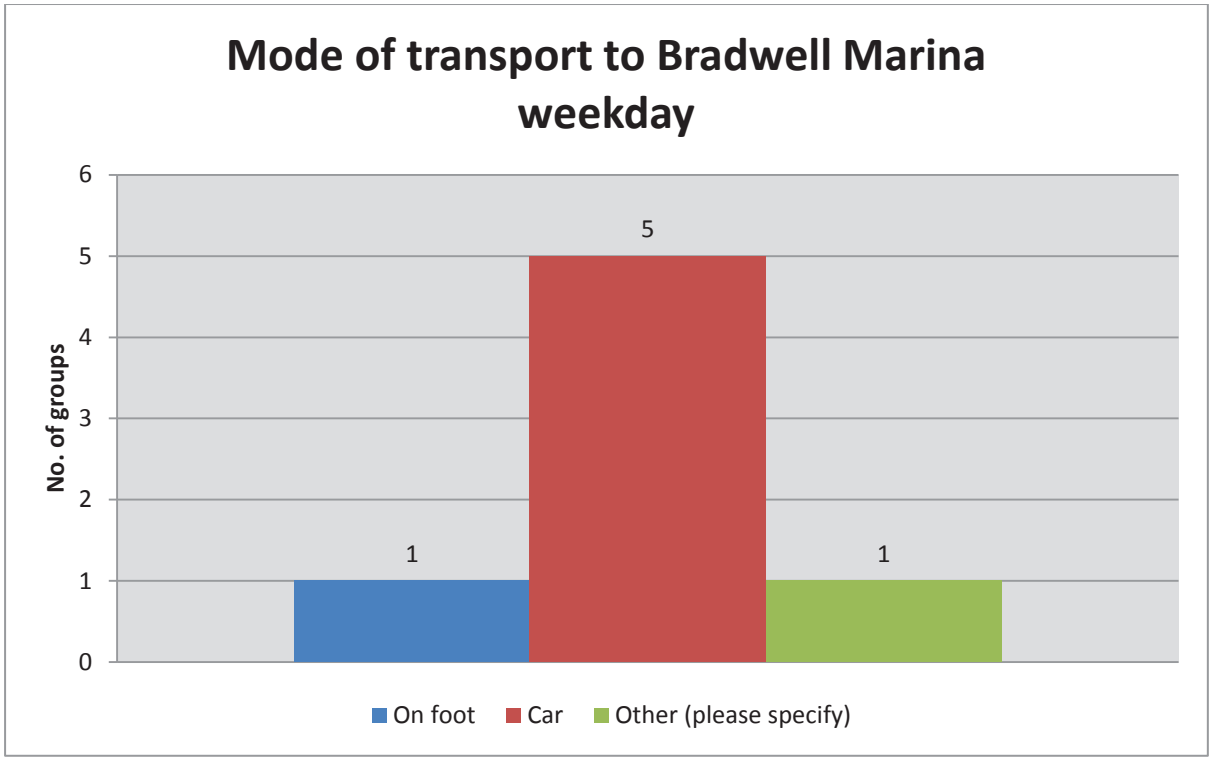



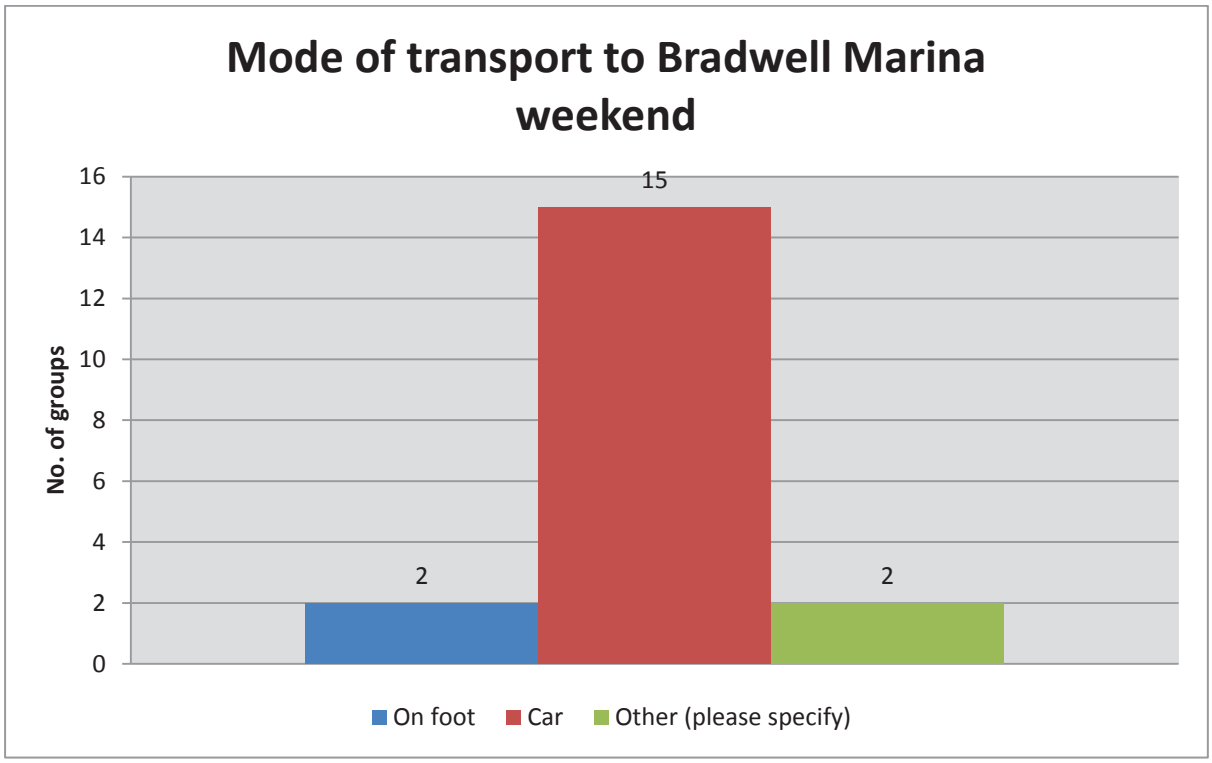
**Figures A6.15- A6.16: Graphs showing results for new park design**



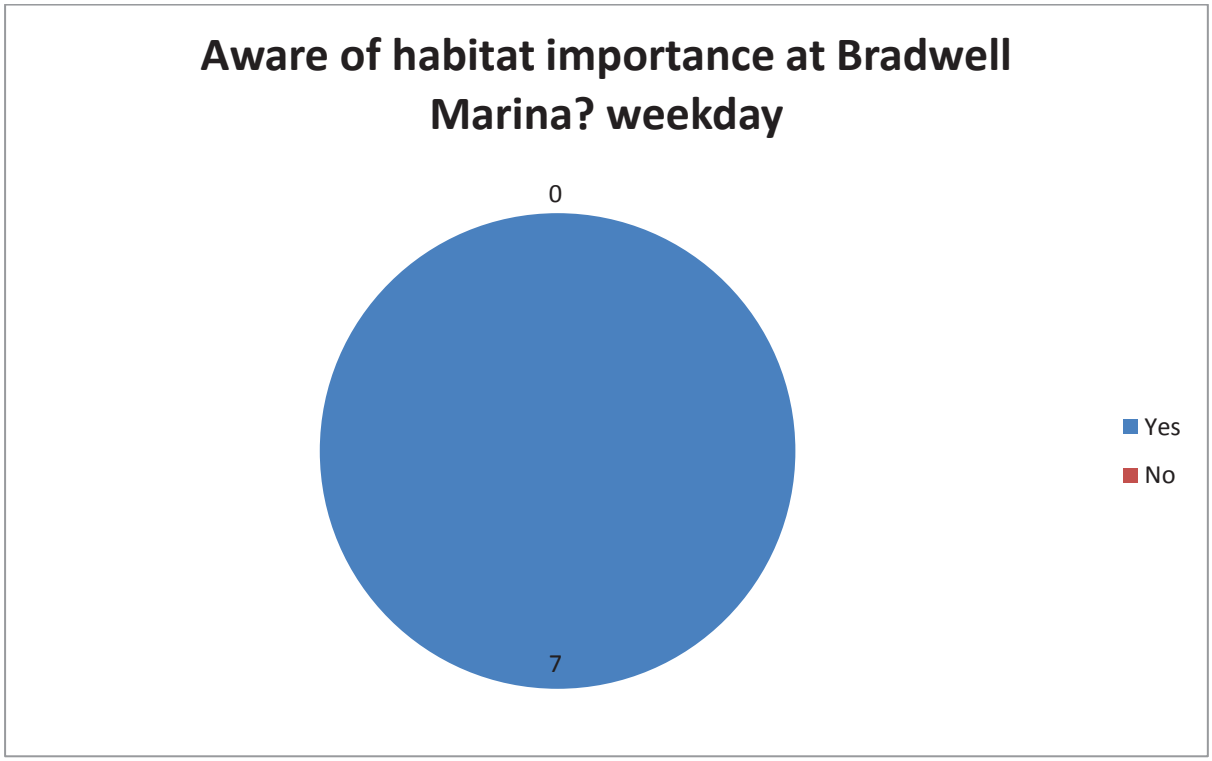



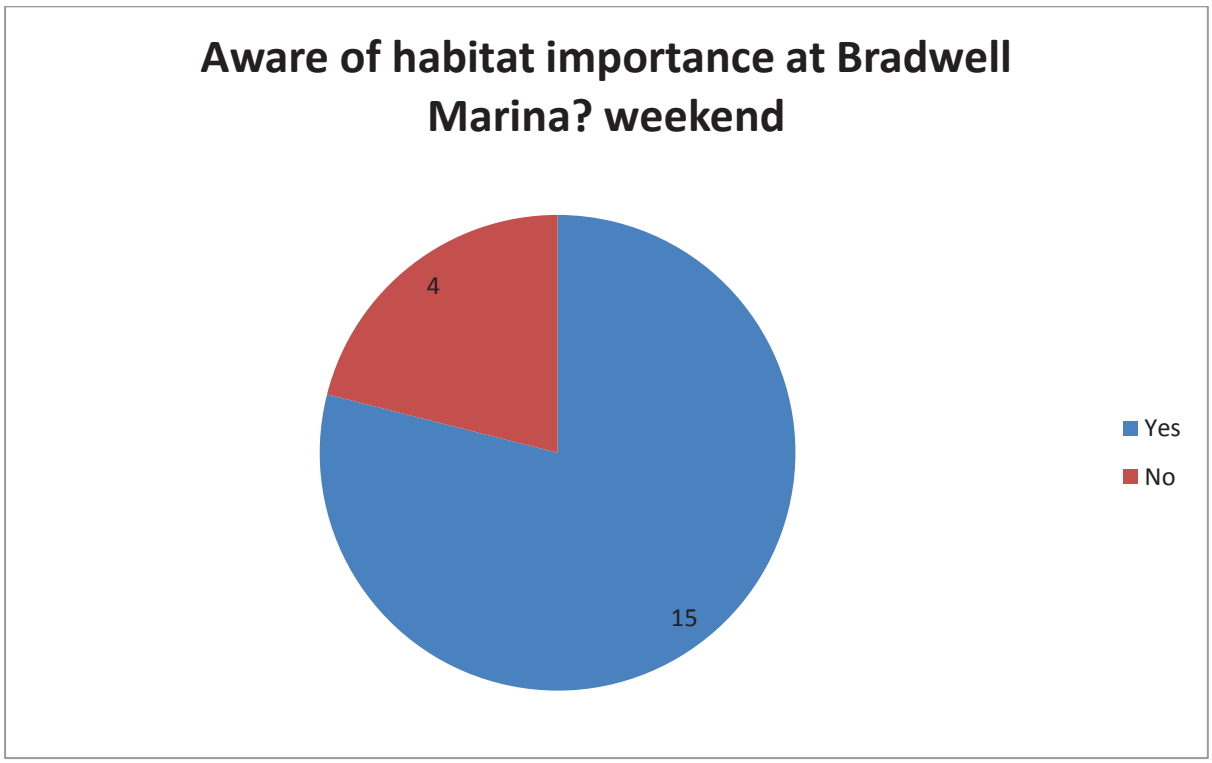
**Figures A6.17- A6.18: Graphs showing results for mode of transport**



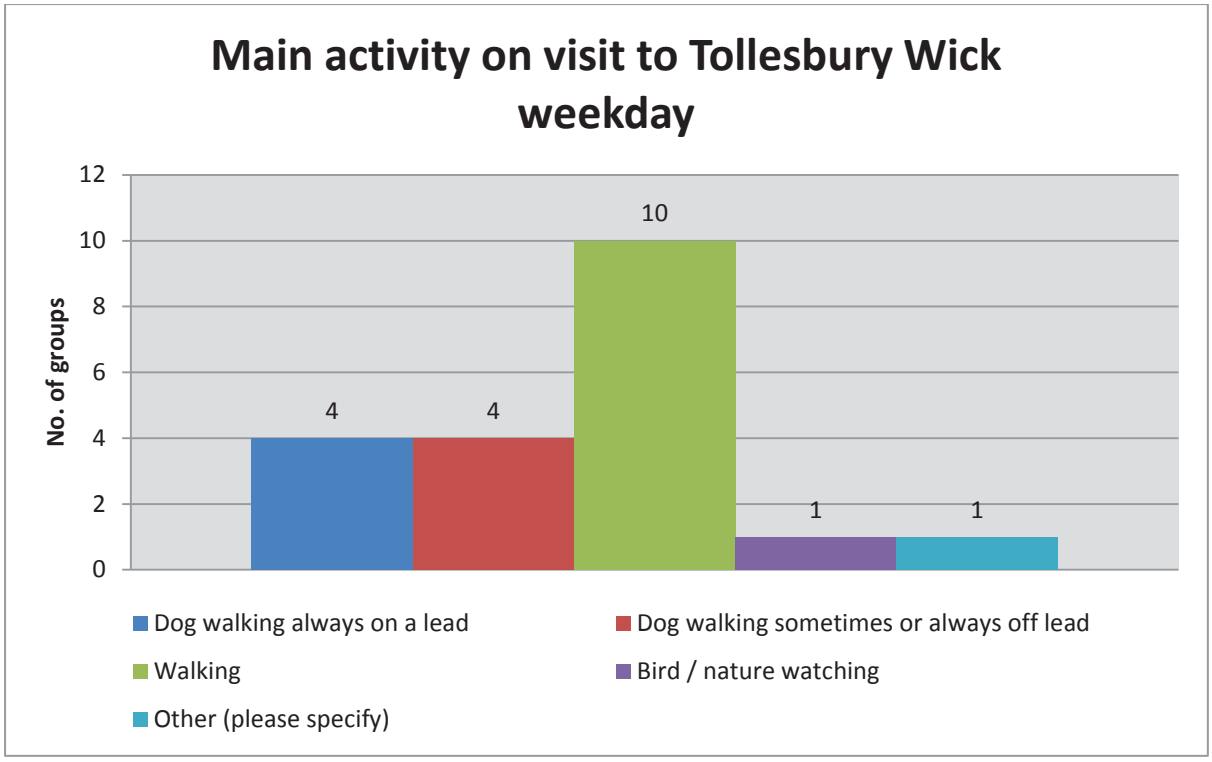



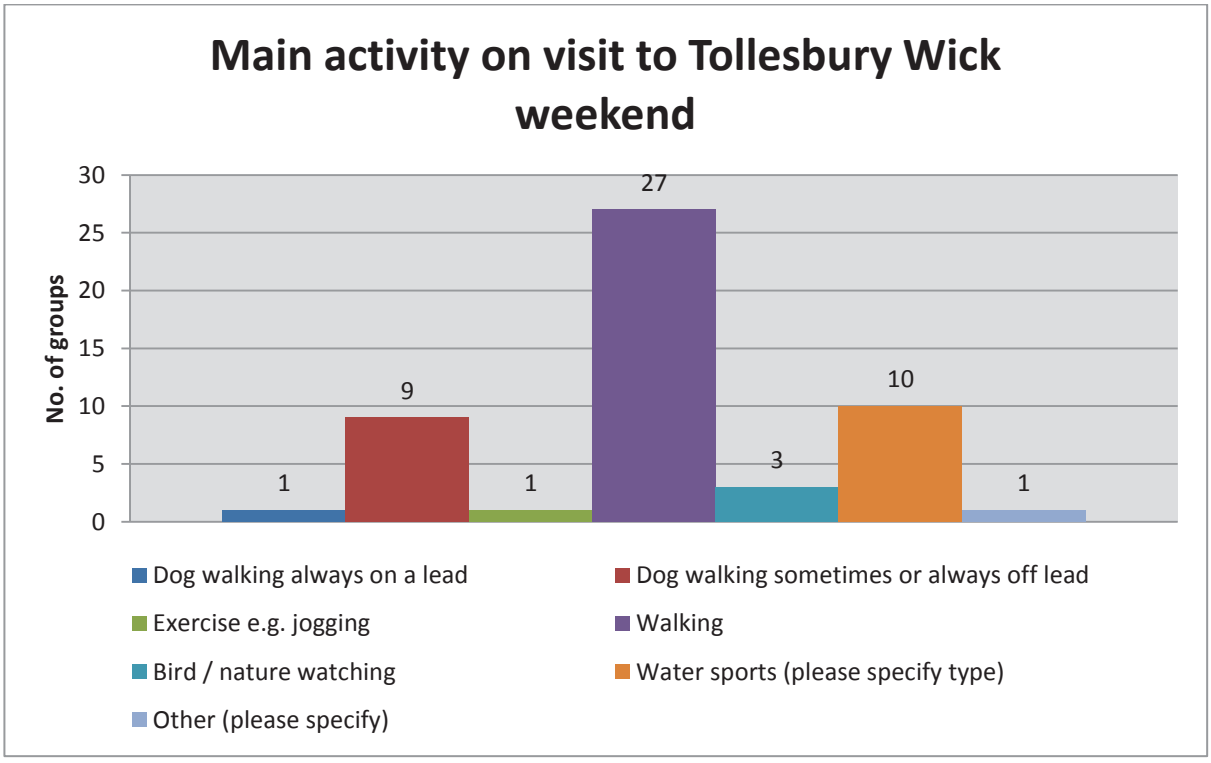
**Figures A6.19- A6.20: Graphs showing results for awareness of habitat importance**



