BIRD AWARE SOLENT

© Pete Durnell

Solent Recreation Mitigation Strategy

December 2017

Foreword by Cllr Seán Woodward - Chairman, PUSH

The value of good partnerships cannot be overstated. Clear thinking, practical application and professional commitment really can change the world.

The Partnership for Urban South Hampshire (PUSH) has been proud of its involvement with the Solent Recreation Mitigation Partnership (SRMP) from its very inception. True concern about protecting the coastline of the wider Solent region, backed up by valid research and a pragmatic approach to dealing with developers and the public alike has led to some ground-breaking progress, with the work of the SRMP being regarded nationally as best practice.

The existence of the SRMP means that our coastline can remain evolving and vibrant, benefitting from considered and relevant development whilst also ensuring ecological needs are duly met. With a public-facing brand - Bird Aware – the SRMP has achieved unprecedented success in engaging with the wider public and is developing into a major and positive force for behaviour change.

I am proud to present to you the Solent Recreation Mitigation Strategy – a document that embodies a progressive way of thinking and an opportunity to ensure our landscape is developed to meet the needs of society and our unique ecological assets. I look forward to seeing the many benefits that will arise as a result of this strategy and I invite you all to take steps to become more bird aware when visiting our beautiful coastline.

For PUSH consideration on 5th Dec 2018

Contents

Summary 4

1 Introduction 5

2 The need for mitigation 6

3 Overall approach and benefits 9

4 The mitigation measures 11

5 Resource costs and funding 14

6 Developer contributions 17

7 Implementation, governance and reporting 20

Appendix A: Calculation of number of new dwellings mitigated 22

Appendix B: Criteria for Suitable Alternative Natural Greenspaces(SANGs) 23

Appendix C: Resource costs 25

Appendix D: In-perpetuity funding 26

Appendix E: References 28

FINAL SH consideration on 5th Dec 2018

The Solent Recreation Mitigation Partnership was established to formulate, implement and monitor the strategy using developer contributions transferred from the local planning authorities. The Partnership comprises the fifteen Solent local authorities, Natural England, the Royal Society for the Protection of Birds, Hampshire & Isle of Wight Wildlife Trust, and Chichester Harbour Conservancy. The authorities are: Chichester District Council, East Hampshire District Council, Eastleigh Borough Council, Fareham Borough Council, Gosport Borough Council, Hampshire County Council, Havant Borough Council, Isle of Wight Council, New Forest District Council, New Forest National Park Authority, Portsmouth City Council, Southampton City Council, South Downs National Park Authority, Test Valley Borough Council, Winchester City Council.

Further information about the Partnership and its work including answers to frequently-asked questions is available at: www.birdaware.org

Summary

Tens of thousands of coastal birds fly from as far as Arctic Siberia to spend the winter on the Solent. They need to be able to feed and rest undisturbed, if they are to survive the winter and fly back to their summer habitats. Three Special Protection Areas (SPAs) have been designated to safeguard the birds.

Over 60,000 new homes are planned around the Solent up to 2034. Research has shown that these will lead to more people visiting the coast for recreation, potentially causing additional disturbance to these birds.

The strategy set out in this document, aims to prevent bird disturbance from recreational activities. It seeks to do this through a series of management measures which actively encourage all coastal visitors to enjoy their visits in a responsible manner rather than restricting access to the coast or preventing activities that take place there. Prepared by the Solent Recreation Mitigation Partnership of local authorities and conservation bodies, the strategy was published for consultation in July 2017 and changes incorporated as a result.

The Strategy proposes:-

- a team of 5-7 coastal rangers to advise people on how to avoid bird disturbance, liaise with landowners, host school visits, etc;
- communications, marketing and education initiatives and an officer to implement them;
- initiatives to encourage responsible dog walking and an officer to implement them;
- preparation of codes of conduct for a variety of coastal activities;
- site-specific projects to better manage visitors and provide secure habitats for the birds;
- providing new/enhanced greenspaces as an alternative to visiting the coast;
- a partnership manager to coordinate and manage all the above.