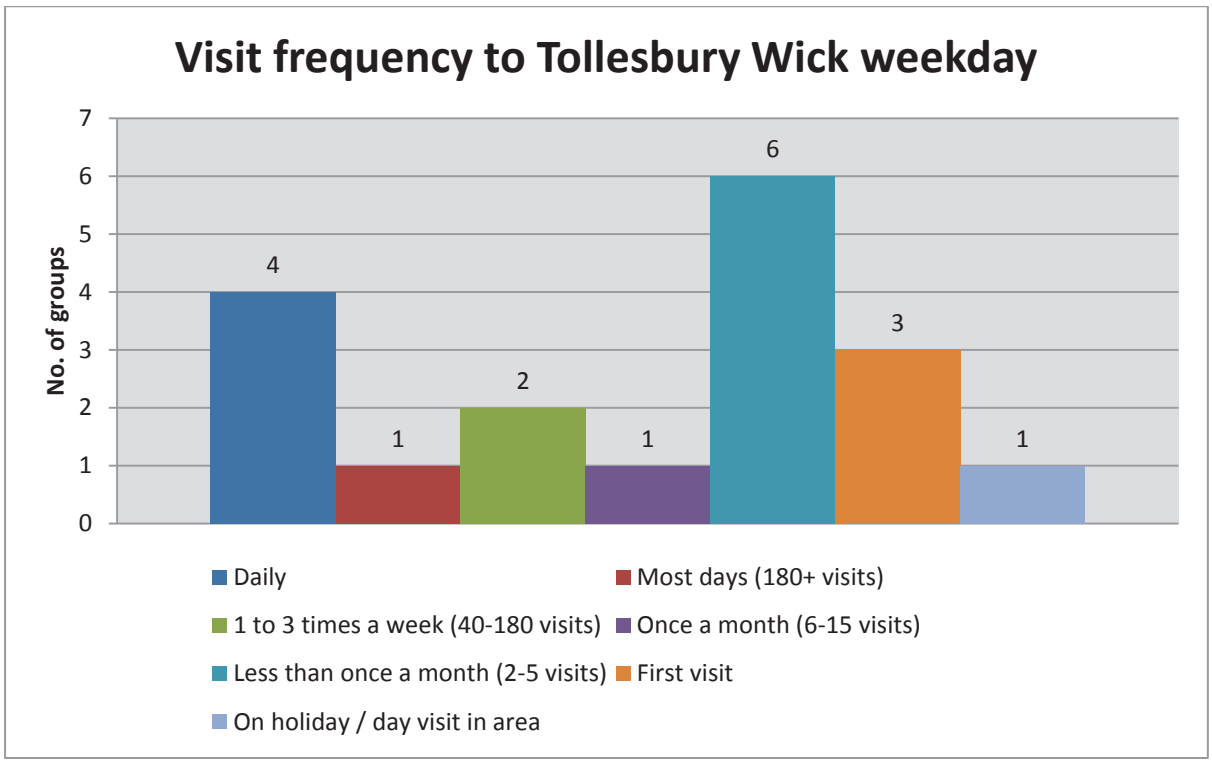



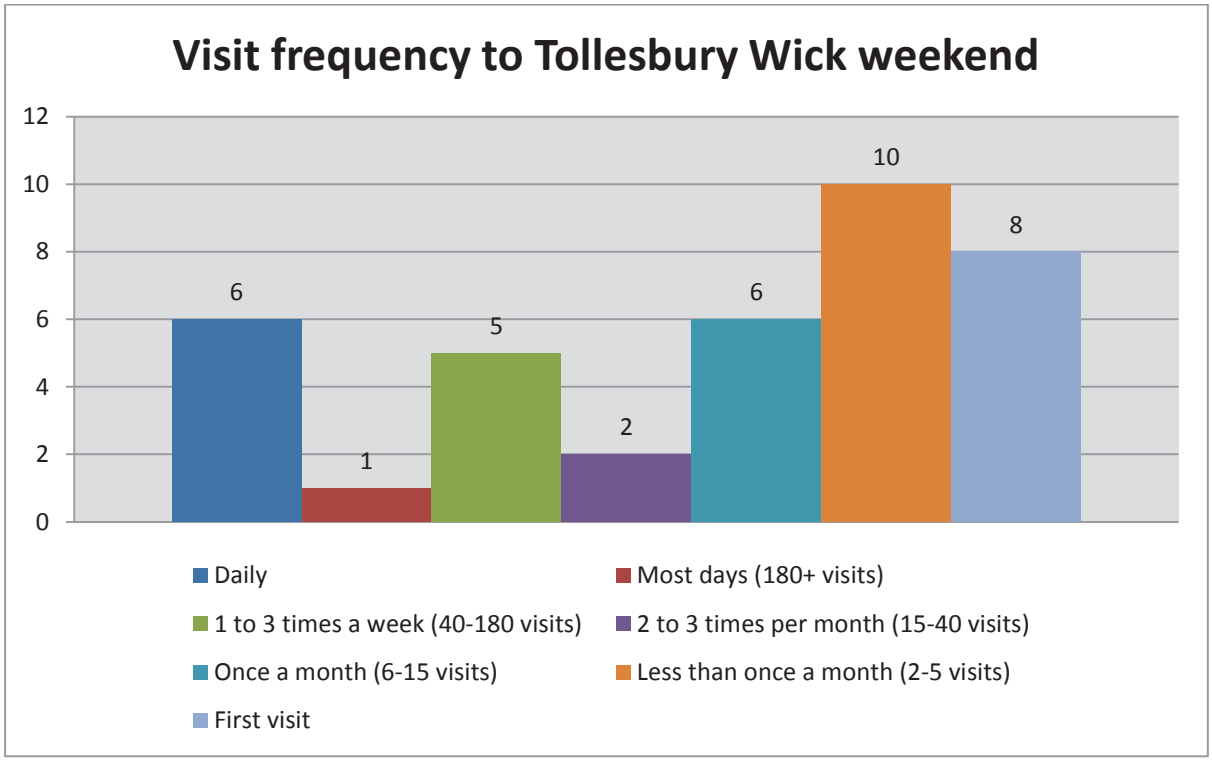
**Figures A6.21-A6.22: Graphs showing results for main activity**



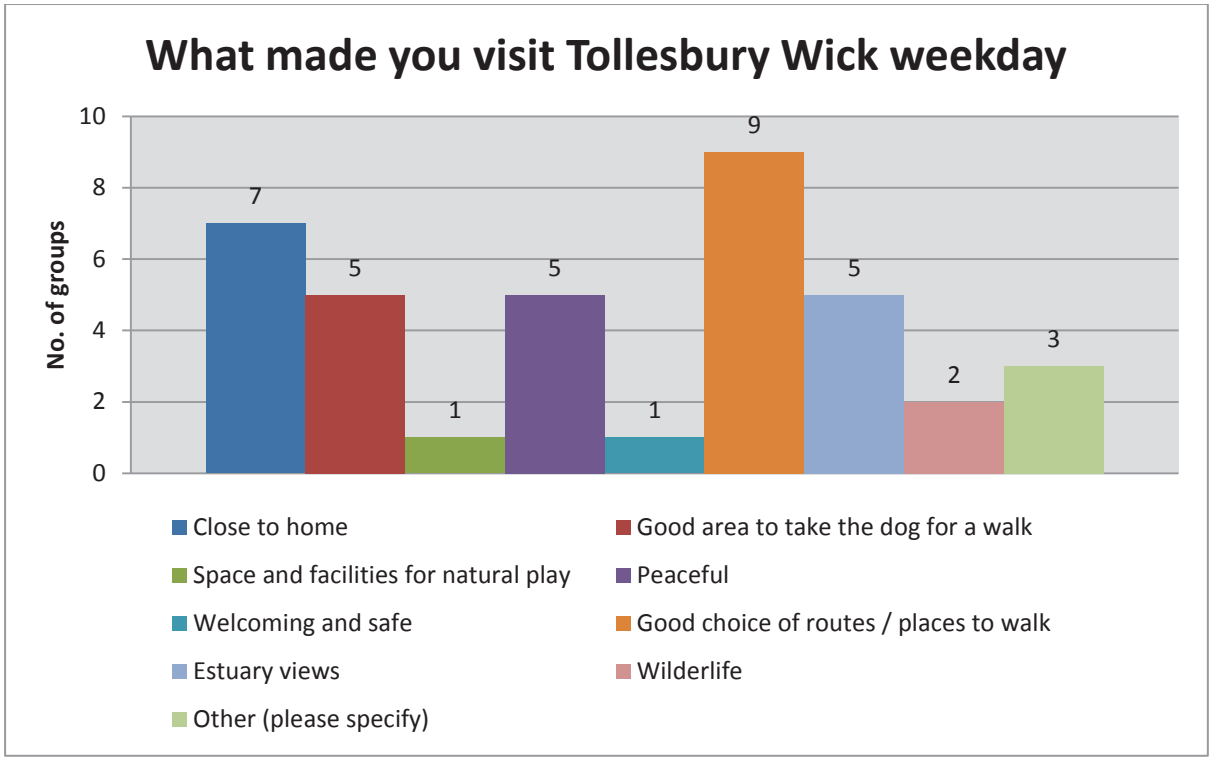



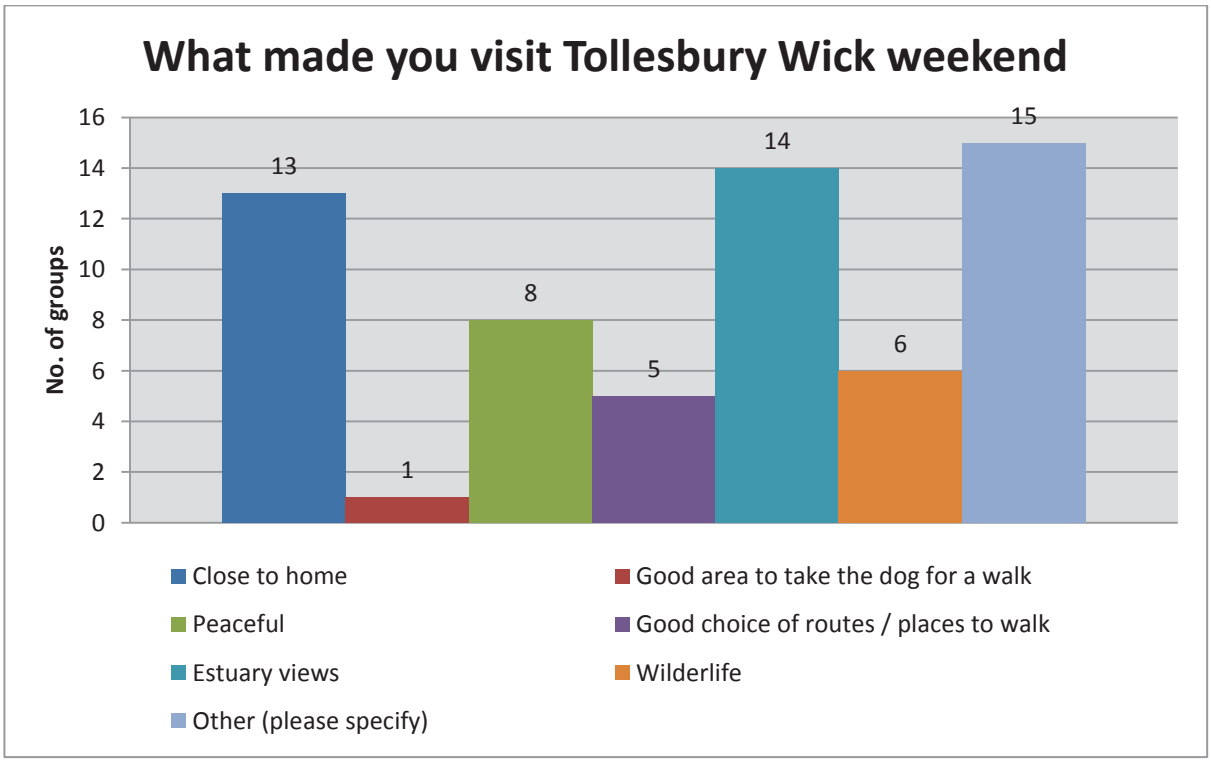
**Figures A6.23- A6.24: Graphs showing results for visit frequency**



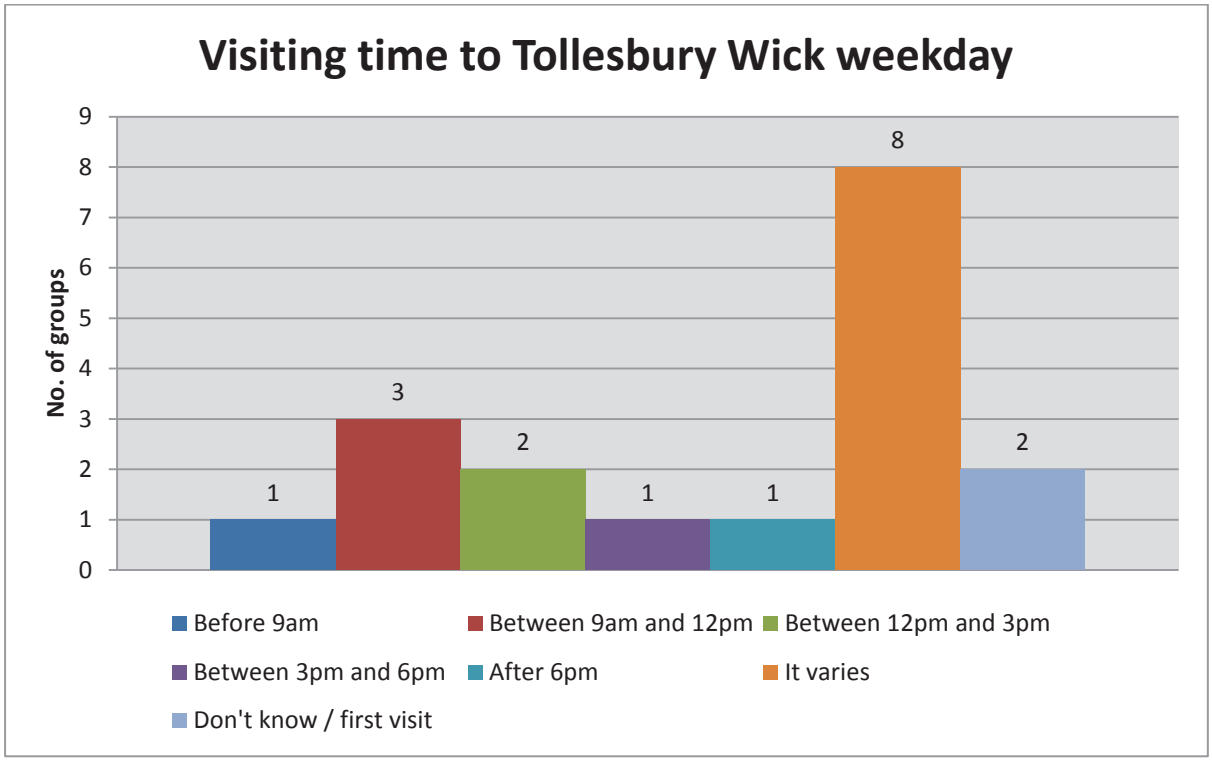



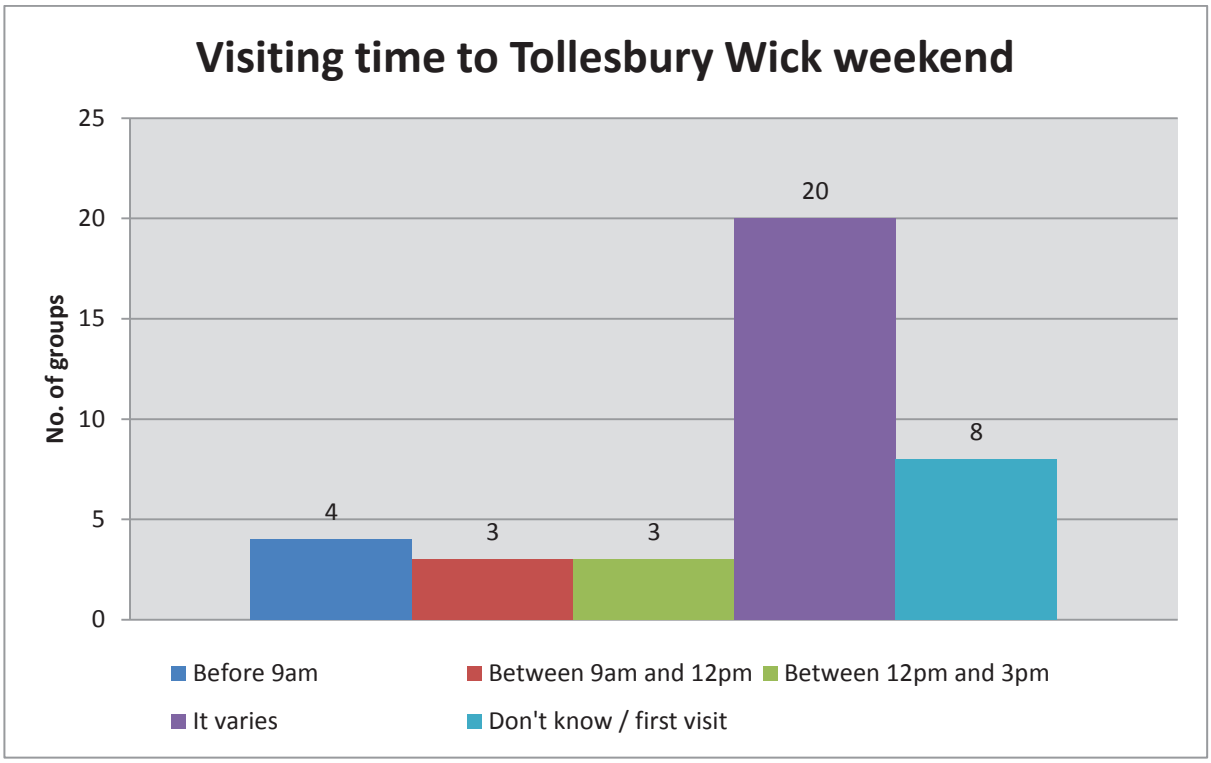
**Figures A6.25- A6.26: Graphs showing results for question 'What made you visit?'**