Implementation of these measures and monitoring of their effectiveness, will be funded by 'developer contributions' calculated according to the bedroom numbers of the property, equivilant to an average of £564 per dwelling (increased annually to take into account inflation). This applies to new homes built within 5.6 kilometres of the SPAs. (This 5.6 kilometre zone is where the majority of coastal visitors live.) Some developments may require additional mitigation due to their size or proximity to a SPA.

The developer contributions will be collected by the local authorities and transferred to the Partnership which will implement the measures. Some of the money received will be set aside to fund the measures 'in-perpetuity' (calculated on an 80 years basis) after 2034.

Council leaders will steer and oversee the Partnership's activities and expenditure. Progress on implementation and financial accounts will be published in an annual report.

Further information about the Partnership is at: www.birdaware.org

For PUSH consideration on 5th Dec 2018

Introduction

1.1. The Solent is internationally important for its wildlife. Each winter, the Solent hosts over 90,000 waders and wildfowl including 10 per cent of the global population of brent geese. These birds come from as far as Siberia to feed and roost before returning to their summer habitats to breed. Three Special Protection Areas (SPAs) were designated by the Government predominantly to protect these over-wintering birds (see map on page 6).

1.2. Legislation requires mitigation for any impact which a proposed development, in combination with other plans or project, is likely to have on a SPA. It requires local planning authorities before they grant planning permission for the project, to ensure the necessary mitigation will be provided. In practice this means that that development proposals cannot be consented or proceed unless there are no impacts on the integrity of European sites. If significant effects are predicted to occur, suitable measures for mitigation are required to reduce impacts to acceptable levels.

1.3. The Strategy provides a strategic solution to ensure the requirements of the Conservation of Habitats and Species Regulations 2010 (as amended) (the Habitats Regulations) are met with regard to the in-combination effects of increased recreational pressure on the Solent SPAs arising from new residential development.

1.4. The Conservation of Habitats and Species Regulations 2017 consolidate all the various amendments made to the Conservation of Habitats and Species Regulations 2010 and theConservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. Further details are available here.

1.5. The Strategy seeks to provide mitigation for the duration of the impact (in-perpetuity) in line with the Habitats Regulations. Throughout this period, regular strategic reviews will take place every 5 years or more frequently if changes in the legislation or evidence necessitate.

1.6. A development can have various impacts, but one which is likely to arise from all new housing around the Solent SPAs is the impact of additional recreational visits, and therefore potential bird disturbance to the SPAs. Although the developer has the legal duty to provide the mitigation, the local authorities and conservation groups have devised a strategic approach to the provision of the mitigation for recreational impacts in order to facilitate delivery and ensure a consistent approach.

1.7. This document sets out that strategic approach, the mitigation measures to be implemented, and the arrangements for governance, reporting, and monitoring. It provides mitigation for the impact of in-combination recreational visits arising from housing which is planned around the Solent up to 2034. It does not address the impact of existing activities, which is the role of the separate Solent European Marine Sites (SEMS) initiative. It should also be noted that the Strategy does not deal with any other impacts on the SPAs such as loss of habitat, increased noise, effect on water quality etc - which may arise from new housing, or the potential impact of other types of development such as new employment sites. Separate mitigation may be required to address these additional impacts on the SPAs that arise from new development. These will be assessed by the local planning authorities, with advice from Natural England, at the planning application stage.

For Public Consideration 5th Dec 2018

1.8. The strategy enables a housebuilder to make a monetary 'developer contribution' for the strategic mitigation of recreational pressures that would otherwise occur over a wide area, instead of needing to provide bespoke mitigation themselves. A developer can still provide their own mitigation, if they have the ability to do so, but for the vast majority it will be simpler, quicker and less costly to make a contribution towards the Strategy. This approach provides clarity and certainty for both developers and local authorities. It helps to deliver coordinated and effective mitigation, whilst simultaneously speeding up the development approval process and reducing the costs for all parties. It also provides a means for mitigating the impact of small developments for which it would not be practical to provide bespoke mitigation for.