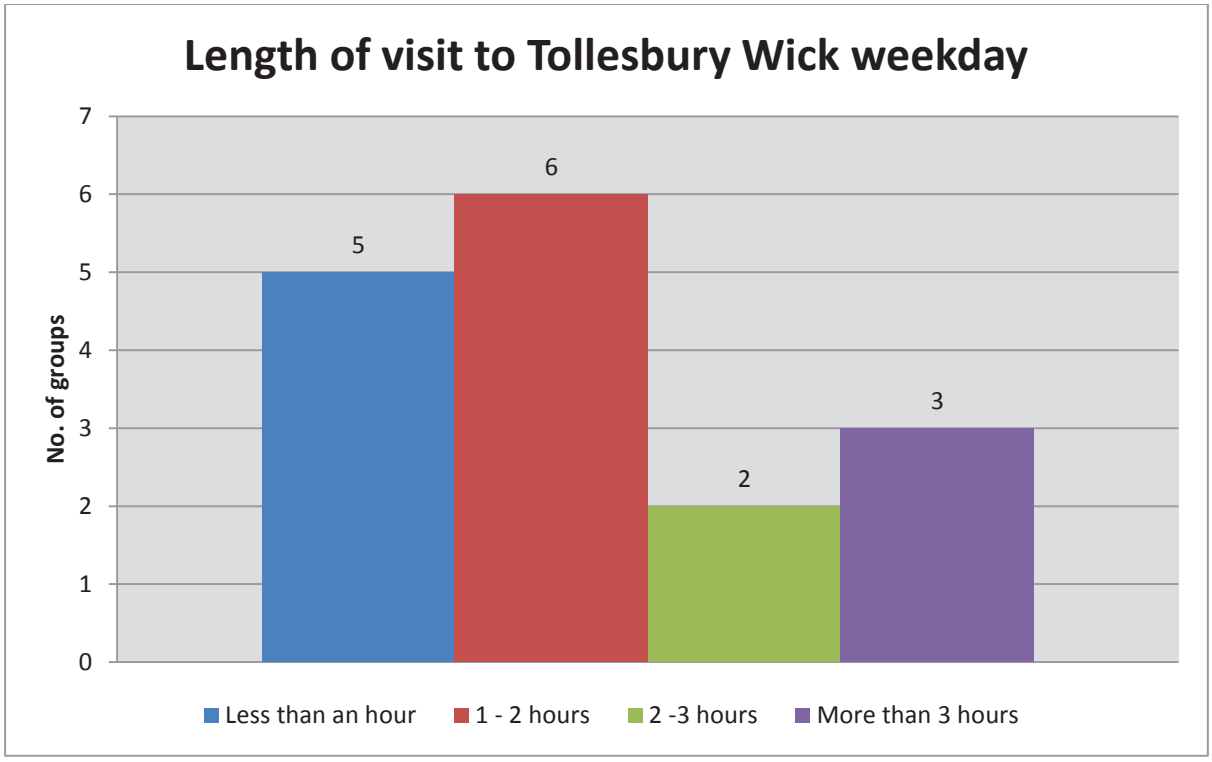



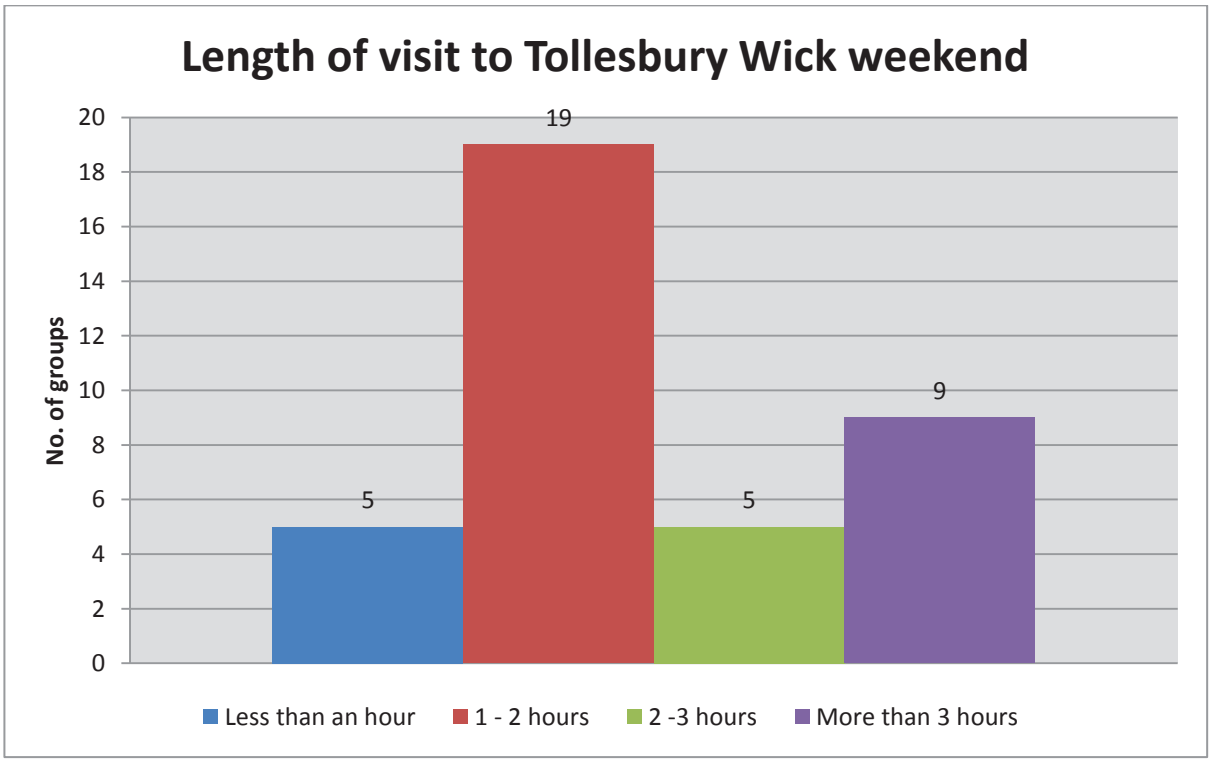
**Figures A6.27- A6.28: Graphs showing results for visiting time**



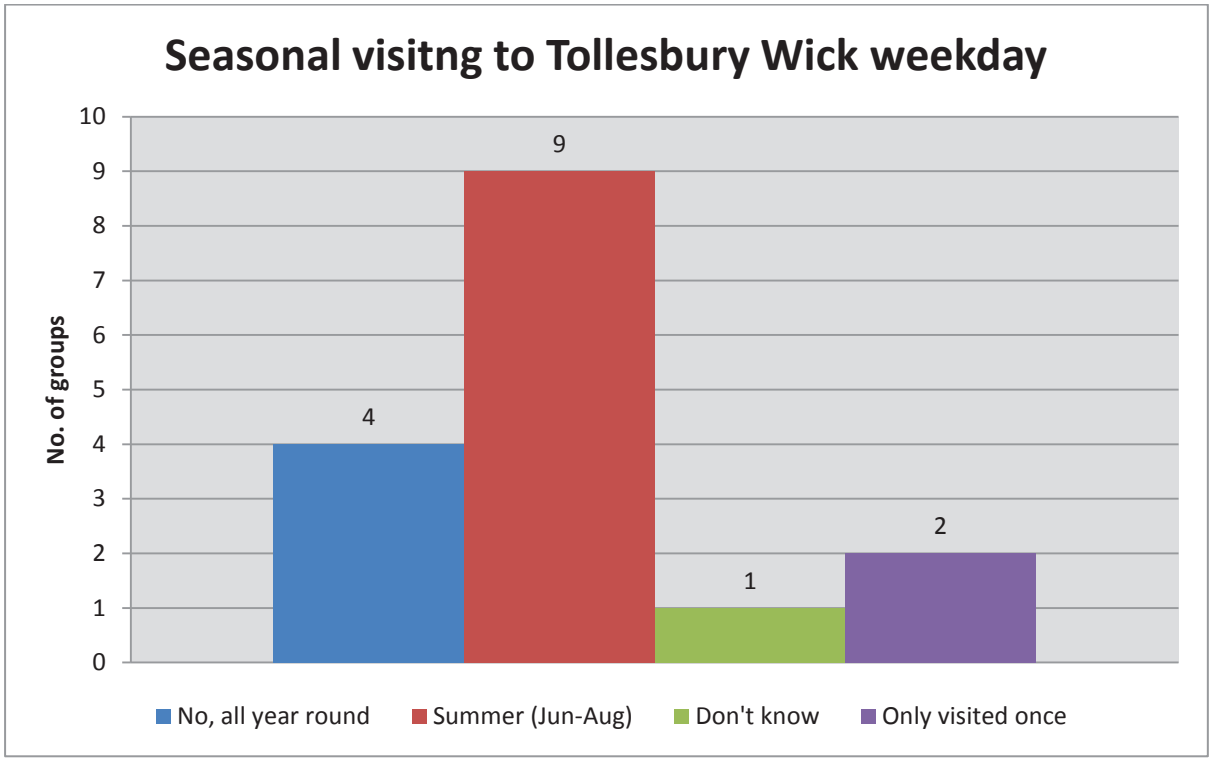



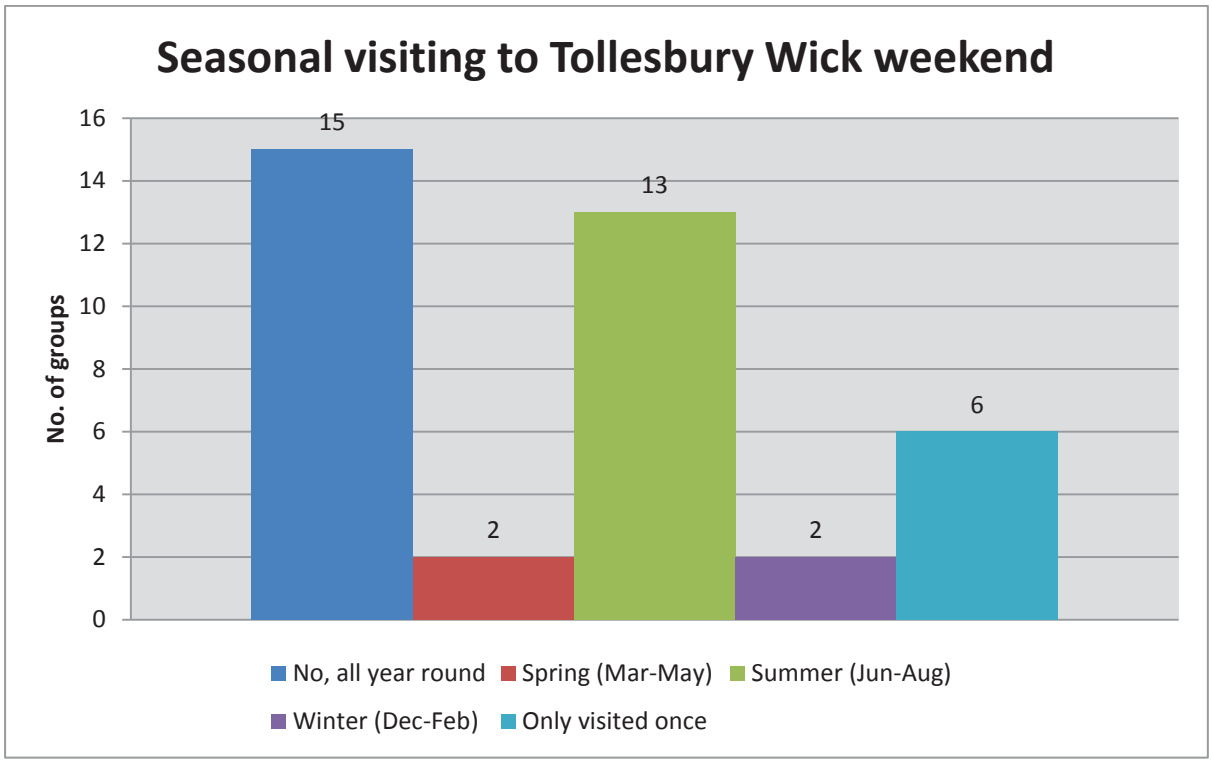
**Figures A6.29- A6.30: Graphs showing results for length of visit**



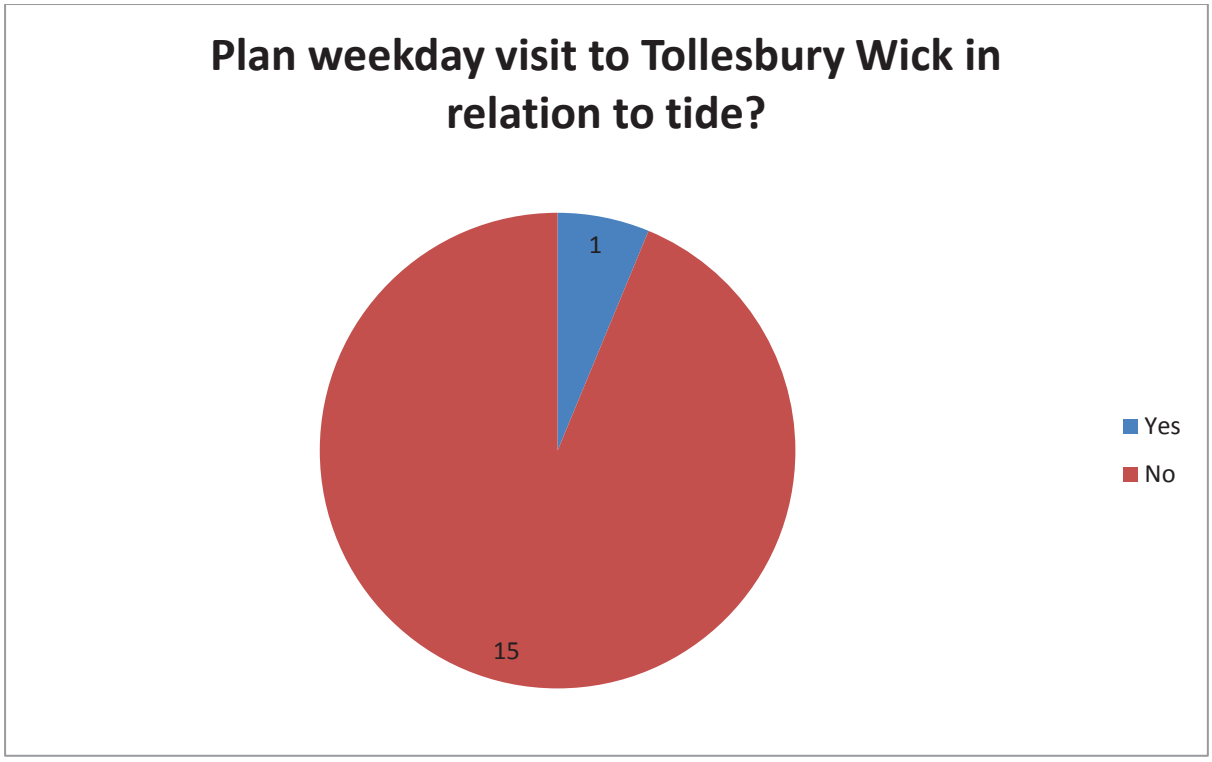



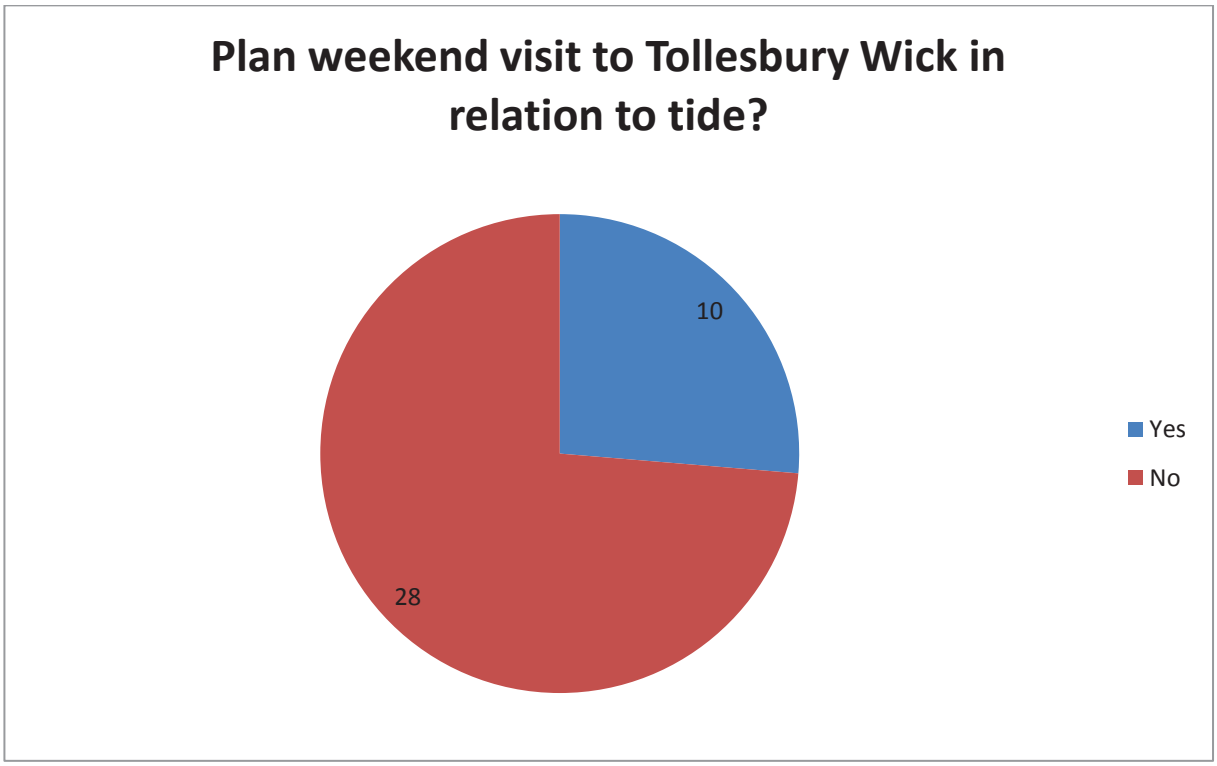
**Figures A6.31- A6.32: Graphs showing results for seasonal visiting**



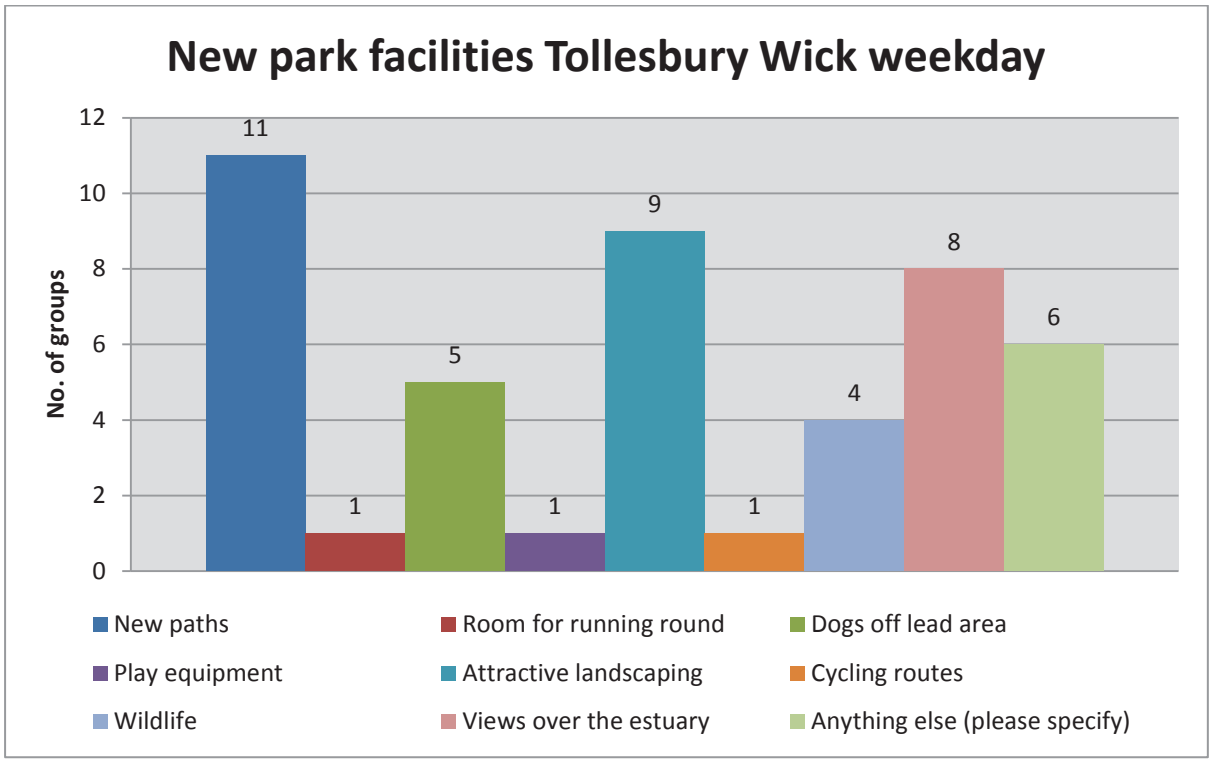



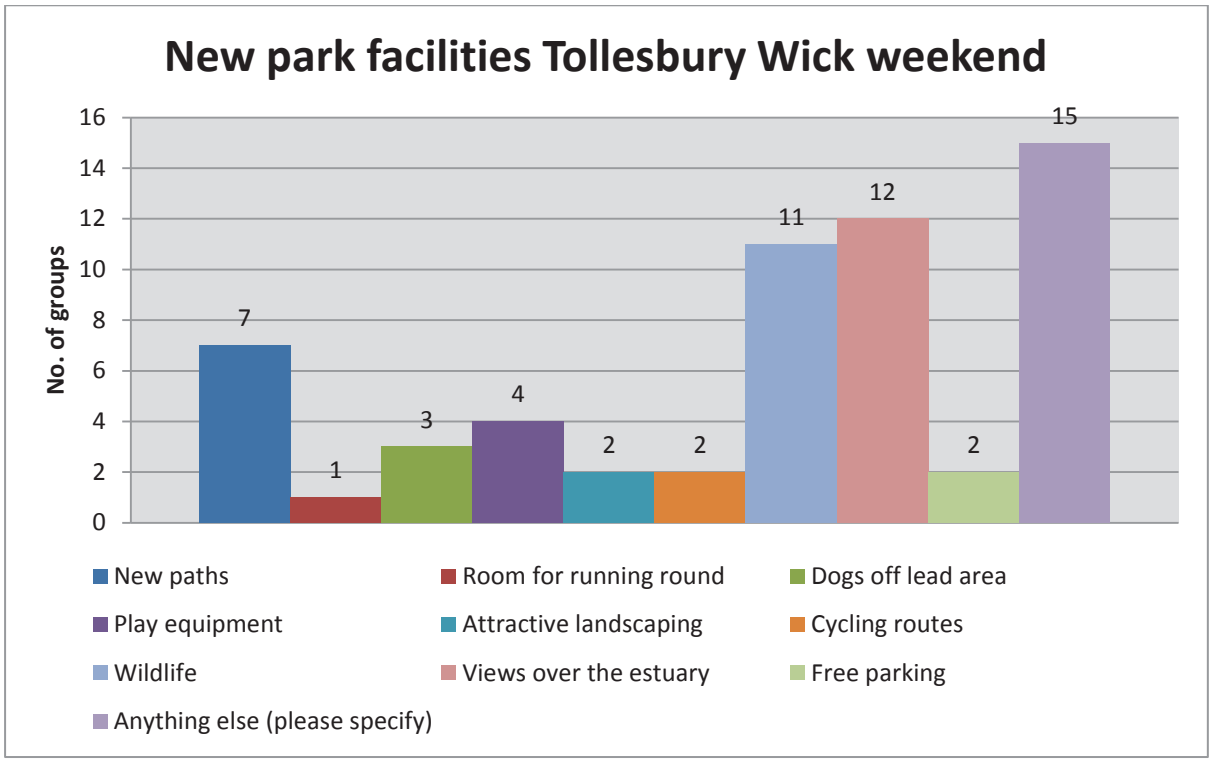
**Figures A6.33- A6.34: Graphs showing results to question 'Plan visit in relation to the tide?'**