For PUSH consideration on 5th Dec 2018

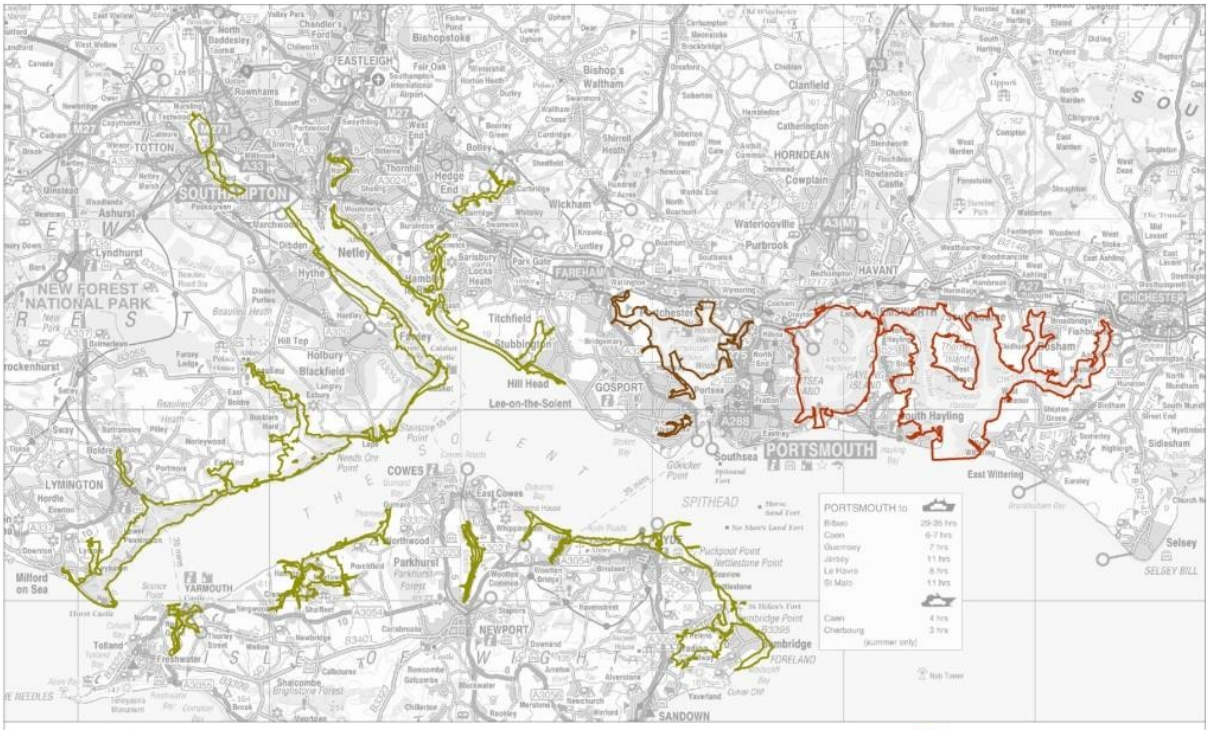
2 The need for mitigation

2.1. The Solent coast, particularly its mudflats, shingle and saltmarshes, provide essential winter feeding and roosting grounds for birds that spend the winter here. The wide range of recreational activities which take place on this coast can result in disturbance to the birds, albeit often unintentional.

2.2. Human disturbance of the birds can have several impacts. Birds may be more alert, resulting in a reduction in the amount of food eaten, or they may move away from the disturbance. A bird which moves away forgoes valuable feeding time whilst in the air and also uses energy in flying - a double impact on the bird's energy reserves. If the disturbance is substantial, then food-rich areas may be little used by the birds or avoided altogether, leading to other areas hosting a higher density of birds and intensifying the competition for the available food.

2.3. Ultimately, the consequence of human disturbance can be increased bird mortality or a reduction in the amount of energy which the individual bird has available at the end of the winter period to fly back to its breeding grounds. If as a consequence the birds are unable to complete their migratory journey or are not in sufficiently good condition to breed when they arrive, then this would lead to a reduction in the bird population.

The Solent Special Protection Areas



Map 1: SPA boundaries

Contains Ordnance Survey Data. © Crown copyright and database right 2015.

2.4. Extensive research was undertaken during 2009-2013 to assess the impact of recreational activity on wintering birds on the Solent coast. This work was known as the Solent Disturbance Mitigation Project and formed part of the Solent European Marine Sites (SEMS) Scheme of Management. The research was coordinated by the Solent Forum, who coordinated it. This work included recording the response of birds to disturbance, face-to-face surveys of visitors at the coast, and a postal survey of households living around the Solent. Computer modelling using that information predicted the number of additional recreational visits which would be generated by planned housebuilding.