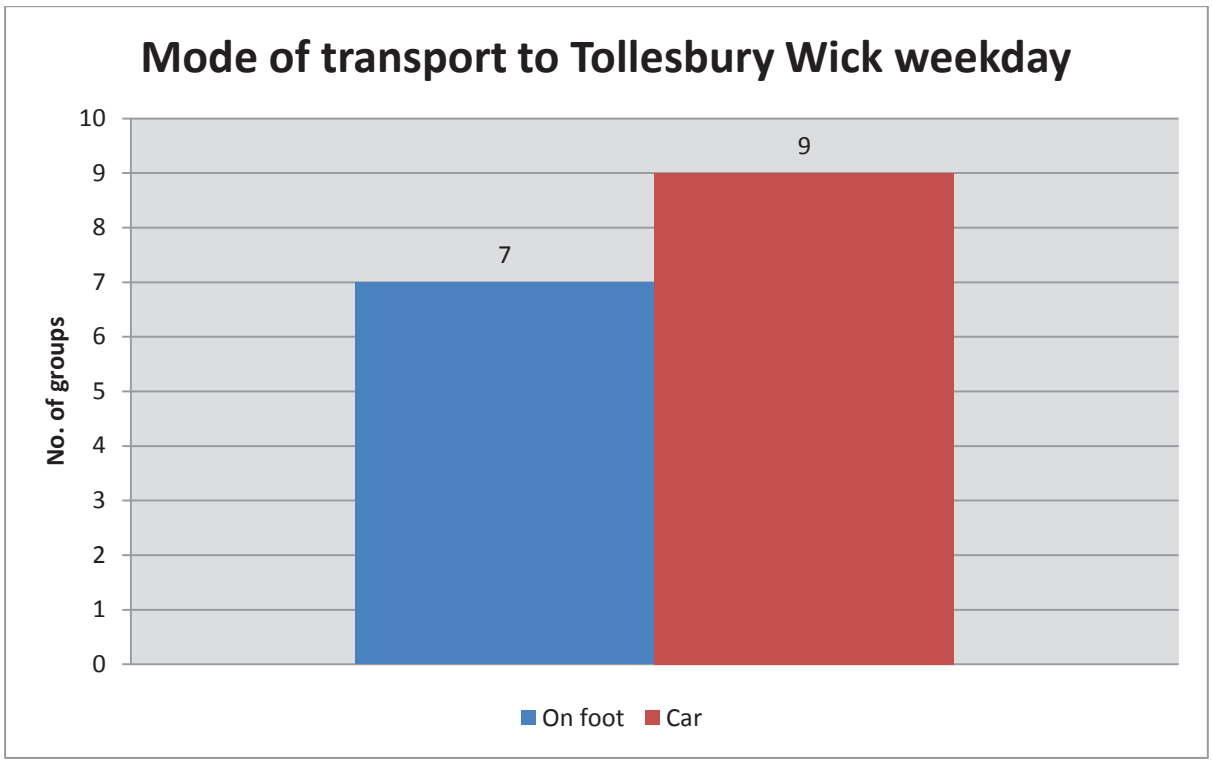



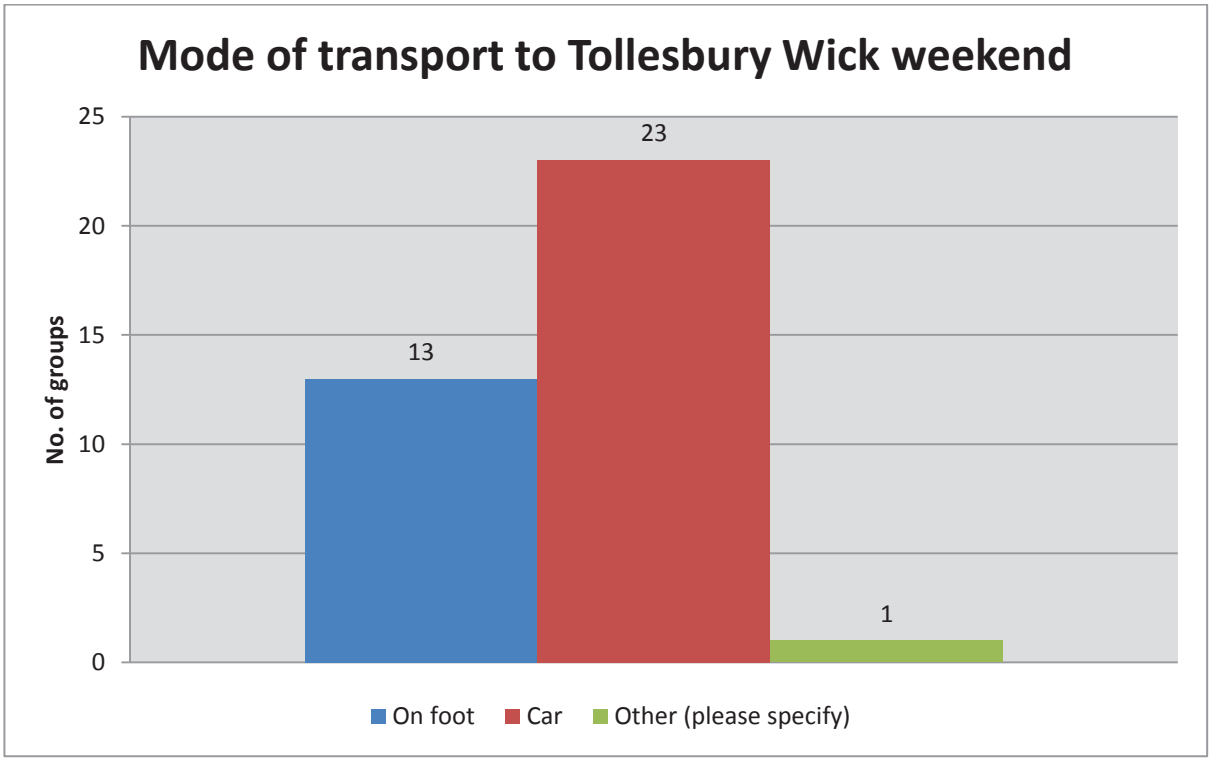
**Figures: A6.35- A6.36: Graphs showing results for new park design**



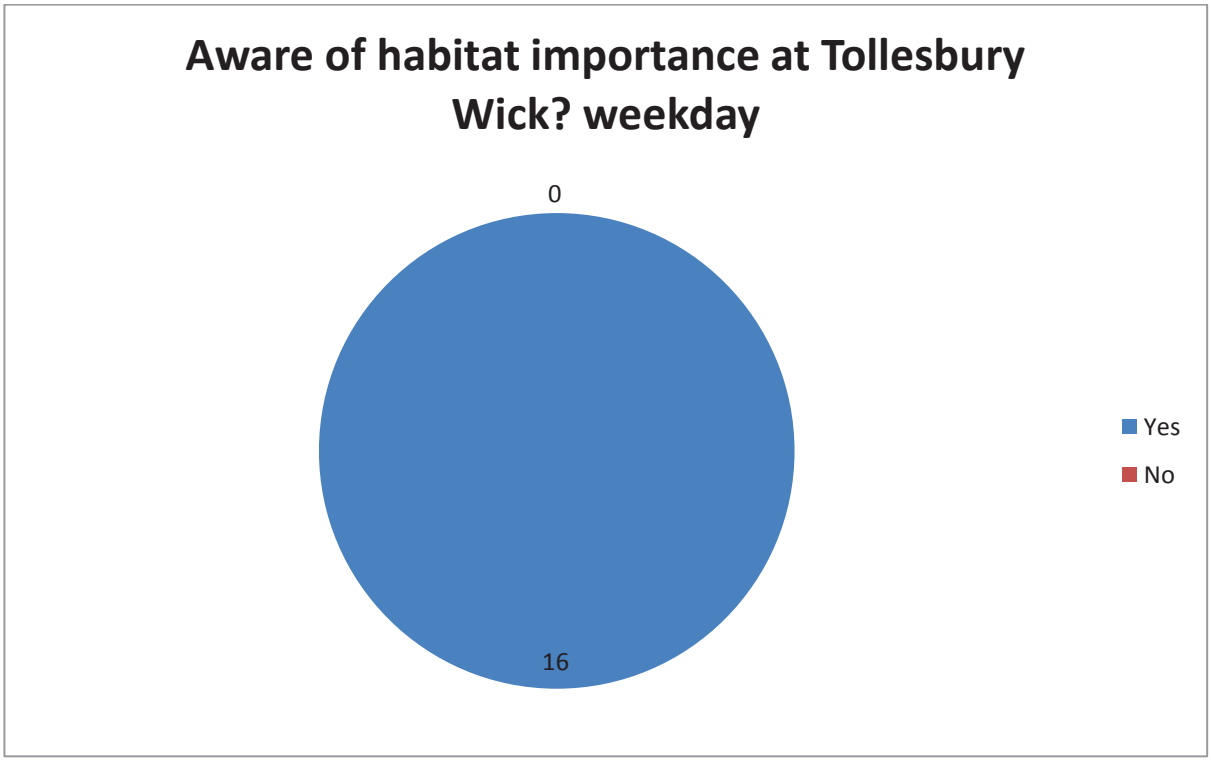



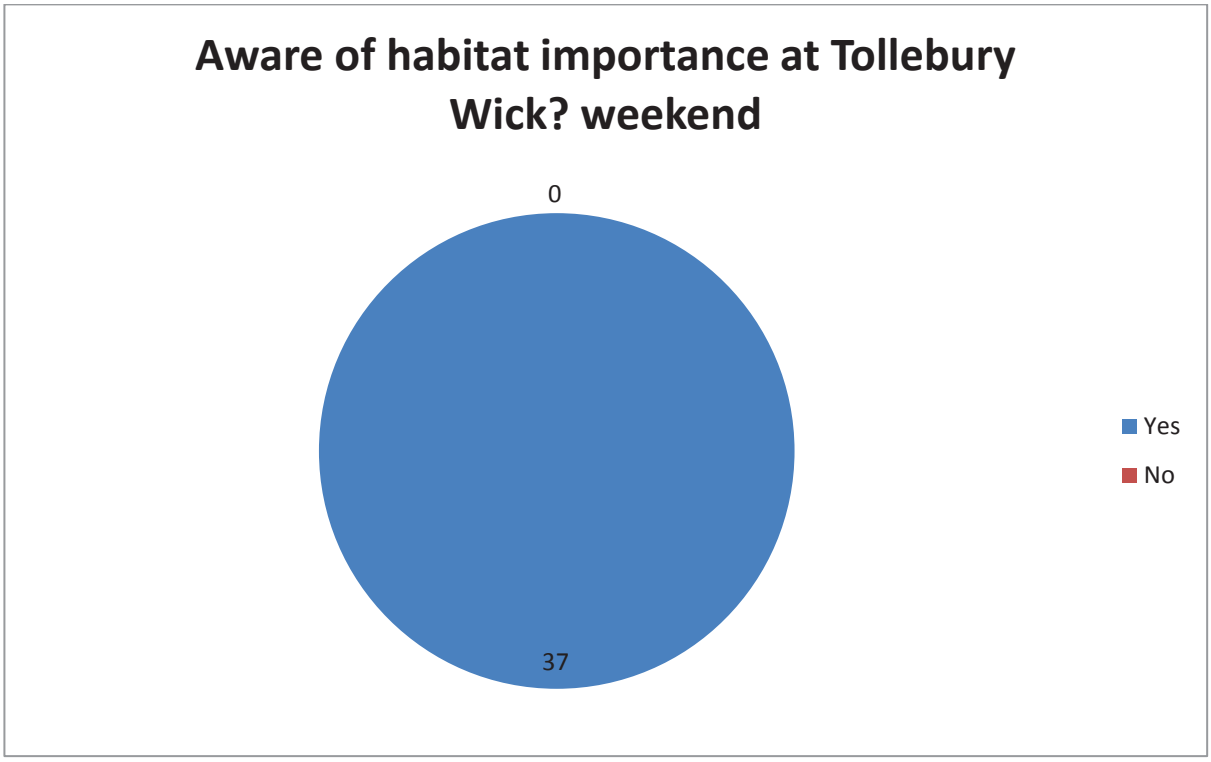
**Figures A6.37- A6.38: Graphs showing results for mode of transport**



**Figures A6.39- A6.40: Graphs showing results for awareness of habitat importance**



## Appendix 7: Initial Stakeholder Workshop Results

The results of these workshops were based on individual attendee's opinions *and suggestions* rather than what mitigation measures will be implemented. A further follow up workshop and technical analysis will inform this.

**Attendee List**

| North workshop | |
|---|---|
| **Name** | **Organisation** |
| Sue Hooton | Place Services |
| Lois Crisp | Place Services |
| Hamish Jackson | Place Services |
| Jack Haynes | Natural England (NE) – lead on RAMS project and planning team lead for Tendring Council. |
| Roy Read | NE - England coast path (ECP) representative |
| Chris Keeling | NE - responsible officer (RO) for Stour and Orwell and Blackwater Estuaries |
| Michael Parkin | NE - RO for the Dengie |
| Heather Read | NE – planning lead for Colchester, Maldon, Rochford and Southend-on-Sea councils. |
| Charlie Williams | NE - RO for the Colne Eaturay |
| Zoe Ringwood | NE - RO for Hamford Water |
| Gavin Rowsell | Farmer |
| David Eagle | Farmer |
| Cllr Andrew St Joseph | Maldon DC |

| South workshop | |
|---|---|
| **Name** | **Organisation** |
| Mark Summer | MOD / DIO |
| Jamie Melvin | NE – planning lead for Basildon, Castle Point and Thurrock councils |
| James Stack | QinetiQ |
| Charlie Williams | NE – RO for Crouch and Roach Estuaries |
| Phil Sturges | NE - ECP representative |
| Paul Woodford | Farmer |
| Lynne Main | Basildon Borough Council |
| Annie Gordon | Essex Wildlife Trust |
| Rachel Langley | Essex Wildlife Trust |
| Claire Stuckey | Chelmsford City Council |
| Mike Sharp | Motor Cruising Club |
| Steve Plumb | Thurrock Council |
| Mark Nowers | RSPB |
| Josey Travell | Southend Borough Council |
| Paul Jenkinson | Southend Borough Council |
| Jack Haynes | NE – NE lead for RAMS project |
| Amanda Parrott | Basildon Borough Council |
| Sue Hooton | Place Services |
| Lois Crisp | Place Services |
| Luke Pidgeon | Place Services |
| Maria Hennessy | Place Services |

| | |
|---|---|
| Shirley Anglin | Essex Highways |
| Mark Nowers | RSPB |
| Beverley McClean | Colchester BC |

Comments made below may aid conclusions on what mitigations may beneficial in certain locations but is not the sole basis for them.

Access management measures currently in place:

*All Habitats sites*

- Stationary electronic people counters have been used by Essex County Council (Highways) to determine visitor numbers to areas in Essex e.g. Maldon. Could it be possible that this data could be used to determine possible impacts? Could people counters be a viable way of determining visitor numbers to sensitive areas?
- Essex Wildlife Trust has been training volunteers (Coastal Guardians) to promote visitor awareness by talks and management of signs.

*Stour and Orwell Estuaries*

- There is visual screening and a bird hide on the southern shore of the estuary. This ensures that an area looks more important for over wintering birds, with the aim of causing a better public attitude on how the area is used.

*Hamford Water*

- Bramble Island has no access and is a quiet area as it is a known area for sensitive wintering and breeding birds.

*Blackwater Estuary*

- Old Hall Marshes has a Little Tern colony but is managed by restricted access by boat in the summer.

*Dengie*

- Not so much a mitigation measure but as access to the coast in the south-east Dengie area is poor it means that it is isolated and quiet with only occasional dog walkers, anglers and birdwatchers.

*Crouch and Roach Estuaries*

- Chelmsford Parks such as Fenn washland and Saltcoats Park are alleviating pressures on Habitats sites. These provide good facilities such as dog walking, car parking, sports facilities, good access points and no access to the sea wall.
- Currently there is signage on the sea walls and public rights of way (PROW).

*Foulness Estuary*

- Currently 31 SSSI areas that are not touched, so will cause little disturbance.
- There is no public access at MD land in Shoebury, and roughly 3km east of Sutton has no public access to the coastline.

- Foulness Island is roughly 8km long, if a ZOI of 13km was imposed this would mean little contributions from developers as there is little to no residential development on the MOD land.

*Thames Estuary and Marshes*

- Thameside Nature Park is set to extend further.
- East Tilbury Quarry is anticipated to restore biodiversity and provide recreational facilities/areas away from the coast.
- Lower Thames Crossing and adjacent Nationally Significant Infrastructure Projects (NSIPS) could close the most southerly part of the coast for a few years. This will encourage more people north from Coalhouse Fort to Thameside Nature Park or other areas that may not be on the coast.

Potential mitigation solutions:

*All Habitats sites*

- Stationary electronic people counters have been used by Essex County Council (Highways) to determine visitor numbers to areas in Essex e.g. Maldon. Could it be possible that this data could be used to determine possible impacts? Could people counters be a viable way of determining visitor numbers to sensitive areas?
- Essex Wildlife Trust has been training volunteers (Coastal Guardians) to promote visitor awareness by talks and management of signs.

*Stour and Orwell Estuaries*

- Saltmarsh is driven over and trampled at Jacques Bay (accessed via Shove Lane, Bradfield), possible reduction in access to avoid habitat erosion.
- Water skiing is common and speed limits are not kept to at Jacques Bay. This should be enforced to reduce disturbance.
- Unauthorised access along sea wall in front of screen should be managed; this could be through better screening or wardening.
- There are bait diggers at Jacques Bay which should be made seasonal and have location restrictions.
- Access along outer edge of saltmarsh to high tide roosts at Wall Lane causes disturbance as well as recreational water craft particularly kayakers and paddle boarders. Access and locations of activities should be restricted.
- There is easy access to the foreshore at Mistley Walls which impacts the birds that sit close to the path. Possibly reduce the ease of access or divert access point elsewhere.

*Hamford Water*

- Enforcement should be made to unauthorised quadbikes and motorbikes.
- A bridle path should be created at the western side of Hamford Water, this will draw horses away from the seawalls and give landowners income stream through stabling and grazing.
- Create shorter circular paths off coastal path with particular access from car parks.
- Promote alternative sites for wind surfers and canoeists away from The Naze such as St. Osyth Lake/Jaywick/end of Clacton beach.
- The Naze should have seasonal access rather than 365 day access.
- A main car park on public open space away from The Naze may encourage people to walk their dogs there instead of sensitive areas.
- Need to engage with developers especially national/big developers to see conservation areas as an attraction for selling houses and developers taking responsibility for conservation management.
- Post Brexit; bring access habitat management into subsidy schemes for farmers.
- Consider ideas for the environment bank.
- Walking on the saltmarsh is disturbing birds on the south easterly side of Hamford Water.

*Colne Estuary*

- Habitat creation is needed bringing birds away from the coast.
- Keep shingle recharge out of spreading room at all times.
- Strandline/sand/shingle vegetation along the south side of Mersea and Cudmore Grove is currently being damaged by trampling and fires, mitigation is required to reduce impact. Current access levels at Cudmore Grove already cause some damage to vegetation and reducing breeding success for ringed plover.
- Power gliders currently take off from a field in Mersea which affects a large area, these occasionally fly low and fly over the Colne and Blackwater SPAs.
- Jet skis and canoes disturbing wader high tide roosts in main channel of the Colne Estuary and Strood Channel.
- Breeding ringed Plover and potentially Little Tern are heavily disturbed by the ferry passenger route from Mersea to Brightlingsea.
- Colne Point is by far the most important area for sand/shingle veg and breeding ringed plover so should be protected. Saltmarsh is vulnerable to increased visitor pressure from the Essex Wildlife Trust (EWT) and National Nature Reserve (NNR).
- Natwurst beach - dune vegetation badly damaged in places.
- The poplar beach by Point Clear commonly has kiteboarding which is disturbing terns and ringed plovers.
- The new play area at Cudmore Grove has increased visitor numbers significantly and in turn increased recreational disturbance, possibly look at

ways of reducing numbers by creating large, high quality play areas away from the coast.

*Blackwater Estuary*

- Maldon DC jet ski patrols should be supported.
- Keep Northey Island free of spreading room.
- Goldhanger had a former Little Tern colony.
- East Osea is a very popular picnic area which is un-authorised.
- Flying paramotors at Tollesbury.
- Keep shingle spit free from public access at Tollesbury Wick.

*Dengie*

- Canoeists disturb high tide roosts on the River Blackwater.
- There is often illegal off-roading of motorcycles and quadbikes on the seawalls and saltmarsh beach by Bradwell PowerStation.
- The north east Dengie area is too disturbed for high tide roosts.
- Othona Community and St Peters Church area is known to have walkers cross the saltmarshes in all directions.

*Crouch and Roach Estuaries*

- Use the foreshore department to enforce byelaws and speed limits for water sports such as jet skis. If this is an option journey times to the coast will need to be considered.
- Encourage more people to use Chelmsford Parks for their recreational activities.
- Increase signage to inform the public.

*Foulness Estuary*

- Currently there is access to jet skis in the north of Shoebury, this causes disturbance. Possible restrictions to be put in place.

*Southend and Benfleet Marshes*

- Jet skiers and kite surfers north of Gunners Park are supposed to be ¼ mile out of coast but it is common that they are not. Enforcement should be considered to ensure they stay within their boundary.

## Appendix 8: Baseline Visitor Survey Data

Basildon

Basildon Borough Council does not currently have any visitor survey data for the Habitats sites; future surveys to be undertaken will be outlined in section 3.

Braintree

Braintree District Council has funded visitor survey data to support North Essex Shared Section 1 Local Plan. Braintree contributed to a plan level Habitats Regulation Assessment in spring 2013 for the shared local plan, containing relevant survey data for many of the Habitats sites across Essex.

Additionally Braintree has s106 money available to fund further visitor surveys as required by several project level HRAs for developments within easy travelling distance of the coast (Place Services, 2017); however, details for these surveys are currently unknown.

Brentwood

Brentwood Borough Council does not currently have any visitor survey data for the Habitats sites; future surveys to be undertaken will be outlined in section 3.

Castle Point

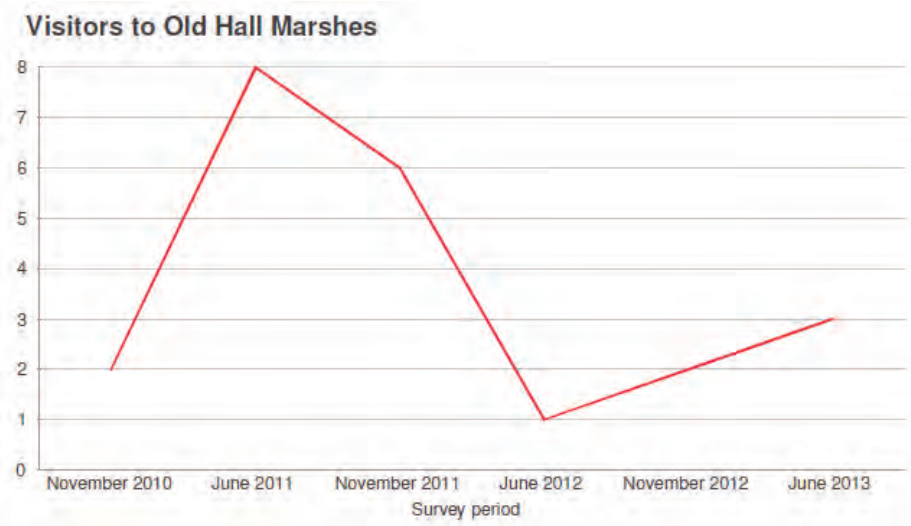
Castle Point Borough Council does not currently have any visitor survey data for the Habitats sites; future surveys to be undertaken will be outlined in section 3.

Chelmsford

Chelmsford City Council do not currently have any visitor survey data for the Habitats sites; future surveys to be undertaken will be outlined in section 3.

Colchester

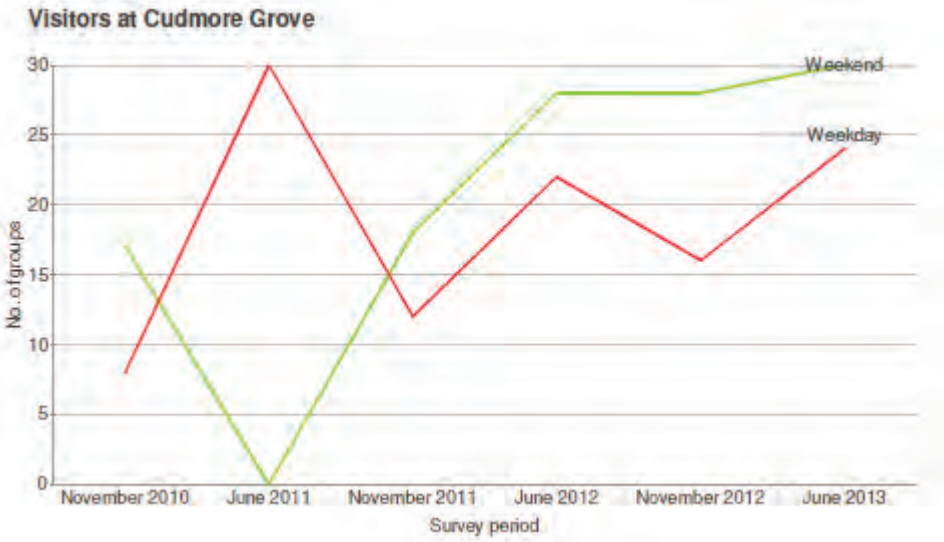
Colchester Borough Council has provided visitor survey data to support North Essex Shared Section 1 Local Plan. Colchester produced a plan level Habitats Regulation Assessment in Spring 2013 for the shared local plan, containing relevant survey data for many of the sites across Essex.



| Counts Respondents | Total | Survey period | | | | | |
|---|---|---|---|---|---|---|---|
| | | November 2010 | June 2011 | November 2011 | June 2012 | November 2012 | June 2013 |
| Base | 56 | 12 | 9 | 16 | 5 | 4 | 10 |
| SSSI Unit | | | | | | | |
| Strood Channel | 56 | 12 | 9 | 16 | 5 | 4 | 10 |

| Counts Respondents | Base | Survey period | | | | | |
|---|---|---|---|---|---|---|---|
| | | November 2010 | June 2011 | November 2011 | June 2012 | November 2012 | June 2013 |
| Total | 310 | 32 | 31 | 54 | 65 | 74 | 54 |
| Weekday or weekend | | | | | | | |
| Weekday | 142 | 14 | 15 | 28 | 24 | 25 | 36 |
| Weekend | 168 | 18 | 16 | 26 | 41 | 49 | 18 |

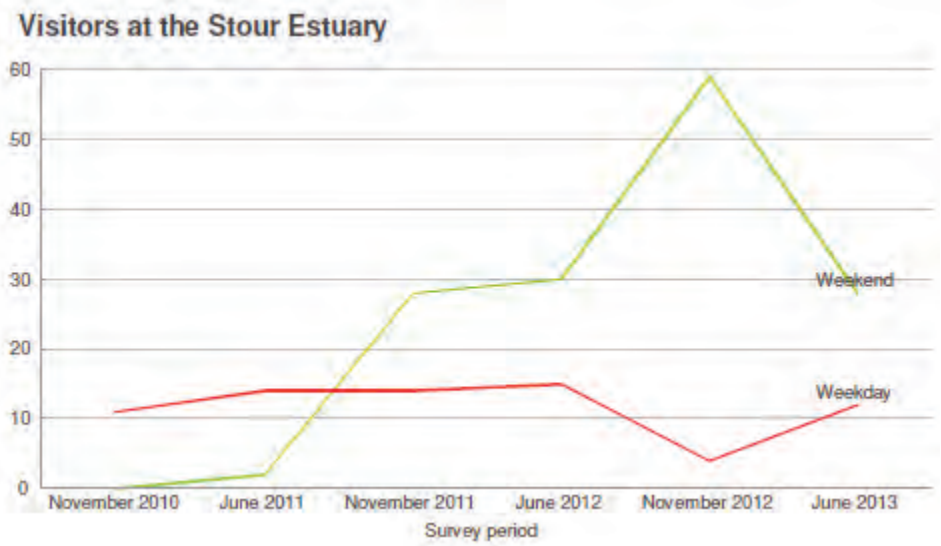
**Table 15.** Number of visitors at Brightlingsea Marshes over the three year survey period.




| Counts Respondents | Base | Survey period | | | | | |
|---|---|---|---|---|---|---|---|
| | | November 2010 | June 2011 | November 2011 | June 2012 | November 2012 | June 2013 |
| Total | 35 | 6 | 2 | 7 | 4 | 6 | 10 |
| SSSI Unit | | | | | | | |
| Kirby Quay | 35 | 6 | 2 | 7 | 4 | 6 | 10 |

**Table 17.** Number of visitors at Kirby Quay over the three year survey period.


Number of visitors at Walton-on-the-Naze
60
50
40
30
20
10
0
Walton-on-the-Naze
November 2010
June 2011
November 2011
June 2012
November 2012
June 2013
Survey period


Visitors at the Stour Estuary
60
50
40
30
20
10
0
Weekend
Weekday
November 2010
June 2011
November 2011
June 2012
November 2012
June 2013
Survey period


Number of visitors at The Walls
45
40
35
30
25
20
15
10
5
0
Weekend
Weekday
November 2010
June 2011
November 2011
June 2012
November 2012
June 2013
Survey period

Maldon

Maldon District Council currently has visitor survey data for the Habitats sites

Rochford

Rochford District Council currently has a visitor survey undertaken by the RSPB recording visitor numbers to Wallasea Island.

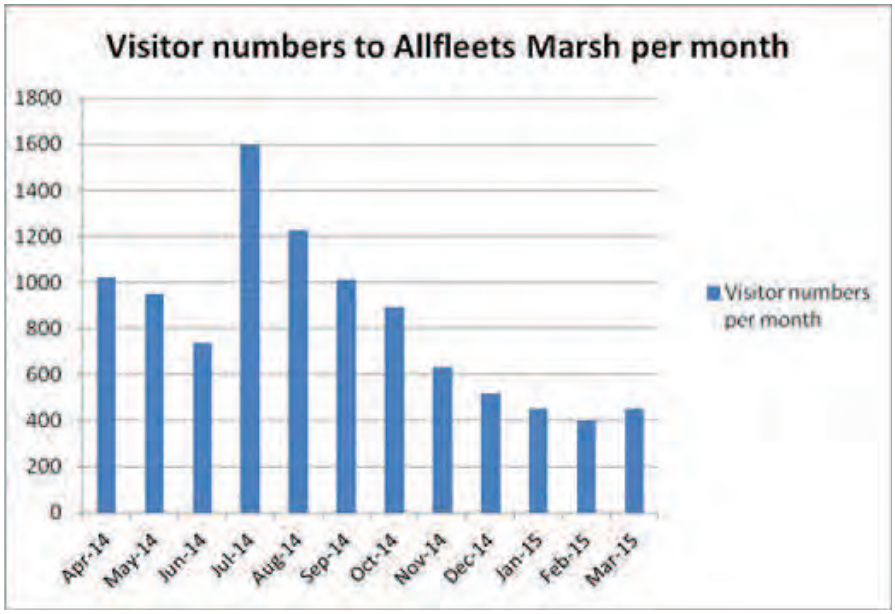
There is visitor number information available for the period 2008-2017 as shown in the tables below.

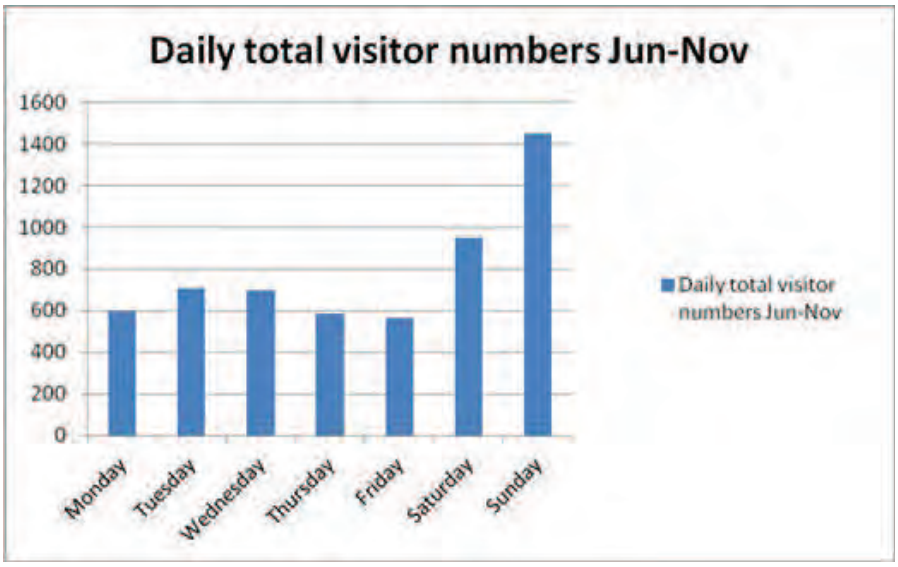
**Table A8.1: Visitor numbers for 2017, including car counter**

| Date | Visits to seawall | No. of cars |
|---|---|---|
| Apr 17 | 1882 | |
| May 17 | 1631 | |
| Jun 17 | 1410 | |
| Jul 17 | 1617 | 1442 |
| Aug 17 | 1824 | 1720 |
| Sep 17 | 1359 | 1239 |

**Table A8.2: Total visitor numbers for period 2008-2016**

| Year | No. of visits |
|---|---|
| 2008/09 | 3619 |
| 2009/10 | 4722 |
| 2010/11 | 5200 |
| 2011/12 | 7208 |
| 2012/13 | 7334 |
| 2013/14 | 7270 |
| 2014/15 | 9893 |
| 2015/16 | 11682 |




Southend-on-Sea

Southend-on-Sea Borough Council has data from visitor surveys undertaken on the main high street although as this location is not in the Natura 2000 site; it is not comparable data for the RAMS. Southend Borough attracts roughly 6 million visitors per annum and because of this, survey data for any area of the Borough is useful in determining impacts upon the natural and built environment, including the Habitats sites.

**Table A8.3: Reasons for visiting in March and May (2013)**

| Reason for Visit | Wed 23 Mar | Fri 25 Mar | Sat 26 Mar | Mon 30 May | Total | % |
|---|---|---|---|---|---|---|
| Work | 49 | 25 | 19 | 61 | 154 | 18% |
| Education | 44 | 1 | 1 | 6 | 52 | 6% |
| Shopping | 64 | 56 | 61 | 49 | 230 | 27% |
| Business | 9 | 3 | 1 | 5 | 18 | 2% |
| Leisure | 53 | 86 | 66 | 114 | 319 | 38% |
| Night Clubs | 2 | 5 | 1 | 0 | 8 | 1% |
| Seafront/Amusements | 3 | 11 | 5 | 23 | 42 | 5% |
| Other | 12 | 7 | 5 | 2 | 26 | 3% |
| *Total* | 236 | 194 | 159 | 260 | *849* | |

The questions were in regard to reasons for visiting. The data provides an insight into visitor habits.

Tendring

Tendring District Council has provided visitor survey data for the Habitats sites to support North Essex Shared Section 1 Local Plan and contributed to a plan level Habitats Regulation Assessment in Spring 2013 for the shared local plan, containing relevant survey data for many of the sites across.

Thurrock

Thurrock Borough Council currently has visitor survey data for the Habitats sites, produced by Essex Wildlife Trust and Coalhouse Fort.
Additionally, Thurrock has s106 money available to fund further surveys within the Thames Estuary SPA area however details for these surveys are currently unknown.

Essex County Council

In 2013 Place Services produced a project level Habitats Regulations Assessment Screening Report on behalf of ECC for Thames Estuary Pathways project. This document contained relevant visitor information for the Thames Estuary Pathways between Tilbury to Leigh-on-Sea.

**Table A8.4: Estimated future use of Thames Pathways (2013)**

| Section | Mean number of path users per day | Winter path users per day | Estimated future mean number of path users per day | Estimated future mean number of winter path users per day |
|---|---|---|---|---|
| Tilbury to East Tilbury | 50.9 | 15.3 | 76 | 22.8 |
| East Tilbury to Stanford Le Hope | 28.8 | 8.6 | 58 | 17.4 |
| Stanford Le Hope to Pitsea | 13.7 | 4.1 | 28 | 8.4 |
| Pitsea to Benfleet | 14.7 | 4.4 | 30 | 9 |
| Benfleet to Leigh-on-Sea | 354 | 106 | 443 | 132.9 |

## Appendix 9: Survey postcode data and methodology

Surveyors asked visitors to the coast for their home town postcode data or location in order to calculate the distances travelled. Where a town eg Colchester was given, the distance was generated from this information. The Zones of Influence distances are based on the 75$^{th}$ percentile of postcode data (i.e. the distance where the closest 75% of visitors come from) taken from all surveys undertaken for each Habitats site (winter or winter/summer surveys depending on designation features).

This method was used for a number of strategic mitigation schemes nationally and is considered by Natural England to be best practice.

The tables below include the postcode data provided for all of the visitor surveys undertaken for this project.

| Colne Estuary | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | co58 ue | co58 uw | co58u w | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | |
| Distance | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | |
| Location | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | |
| Distance | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Location | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | co7 | |
| Distance | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Location | co7 | co7 | co7 | co58 tn | co79j h | co79 bb | co79 nu | co58d z | co79 ra | co79f e | co58 hl | co79ld | co79 tb | co58 gg | co58rd |
| Distance | 0.4 | 0.4 | 0.4 | 0.6 | 0.9 | 0.9 | 0.9 | 1 | 1 | 1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.6 |
| Location | co58 pr | co78 ae | co79qg | co58 qh | CO58 NA | co20j n | co20j u | co43n b | co12 bn | co4 | co4 | co4 | co4 | co29dr | co27 hw |
| Distance | 1.6 | 1.6 | 1.8 | 2.3 | 2.5 | 4.3 | 4.6 | 5.5 | 5.6 | 6 | 6 | 6 | 6 | 6.7 | 6.7 |
| Location | co33 ea | co33 ng | colche ster | co1 | co1 | co1 | co33 uz | co33q p | co34j g | co30r n | co30 hp | co3 | co3 | co3 | co3 |
| Distance | 6.7 | 7.1 | 7.3 | 7.4 | 7.4 | 7.4 | 7.5 | 7.7 | 8.6 | 9.2 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 |
| Location | co3 | co63 ef | co5 | c05 | co5 | co5 | co5 | co5 | co5 | co5 | co5 | co5 | co61l s | co13 | co50 pn |
| Dista | 9.7 | 10.6 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12.4 | 12.4 | 12.5 |

| nce | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Location** | co6 | co62dx | co61qz | witham | cm34qu | cm79ua | cm79at | cm777ux | co93ps | cm16qz | cm74ra | cm248hp | da28eb | en87he | en14jd |
| **Distance** | 15 | 16.1 | 17.4 | 19.2 | 24.1 | 24.7 | 26 | 27.1 | 28.7 | 29.4 | 36 | 50.8 | 61.8 | 66.3 | 69.4 |
| **Location** | n16 | | | | | | | | | | | | | | |
| **Distance** | 73.9 | | | | | | | | | | | | | | |

| Crouch and Roach Estuaries | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | cm08as | cm08hw | cm08rp | cm08rp | cm08bd | cm08hw | cm08jb | cm08js | cm36dq | cm08as | cm08ha | cm08ll | cm08ja | cm36ls | cm36lu |
| **Distance** | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| **Postcode** | northfambridge | northfambridge | cm36lu | northfambridge | northfambridge | northfambridge | northfambridge | northfambridge | cm08hb | cm08la | cmo8jg | cm08jy | cm08hq | cm08la | cm36lt |
| **Distance** | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| **Postcode** | cm08er | cm08ld | cm36lz | cm36lz | cm36lz | cm08sz | cm08dy | cm08dx | cm08dx | cm08ed | cm08hf | cm08ed | cm08es | burnham | burnham |
| **Distance** | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| **Postcode** | burnham | burnham | cm36nf | cm36nf | cm08eh | cm08en | cm08bq | cm08ds | cm08bq | cm08ex | cm08sn | cm08bq | cm08dr | cm08rl | cm08dl |
| **Distance** | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 |
| **Postcode** | cm08dn | cm08bw | cm08tr | cm08dq | cmo8tt | cm08tf | cm08dd | cm08tx | cm36dt | cm08db | cm08tw | cm08ql | ss5 | cm36je | cm36hp |
| **Distance** | 0.9 | 0.9 | 1 | 1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 2 | 2 | 2.3 | 2.4 | 2.6 |
| **Postcode** | cm36bl | cm36jg | ss69ut | cm07bt | cm36jf | ss118rb | cm07bg | cm36px | cm07rx | cm07ap | cm36tw | cm0 | cm0 | cm0 | cm0 |
| **Distance** | 2.7 | 2.7 | 2.8 | 3 | 3 | 3.1 | 3.5 | 3.9 | 4 | 4 | 4.1 | 4.2 | 4.2 | 4.2 | 4.2 |
| **Postcode** | cmo | cm0 | cm0 | cm0 | cm0 | cm0 | cm0 | cm0 | cm07al | cm38dg | cmo7dj | cm07dg | ss68py | cm36ap | ss129ea |
| **Distance** | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.3 | 4.4 | 4.5 | 4.7 | 4.8 | 4.9 |
| **Postcode** | cm34hp | cm36te | cm07rt | ss95bs | ss9 | cm112uh | cm96ad | cm07pa | cm112ld | cm9 | billericay | cm28by | cm120hr | cm129pn | ss156jz |
| **Distance** | 5.1 | 5.3 | 5.5 | 6.2 | 6.4 | 8.9 | 9 | 9.2 | 10.1 | 10.5 | 11.2 | 11.7 | 11.8 | 12.2 | 13.1 |
| **Postcode** | ss178er | cm40de | cm4 | ss178en | cm8 | cm3 | cm3 | cm82xe | cm31rs | rm162tj | rm176dn | rm113nn | cm79ll | se167dr | n41ay |
| **Distance** | 14.7 | 14.7 | 14.7 | 14.7 | 16.8 | 17.9 | 17.9 | 18.1 | 21.1 | 23 | 23.7 | 25.1 | 26.5 | 45.5 | 47.5 |
| **Postcode** | gu272jw | ireland | | | | | | | | | | | | | |
| **Distance** | 108 | 501.8 | | | | | | | | | | | | | |

**Dengie**

| **Postcode** | orthona | orthorna | cm07pp | cm07pp | cm07qh | cm07px | cm07qq | cm07px | bate dudley | brad well | bradwell | bradwell | tillingham |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Distance** | 0.1 | 0.1 | 1.6 | 1.6 | 1.9 | 2 | 2 | 2 | 2.1 | 3.3 | 3.3 | 3.3 | 3.6 |
| **Postcode** | tillingham | cm07hs | tillingham | cm07tw | asdeldham centre | cm07gr | cm07np | burnham | burnham | burnham | burnham | southminster | southminster |
| **Distance** | 3.6 | 3.7 | 3.9 | 4 | 5 | 5.5 | 5.8 | 7 | 7 | 7 | 7 | 7.1 | 7.1 |
| **Postcode** | southminster | southminster | southminster | cm0 | cm0 | cm0 | steeple | mayland | althorne | cm36et | maylandsea | heybridge | cm9 |
| **Distance** | 7.1 | 7.1 | 7.1 | 7.2 | 7.2 | 7.2 | 9 | 11 | 11 | 11.8 | 12 | 14 | 14.3 |
| **Postcode** | cm9 | latchington | maldon | maldon | colchester | ss12ey | southend | coldnorton | hockley | cm8 | ss9 | southwoodham ferrers | cm7 |
| **Distance** | 14.3 | 14.5 | 15.6 | 15.6 | 16.5 | 16.5 | 16.7 | 17.6 | 18.1 | 18.8 | 20.2 | 20.8 | 27.1 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | cm16nn | wickford | wickford | cm1 | chelmsford | cm77 | cm13ea | ss17 7nr | cm31ln | shenfield | ct13 | ilford | ip139hn |
| **Distance** | 27.1 | 27.3 | 27.3 | 29.1 | 30 | 30 | 32.1 | 33.6 | 34.3 | 41 | 48.5 | 58.6 | 59.3 |
| **Postcode** | london | london | ip199lp | ha4 | hp5 | ng23 7nj | cirenseester | de22 2g | cornwall | | | | |
| **Distance** | 73.6 | 73.6 | 77.5 | 92.1 | 104.2 | 192.7 | 200 | 211.1 | 415 | | | | |

## Benfleet and Southend Marshes

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | ss12yt | ss91ea | ss08jj | ss07rl | chalkwell | chalkwell | chalkwell | ss9 1ed | chalkwell | chalkwell | westcliff | westcliff |
| **Distance** | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| **Postcode** | ss08ht | westcliff | ss91dr | ss92dj | ss91as | ss92dg | ss0 8pu | ss91hb | westcliff | westcliff | westcliff | ss9 1as |
| **Dista** | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

| nce | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | gunners prk | ss39ez | ss91ad | ss9 1ad | ss12xa | ss39hl | ss39ls | ss13nj | ss0 7nn | ss9 2ht | ss9 2ax | ss9 2nq |
| **Distance** | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| **Postcode** | ss9 2ax | ss0 7nn | ss39jw | ss39fw | ss92au | ss9 1rp | ss0 8pj | ss39by | leigh | leigh | leigh | leigh |
| **Distance** | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| **Postcode** | leigh | leigh | leigh | leigh | legh | leigh | leigh | leigh | leigh | leigh | leigh | leigh |
| **Distance** | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| **Postcode** | leigh | leigh | leigh | leigh | leigh | leigh | legh | leigh | leigh | leigh | leigh | leigh |
| **Distance** | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| **Postcode** | leigh | leigh | leigh | leigh | leigh | leigh | leigh | leigh | leigh | leigh | ss9 1ra | ss9 1sq |
| **Distance** | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| **Postcode** | ss9 1rd | leigh | leigh | thorpe bay | thorpe bay | thorpe bay stn | thorpe bay | thorpe bay | thorpe bay | thprpe bay | ss13le | ss13nb |
| **Distance** | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| **Postcode** | ss39ja | thorpe bay | ss9 1qx | ss9 2al | ss9 2an | ss9 2an | ss9 1qx | woodgrange drive | ss9 1nj | ss12ub | ss39lz | ss89rd |
| **Distance** | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| **Postc** | ss91ju | ss39qf | ss9 | ss9 1st | ss39le | ss13je | ss12xw | ss9 | ss9 | ss9 | ss9 | ss9 |

| ode | | | 1nw | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Postcode | ss9 | ss9 | ss9 | ss9 | ss13eh | ss12uf | southchurch | ss08ah | southchurch | ss9 2ta | thorpedean | ss24jp |
| Distance | 0.9 | 0.9 | 0.9 | 0.9 | 1 | 1 | 1 | 1 | 1 | 1 | 1.1 | 1.1 |
| Postcode | ss39wb | ss39wb | ss39gb | ss39la | garrison estate | garrison estate | garrison estate | garrison estate | ss07aq | ss9 3pn | ss9 2qp | ss13pp |
| Distance | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 |
| Postcode | ss25az | ss93pj | ss93ea | ss71pg | ss9 3ea | SS9 3EJ | ss09dd | ss09dd | ss13sr | ss0 7bb | ss3 9pe | ss93db |
| Distance | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 |
| Postcode | ss13qp | ss38ag | ss24np | ss39ap | ss93be | ss93fa | ss93dx | SS0 9RD | souyhend | ss25dh | ss13pu | ss24ht |
| Distance | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 |
| Postcode | ss24nf | southend | southend | southend | westliff southend border | southend | ss39sg | ss24hp | hadleigh | hadleigh | hadleigh | shoebury ness |
| Distance | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.7 |
| Postcode | shoebury | shoebury | shoebury | shoebury | ss25lu | hadleigh | ss0 | hadleigh | ss0 | ss0 | shoebury rd | ss24rs |
| Distance | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 |

| Postcode | ss9 4je | ss2 4dl | ss13nz | ss8 0qf | ss71hg | ss38bh | ss7 5eh | ss38xp | ss24rd | ss9 3tu | ss38yh | ss39yy |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance | 1.8 | 1.8 | 1.9 | 1.9 | 2 | 2 | 2 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 |
| Postcode | benfleet | benfleet | benfleet | benfleet | benfleet | benfleet | benfleet | benfflee t | benfleet | benfleet | ss7 | ss24ay |
| Distance | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 |
| Postcode | ss00pz | ss7 | ss0 0py | ss9 4tj | thundersley | thundersley | ss7 2uh | ss75st | eastwood | eastwood | eastwood | ss3 0at |
| Distance | 2.4 | 2.4 | 2.4 | 2.7 | 3.1 | 3.1 | 3.1 | 3.2 | 3.4 | 3.4 | 3.4 | 3.6 |
| Postcode | ss30wl | ss30dx | ss9 5qx | ss9 5as | gt wakering | wakering | wakering | gt wakering | wakering | wakering | ss30rh | great wakering |
| Distance | 3.7 | 3.7 | 3.7 | 3.8 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Postco | great wakering | littl wakering | ss3 | ss30jn | ss74sb | ss6 | ss6 8rb | rayleigh | rayleigh | raighley | raighleigh | rochford |
| Distance | 4 | 4.1 | 4.1 | 4.3 | 4.5 | 4.9 | 5 | 5.1 | 5.1 | 5.1 | 5.1 | 5.3 |
| Postcode | ss30ls | rochford | rochford | ss41nq | ss13 1hz | ss13 1pp | ss54pu | ss54px | ss13 1ph | hockley | ss5 | ss5 |
| Distance | 5.3 | 5.3 | 5.3 | 5.7 | 5.9 | 6.5 | 6.6 | 6.6 | 6.7 | 6.8 | 6.9 | 6.9 |
| Postcode | ss54sj | ss43bj | ss5 4xd | ss141rp | basildon | basildon | basildon | basildon | ss55al | ss120nz | ashingdon | wickford |
| Distance | 7 | 7 | 7.2 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.5 | 8.1 | 8.7 | 8.8 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | ss14 | ss14 2bd | ss154ah | ss178nr | ramsden heath | east tilbury | east tilbury | orsett | orsett | cm120nb | cm3 6ql | rm175rp |
| **Distance** | 8.8 | 9.1 | 11.8 | 12.3 | 12.8 | 12.9 | 12.9 | 14.7 | 14.7 | 15.6 | 16.3 | 18.3 |
| **Postcode** | grays | cm4 0ad | brentwood | CM2 | cm13bj | upminster | upminster | upminster | chelmsford | chelmsford | hornchurch | hornchurch |
| **Distance** | 18.7 | 19.9 | 20.7 | 22.2 | 22.6 | 22.8 | 22.8 | 22.8 | 23 | 23 | 24.9 | 24.9 |
| **Postcode** | rm30ww | rm2 5bu | dartford | romford | romford | east london | cm73dp | cm7 9ax | cm19 4eh | n8 | north london | north london |
| **Distance** | 25.1 | 26.7 | 27 | 27.9 | 27.9 | 36.1 | 37.8 | 38.6 | 42.5 | 47.5 | 47.7 | 47.7 |
| **Postcode** | N1 | london | west london | cambridge | gu12 6rb | buckimgham | norfolk | sheffield | ng60ar | devon | yorkshire | glasgow |
| **Distance** | 48.1 | 49 | 62.6 | 80.3 | 96.2 | 119.4 | 126.2 | 247.5 | 247.6 | 321 | 329 | 577 |

## Thames Estuary and Marshes

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Postcode** | ss170eg | rm188pb | east til | east tilbury | east tilbury | east tilbury | ss17 | ss17 | ss17 | ss17 | ss17 |
| **Distance** | 0.6 | 0.7 | 1 | 1 | 1 | 1 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| **Postcode** | ss17 | station rd | corringham | coringham | ss170nz | linford | linford | linford | linford | linford | ss177rg |
| **Distance** | 1.5 | 1.6 | 1.7 | 1.7 | 1.7 | 2 | 2 | 2 | 2 | 2 | 2 |
| **Postcode** | stanford | stanford | stanford | stanford | stanford | stanford,horndon | stanford le hope | stanford | stanford | stanford | stanford |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Distance** | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |
| **Postcode** | stanford le hope | stanford le hope | stanford | stanford | ss178qr | ss179el | ss178ph | horndon | rm18 8dj | rm188dx | chadwell |
| **Distance** | 2.2 | 2.2 | 2.2 | 2.2 | 2.5 | 2.6 | 3.2 | 3.5 | 4 | 4.4 | 4.8 |
| **Postcode** | tilbury | tilbury | tilbury | tilbury | rm187ah | ss16 | ss14 | rm175rg | rm16 | laindon | basildon |
| **Distance** | 4.9 | 4.9 | 4.9 | 4.9 | 5.5 | 6.4 | 7.1 | 7.2 | 7.2 | 7.6 | 8 |
| **Postcode** | basildon | basildon | basildon | rm17 | grays | grays | grays | grays | grays | chafford | ss7 |
| **Distance** | 8 | 8 | 8 | 8.1 | 8.2 | 8.2 | 8.2 | 8.2 | 8.2 | 8.9 | 9.9 |
| **Postcode** | south ockendon | south ockendon | wickford | rm154bh | ss12 | leigh on sea | cm133dq | hockley | ss11et | cm0 | cm234es |
| **Distance** | 10.1 | 10.1 | 12.3 | 12.4 | 12.6 | 13.5 | 15 | 16.8 | 17 | 30.6 | 45 |
| **Postcode** | so32 | | | | | | | | | | |
| **Distance** | 128 | | | | | | | | | | |

## Appendix 10: Follow up Stakeholder Workshop Outputs

The results of the follow up workshop will inform which mitigation measures may be effective in certain locations but is not the sole basis for them.

**Essex coast RAMS Stakeholder Workshop Outputs**
**10:00 – 13:00 15th June – Colchester Borough Council Offices**

**Attendee List**

| Name | Organisation |
|---|---|
| Matt Wilson | Coast and countryside Manger (Maldon District Council) |
| Roy Read | England Coast Path representative (Natural England) |
| Charlie Williams | Responsible officer for Crouch and Roach (Natural England) |
| Leon Woodrow | Nature Conservation Officer (Tendring District Council) |
| Andrew St. Joseph | Maldon Councillor |
| Zoe Ringwood | Responsible officer for Hamford Water (Natural England) |
| Annie Gordon | Essex Wildlife Trust |
| Rachel Langley | Essex Wildlife Trust |
| David Piper | Blackwater Estuary Lead Ranger (National Trust) |
| Michael Parkin | Responsible officer for Dengie (Natural England) |
| Jack Haynes | Planning officer (Natural England) |
| Heather Read | Planning officer (Natural England) |
| Josey Travell | Environmental and greenspace officer (Southend Borough Council) |
| David Eagle | Farmer |
| Mark Sumner | Access and recreation advisor for Ministry of Defence |
| Mark Nowers | RSPB |
| Xavier Preston | Southend Borough Council |
| Shelley Blackaby | Colchester Borough Council |
| Karen Johnson | Maldon District Council |
| Sue Hooton | Place Services |
| Lois Crisp | Place Services |
| Hamish Jackson | Place Services |
| Luke Pidgeon | Place Services |
| Maria Hennessy | Place Services |

## Benfleet and Southend Marshes SPA and Ramsar

General Notes

- Two Tree Island, highlighted as key area of disturbance;
- Visitors are concentrated in the West (Two Tree), Centre (Golden Mile) and East (Gunners Park). Residents are dispersed to the West and East, whereas, Tourists mainly visit the centre of the seafront;
- Thameslink pathway near Two Tree Island is heavily used (Two Tree to Hadleigh CP Loop);
- Leigh Cockle Sheds provide access to mudflats – people take their dogs.
- Bait diggers use a lot of the foreshore, can be seen travelling quite a way out.
- Staffing issues for the shoreline – on busy day's staff are focused in central Southend;
- Old Leigh has high visitor numbers;
- Two Tree Island Wildfowling – agreement is very old, made in the 1950s, wasn't aware of it until recently. Southend waiting for NE input;
- Potential to expand Belhus/Hadleigh Country Park? ;
- The England Coast Path is planned to run along the entire length of the coastline in Southend-on-Sea; and
- There is access by foot onto Canvey Point.

**Table A10.1: Mitigation ideas**

| Location | Mitigation option | Notes |
|---|---|---|
| Two Tree Island | Employ new rangers to monitor the site. | Two Tree Island is currently heavily utilised during the busier tourist periods mainly by local residents. |
| | Habitat regeneration | Paths on the island are currently inadequate, and there are currently many wander lines. |
| | Implement information boards | The area features habitats which could be seen as unimportant due to their appearance. Inform visitors of the mudflat importance. |
| | Install buoy markers off of Two Tree Island | Paddle-boarders and Kayakers have the potential to disturb habitats at Two Tree as there is no designation in place. |
| | Interchangeable car park size | Car park is currently used for car meets, install barriers to prevent misuse of the car park. |
| Gunners Park | Provide alternate green space | Southend currently has very little open green space. Provide green space elsewhere, it doesn't |

| | | |
|---|---|---|
| | | necessarily have to be a large area. |
| | Control dog walking in the area more | Despite the MOD designation on the foreshore, dog walkers are still accessing the area. |
| General | Mitigate disturbance | Employ rangers for the seafront who have the ability to enforce/influence. |
| | Potentially use County Council land for alternate green space use | The County Council may have land which is suitable for alternative green space to be provided eg former landfill sites. |

## Crouch and Roach Estuaries SPA and Ramsar

General Notes

- Referring to Burnham-on-Crouch – honey pot site, mostly seaward of coast;
- Referring to Paglesham/East End – Encouraging canoe trips? ;
- Referring East of North Fambridge – Wildfowling;
- Referring to both the rivers Crouch and Roach – Sailing and powerboats currently travelling into creeks, in turn disturbing birds;
- Referring to North Fambridge Marina – new ferry proposed which would travel from north to south of the river; and
- Oyster shell recharge projects are being undertaken to help create habitats for Little Terns.

**Table A10.2: Mitigation ideas**

| Location | Mitigation option | Notes |
|---|---|---|
| West of Potton Island | Monitor the permitted use of narrow channels. | Narrow channels with wide areas of mud, boats and water activity cause bird disturbance. |

## Colne Estuary SPA and Ramsar

General Notes

- Referring to eastern side of Tollesbury Wick – picnicking and swimming popular at spit, potentially little terns nesting at this point, also lots of boating activity;
- Referring to eastern side of Old Hall Marshes – potential little tern nesting site;
- Referring to north-west Mersea Island – Water skiing and canoeing all year;
- Referring to south-west of Seawick – high level of beach activity because of caravan parks;

- Referring to stretch of coast northwards of Brightlingsea – Popular walking route;
- Ray Island has many walkers on Bonner Saltings to the island and boat landing mainly in the summer. The no landing signs that are currently there appear to be ineffective. More recently no access signs, new gates and fence have been implemented onto the landward access through Bonner Saltings; and
- Jet skis at Fingringhoe Wick NR, Geedon Bay and Saltmarsh commonly do not follow the 8 knot speed restriction in that area, ultimately the wash created from the jet skis causing an erosional effect on the saltmarsh.

**Table A10.3: Mitigation ideas**

| Location | Mitigation option | Notes |
|---|---|---|
| Strood Channel | Communicate with user group to explain impacts. Provide guided walks and talks. | Canoeing up the channel at high tide |
| Colne Point | Rangers should identify Little Terns and fence off sites. | A range of measures are needed. Disturbance is adversely affecting birds – Ringed Plover and Little Tern. |
| | Caravan sites should be educated to understand importance of the spit as a habitat for birds | |
| | Restrict access at certain times of year to prevent disturbance. | |
| Eastern side of Tollesbury Wick | Fencing off nesting sites | Little Terns are known to nest at Tollesbury Wick, fencing to prevent access and mitigate disturbance. |
| South east of Wivenhoe | Managed realignment | Currently heavy disturbance for Little Terns, managed realignment has solved cases like this in other areas. |
| Ray Island | Enforce no access | Remove the National Trust 'Welcome' sign as it sends the wrong message. |
| Fingringhoe Wick Nature Reserve | Engagement with local clubs | Clubs could include boating clubs to improve behaviour. |
| Fingringhoe Wick Nature Reserve, Geedon Bayand Saltmarsh woned by MOD | Rangers and education | Add a warden for these areas and get them to engage with local boat clubs and liaise with the Harbour Master and River Police. |

## Stour and Orwell Estuaries SPA and Ramsar

General notes

- The Stour has very few access points to the coast. The main points on the Essex coast are Mistley Walls, Bradfield, Wrabness and Stour Wood, Ramsey;
- There is a no access sign to the beach at Wrabness but this is ignored; and
- There are numerous dog users at Wrabness and many do not use leads.

**Table A10.4: Mitigation ideas**

| Location | Mitigation option | Notes |
|---|---|---|
| Mistley Walls | Ranger that will encourage people to move to an alternative beach that is located at Manningtree (opposite The Crown pub) which is close by and will have less of an impact. | The alternate beach is better suited for recreational activities but is not well known, once people know the location they could be more likely to use that beach rather than Mistley Walls. |
| Mistley Walls | Signage educating the public about when they are allowed to use the beach. | This could be a similar method that has been seen in other authorities that uses red, amber and green paw prints to show dog owners when their dog is allowed in certain areas. |
| Mistley Towers | Educate the user group about what behaviours could impact their surroundings. | There is an unofficial kayaking launch point from this location. Kayakers go into creeks at high tide. |
| Bradfield | Signage to about when they are allowed to launch boats etc. | Long term discussions to regulate use of launching point |
| Stour Wood, Ramsey | Rangers to promote positive behaviour and educate dog walkers. | This area has a high presence of dog walkers. There are currently RSPB patrol volunteers that help in that area plus EWT reserve no dogs. |
| Harwich Haven Authority | Find a water bailiff to enforce speed limits and positive behaviour or work more closely with Essex Marine Police. | It is not uncommon to witness speeding along the Stour, a bailiff would help keep speed limits in check. |
| Dovercourt | Promote jet ski launch points from Dovercourt. | This will encourage people to launch from here where there will be a lesser impact to birds. |
| Wrabness NR | Rangers through an Essex Wildlife Trust partnership. | There is an Essex Wildlife Trust ranger at Wrabness Nature Reserve adjacent to the estuary, |

| | | |
|---|---|---|
| | | where there is a high presence of dog walkers. |
| Wrabness NR | Education | Information days aimed at dog walkers on site as this was tried and received well in the past. |
| Wrabness NR | Behaviour change | Further encourage the public onto concrete paths and discourage from sensitive areas like marsh fields and estuary beach. |

## Blackwater Estuary SPA and Ramsar

General Notes

- Referring to Caravan Parks, Jet skiing is at present a big issue for the estuaries;
- Swimming within the estuary is gaining in popularity;
- Paddle-boarding is also undertaken in areas which are sensitive to bird interference;
- Aircrafts frequently fly over the estuary at low altitudes disturbing wildlife; and
- Walkers and canoeists regularly cause disturbance on Tollesbury Point and shingle spit.

**Table A10.5: Mitigation ideas**

| Location | Mitigation Option | Notes |
|---|---|---|
| Northey Island | Saltmarsh recharge. 10 year project in the South corner. | National Trust is looking at more access to Northey. |
| Bradwell | Coastal realignment or habitat creation. | Creation of new offshore island. |
| General | Alteration to byelaws. | Partnership with Essex Marine Police, who have already undertaken work for Colchester. |
| Blackwater | Expansion of river bailiff services. | Blackwater is main enforcement area – jet ski enforcement in particular. |
| | New walking routes e.g. Heybridge Lakes. | This location is close to the Blackwater, but could provide a circular route. |
| | Expansion of ranger numbers. | Employ more rangers/roving rangers at key sites, to enforce |
| Maldon Promenade | Park extension. | Land available in the east, potential to expand promenade with specific dog walking area. |

| | | |
|---|---|---|
| Blackwater Caravan Parks | Educate park owners and visitors. | Visitors and owners need to be educated about habitat zoning. Review jet-ski zones as they are typically of lesser quality. |

## Foulness Estuary SPA and Ramsar

- There are a lot of walkers and dog walkers at Wakering Stairs

## Hamford Water SAC, SPA and Ramsar

- John Weston Essex Wildlife Trust reserve has restricted access, with roughly 50% of the land with no access
- Currently there is a volunteer warden at John Weston

**Table A10.6: Mitigation ideas**

| Location | Mitigation Option | Notes |
|---|---|---|
| Beaumont Quay | HLS government funded scheme to redirect horse riders from area. Capital works and on-going payments. | Created permissive pathway, around other farm area, to prevent sea wall usage, but is still legal. |
| Stone Point | Create a friend of the ringed plover group. | Local people provide on-site policing to prevent disturbance from dogs/walkers. |
| John Weston | Rangers | Hire a new ranger as there is a current vacancy for one. |
| | Habitat creation / improvement | Look at bird data to see if this would be viable and effective. |
| | Signs | Improve signs on the accessible entrances. |
| | Information | Improve the quality of information at The Naze visitor centre. |
| Skippers Island | | |
| Operating from Titchmarsh Marina | Boat warden | Extend the hours for the boat warden service. Used to be all year round. |
| Local schools | School talks / education to encourage the love of local wildlife. | Changes behaviour of parent. |
| Tourist Information Centre – used to exist | Re-open TIC in local area. | Provide info for what they can do to protect the area. |
| Dog walker policing | Encourage dog-walkers to police other dog-walkers to | Self-policing. |

| | | |
|---|---|---|
| | behave better. | |
| Hamford Water general | Branding for the protected area. | Put a recognisable logo on coffee cups and stickers. Tell people what is special about an area, and how they can help. |
| Coastal Path | Orientation boards along key access points. | Provide information, location and code for the area. |
| General | Warden for the area. | Post for education, policing and habitat management (including Skippers Island and John Weston). |
| | Create an app for the protected area. | Interactive app shows people more robust areas, 'quiet zones' & 'play zones'. |
| | Re-direct paddleboarders. | |

## Thames Estuary and Marshes SPA and Ramsar

General notes

- Referring to the estuary – there is currently no 'obvious' need for water based enforcement of sports/boats;
- Infrequent walkers and fisherman can be found by Mucking Creek;
- It is likely that there will be housing allocations at East Tibury which will increase visitor numbers; and
- Essex Wildlife Trust (Thameside Nature Park) will be expanding and will have restrictions to access as it does currently. This will move visitors away when the reserve is closed.

**Table A10.7: Mitigation ideas**

| Location | Mitigation Option | Notes |
|---|---|---|
| Grays | Quarry restoration | Will move people away from the sea wall. |
| Coalhouse to southern boundary of Thameside NP | Improve surface of track. | Usage of the current track from walking/dog walking has degraded it. |
| Farmland west of Coalhouse | Potential here for habitat creation. | The option to create & provide high tide roosts. |

## Dengie SPA and Ramsar

General notes

- Bradwell beach commonly has illegal off road biking and quad-bikes that are disturbing habitats, fencing doesn't always prevent this;
- A lot of the access to the Dengie is limited as a lot of it is private access unless people are walking along the coast;
- Visitor numbers are currently low but are increasing;
- Need to look at the land immediately to rear of sea wall as Little Tern nest there at Bradwell. Need involvement from farmers/landowners as they are best placed to put in measures that will protect species. Could make it easier for birds to nest at high tide;
- There is a popular walking route along from the Nature Reserve car park along the seawall, which disturbs birds and affects the saltmarsh; and
- Illegal off-roading is common on the sea wall and saltmarsh.

**Table A10.8: Mitigation ideas**

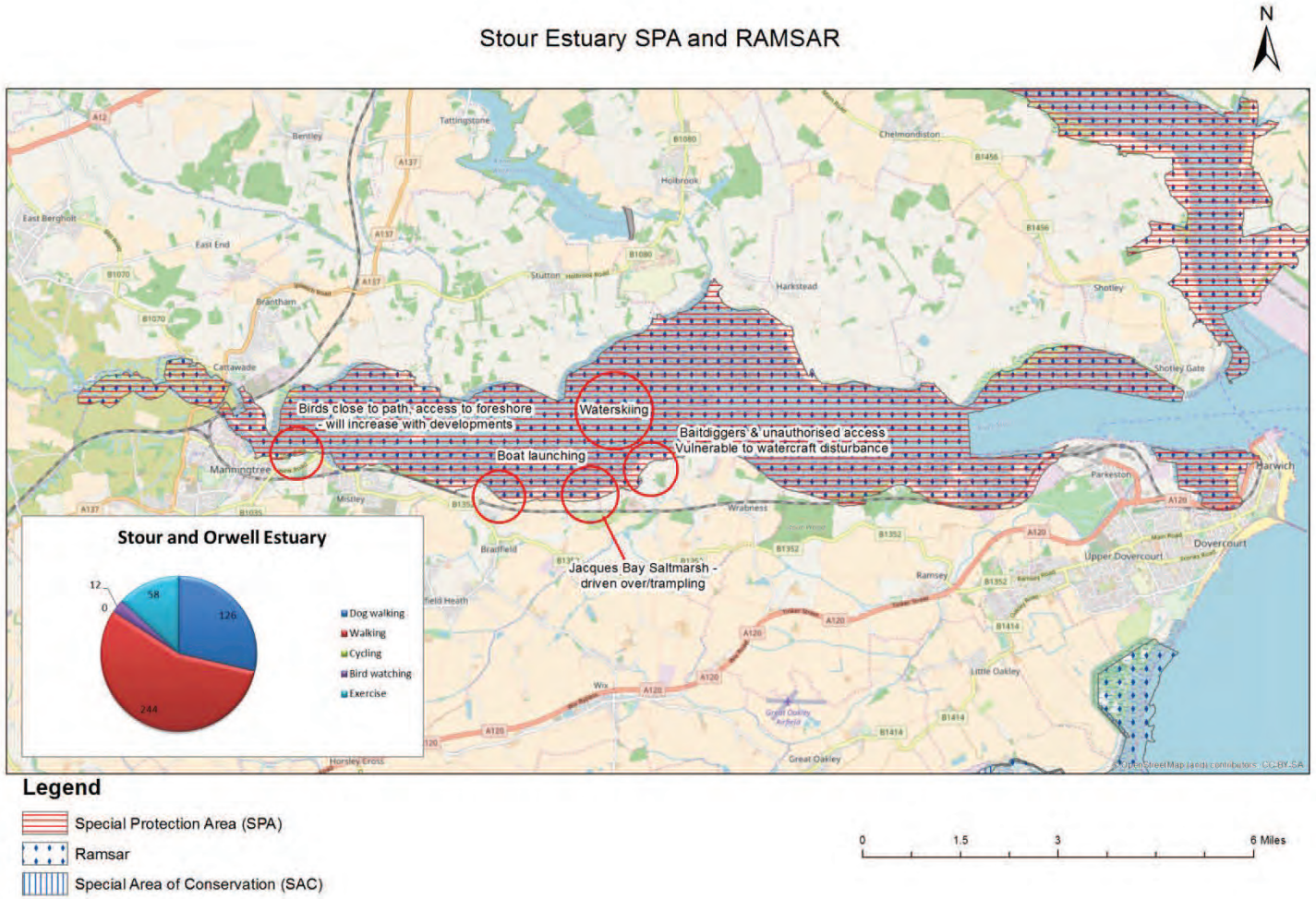
| Location | Mitigation Option | Notes |
|---|---|---|
| Bradwell | New habitat / coastal realignment | Saltmarsh restoration and re-creation, for example creating a new off-shore island near Bradwell. EWT and RSPB have identified sites where saltmarsh can be recharged. It could be a possibility to work in partnership to deliver these schemes. |
| Sea wall | Encourage movement of people away from sea wall to alternative locations. | Alternative locations could include Heybridge Lakes. |

## All sites

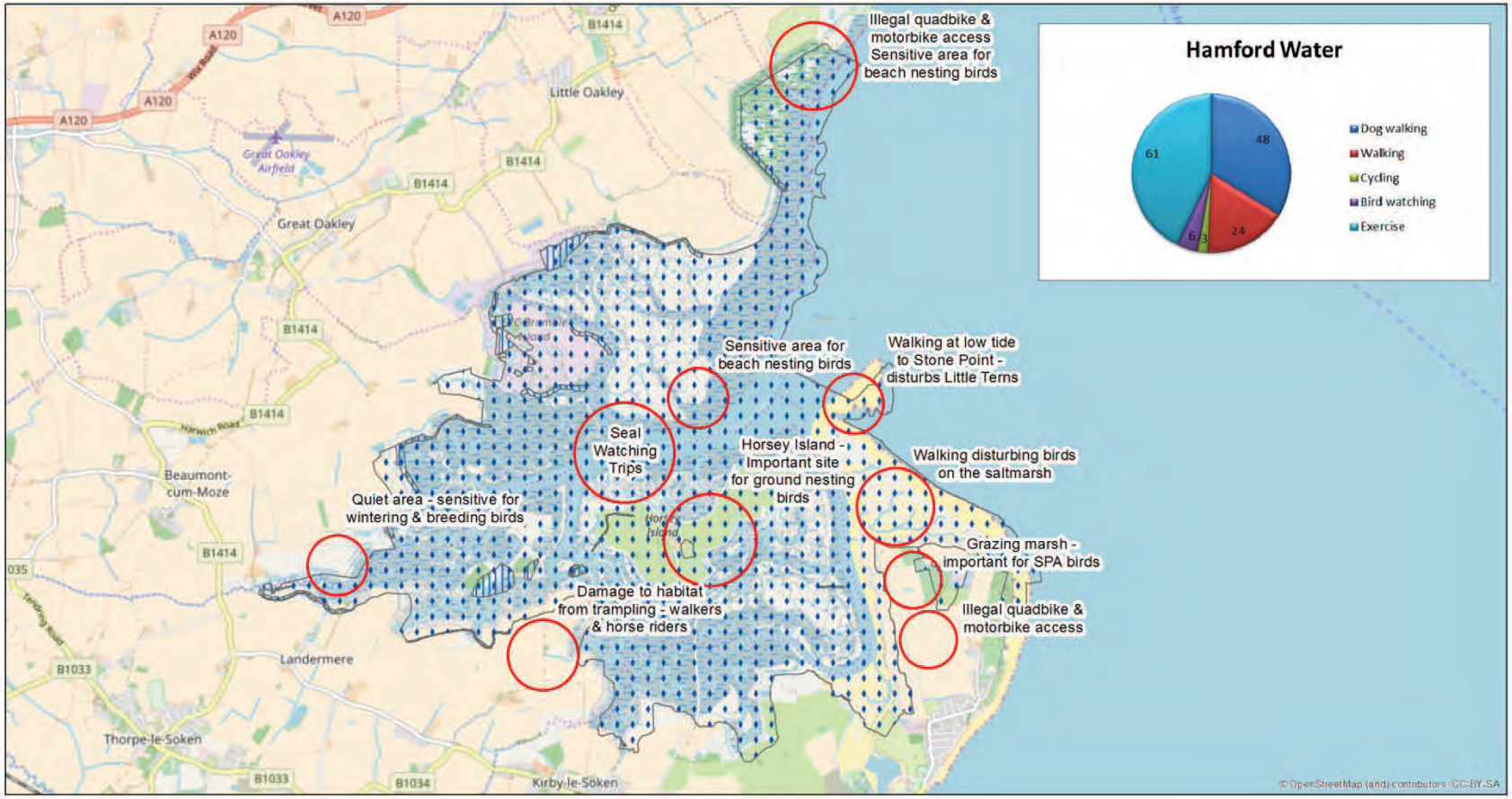
General Mitigation

- Bird Aware is a scheme used in the Solent that is the same concept as the Essex RAMS; this has a website, leaflets and promotes positive behaviours to recreational users. Essex should use this brand as start-up costs would be less and it could mean that the 'Bird Aware' campaign could become nationally recognised. The name Bird Aware should be the preferred name of the scheme compared to the RAMS as it is a clear cut term and is more user-friendly;
- Create partnerships with organisations such as Essex Wildlife Trust, RSPB and National Trust to help deliver measures with their Rangers; and
- Mitigation should include education/communication projects as well as physical projects.

## Appendix 11: Annotated maps of Habitats sites showing recreational disturbance types and locations



# Hamford Water SPA and RAMSAR

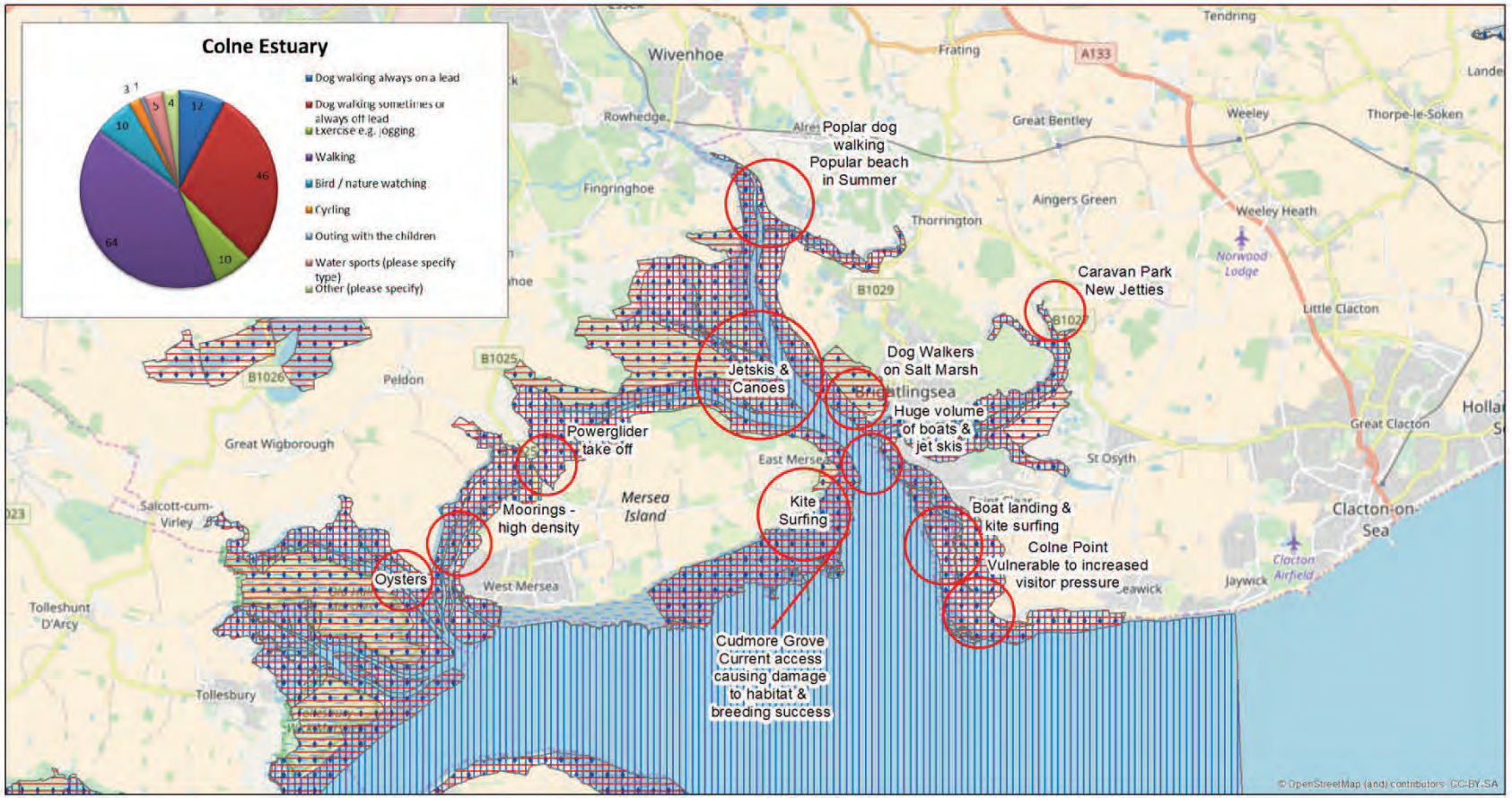



**Legend**

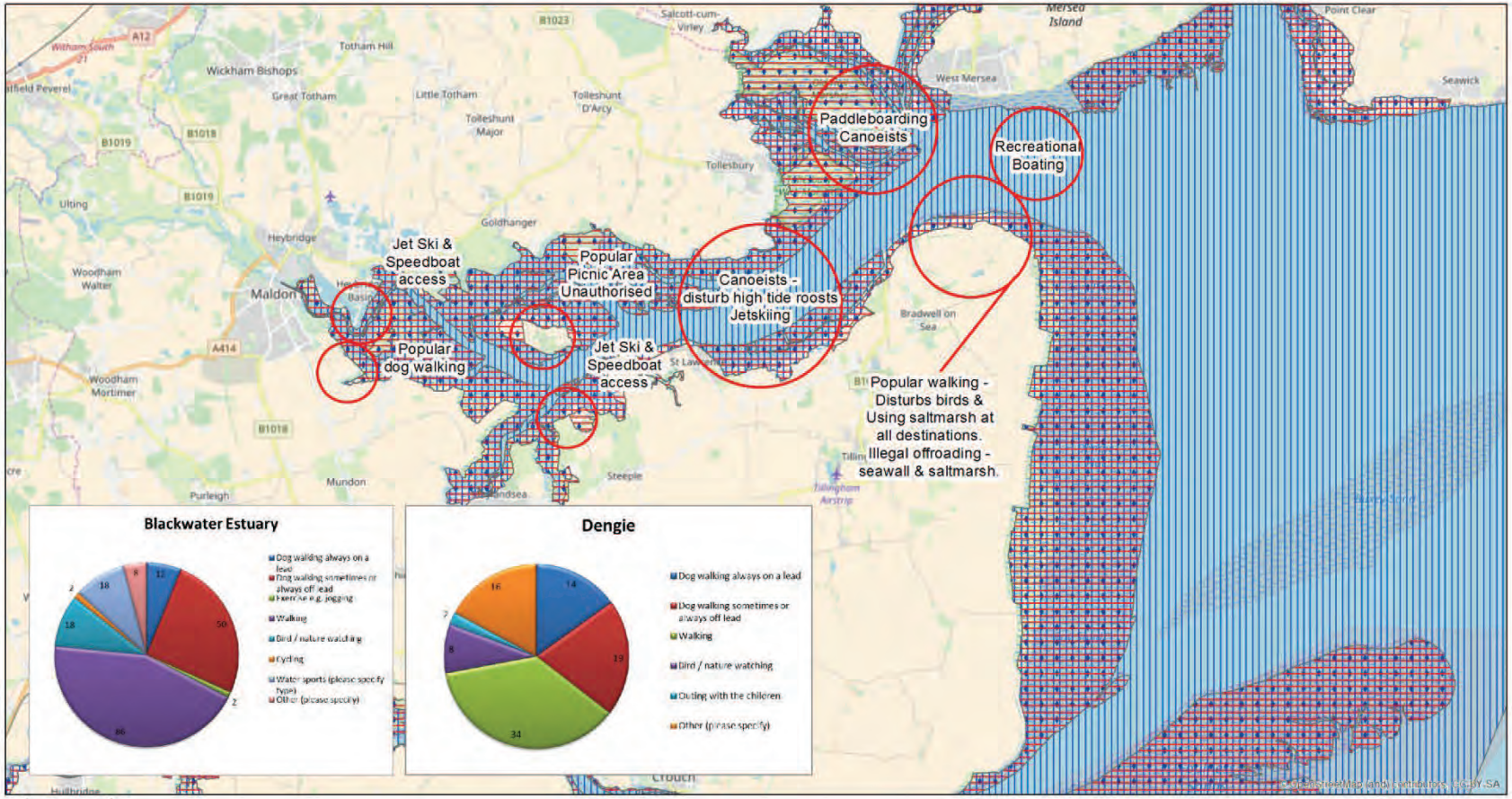
- Special Protection Area (SPA)
- Ramsar
- Special Area of Conservation (SAC)

0 1 2 4 Miles

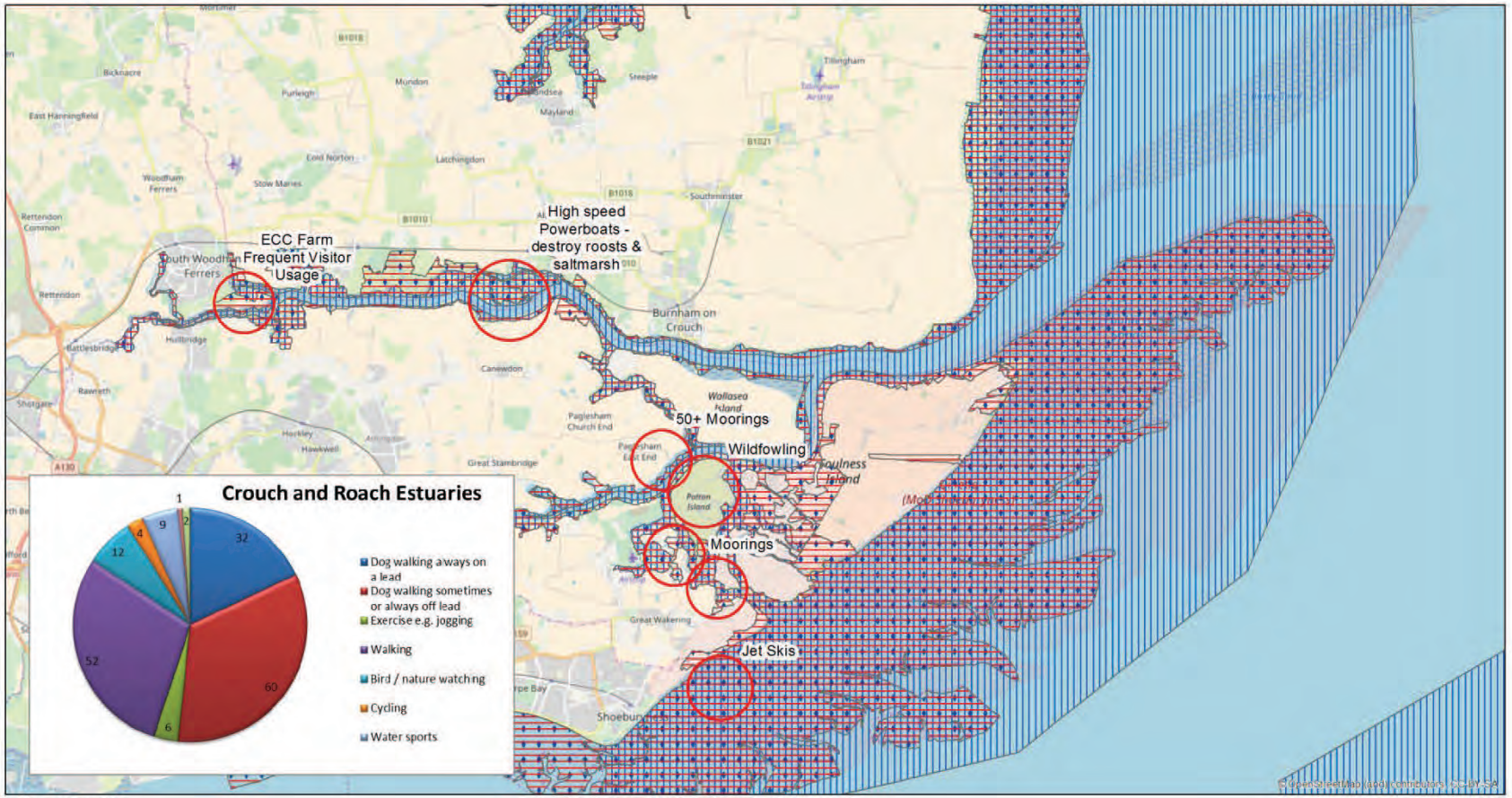
# Colne Estuary SPA and RAMSAR



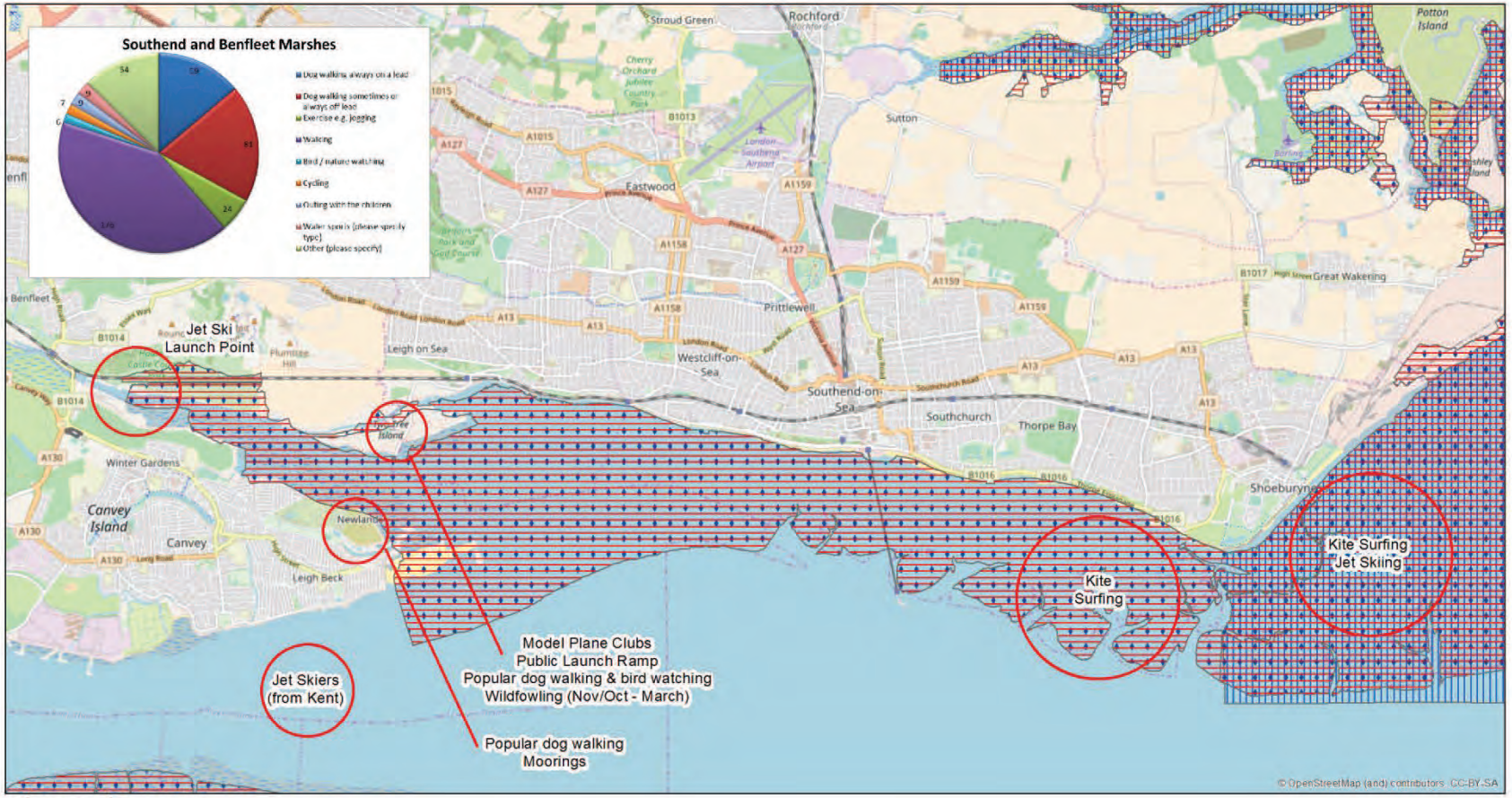
# Blackwater Estuary and Dengie SPA and RAMSAR



# Crouch and Roach Estuaries & Foulness Estuary SPA and RAMSAR



# Benfleet and Southend Marshes SPA and RAMSAR

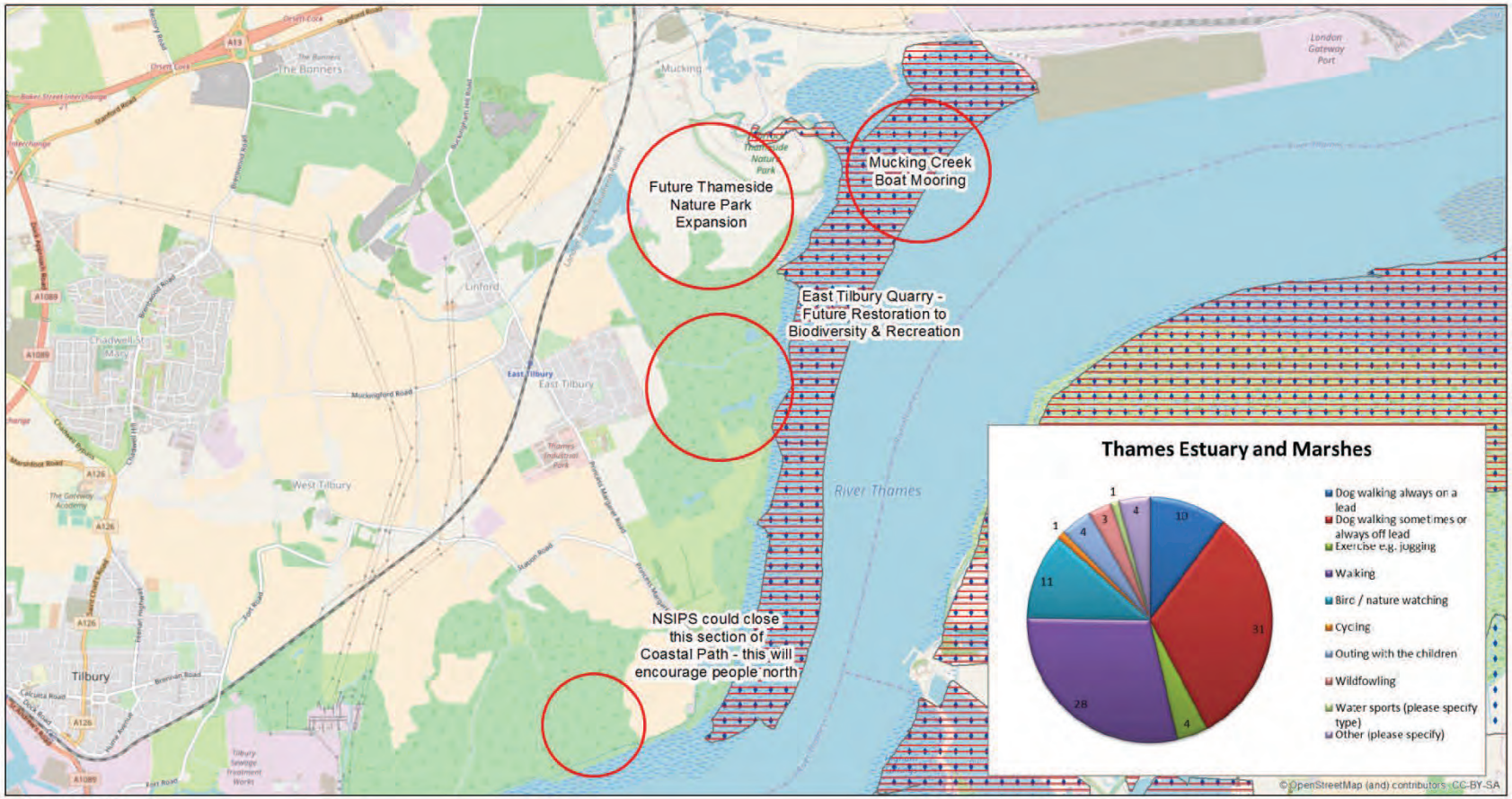



**Legend**

- Special Protection Area (SPA)
- Ramsar
- Special Area of Conservation (SAC)

0 1.25 2.5 5 Miles

# Thames Estuary and Marshes SPA and RAMSAR




**Legend**

- Special Protection Area (SPA)
- Ramsar
- Special Area of Conservation (SAC)

0 0.75 1.5 3 Miles