2.5. By far the most popular activity taking place at the coast is walking, with jogging and cycling also proving popular. The research shows that these account for 91% of all recreational activity[1]. The same research also highlighted that dogs off lead were a cause of 47% of all 'major flights' i.e. bird(s) flying more than 50 metres to escape disturbance[2].This is why understanding the needs of dog walkers and proactively working with them is a priority for the Partnership.

2.6. Although other types of recreational use such as surfing, horse riding and rowing only amount to a total of 9% of activities carried out, each occurrence can create substantial disturbance[3]. Therefore the Partnership has longer term goals to work with each of these groups too.

2.7. The research predicted a 13% increase in visitor numbers at the Solent coast as a result of planned new housing, with the change on individual sections varying from 4% to 84%[4].This highlights that the planned new housing will mean a large increase in coastal visits with a likely impact on the birds unless mitigation measures are put in place.

2.8. The research showed that how people behave, and how access is managed at each location determines the extent of disturbance[5].

2.9. On the basis of this research, Natural England - the Government's advisor on the natural environment - issued formal advice to the Solent local planning authorities in March 2013. Their letter[6] stated: "*This follows the completion of Phase II of the Solent Disturbance and Mitigation Project (SDMP), which reported that there is a Likely Significant Effect associated with the new housing planned around the Solent. Natural England's advice is that the SDMP work represents the best available evidence, and therefore avoidance measures are required in order to ensure a significant effect, in combination, arising from new housing development around the Solent, is avoided*."

2.10. Ecological consultants Footprint Ecology were then commissioned to recommend a package of appropriate mitigation measures. Drawing on an evaluation of measures used elsewhere in the UK and the expert opinion of leading academics and practitioners, they recommended[7]:-

- A delivery officer
- A team of wardens/rangers
- A coastal dog walkers project
- A review of parking
- A review of watersport zones/watersport access
- Codes of conduct pack
- Series of site specific projects
- Watersport permits & enforcement
- Suitable Alternative Natural Greenspaces/additional green

For PUSH consideration on 5th Dec 2018

Infrastructure/alternative roost sites.

2.11. Of these, the main recommendation (in terms of resource allocation) would be the team of wardens/rangers. Footprint Ecology recommended that around 5-7 rangers would form a core team, supplemented with casual staff if necessary[8]. The main ranger presence would be required from September through to the end of March, they advised, but that summer tasks - such as delivering projects, liaison with local landowners and stakeholders - might make it appropriate for some staff to be employed all year.

2.12. Suitable Alternative Natural Greenspaces (SANGs) are a key mitigation measure at some other Special Protection Areas, but Footprint Ecology recommended caution in using them for the Solent SPAs[9]. In large part this was because a survey showed that many people visit the Solent coast for the sea views and the feeling of 'being beside the sea': 34% of those surveyed stated that nothing could be done to make an alternative site more attractive to them[10]. A subsequent study[11] concluded that SANGs may have a role to play in providing mitigation if they are closely linked to management at the coast, are targeted in the right locations, and are accompanied by active promotion of their existence.

2.13. The evidence[12] showed that mitigation should be required from all dwellings built within 5.6 kilometres of the boundaries of the SPAs. This is the zone from which 75% of coastal visitors live. The zone boundary is defined by using straight line distances from the SPA boundary. This approach is the same as that adopted for Thames Basin Heaths and Dorset Heathlands SPAs.

2.14. Two research studies were commissioned to help identify which measures would be the most effective in encouraging responsible dog walking. The first was market research with dog walkers[13] involving interviews at the coast and an on-line survey.

2.15. The second study[14] reviewed measures which have been successfully used elsewhere in the UK and would be relevant to the circumstances of the Solent. It recommended the use of a website, social media and other initiatives to raise dog walkers' awareness of bird disturbance and to promote alternative inland greenspaces. The study emphasised that these initiatives would require adequate resourcing and this has been taken into account with the staffing numbers to carry out this Strategy. They allow for a full time dedicated resource to work with dog walkers and dog interest groups to achieve a way forward that fully considers their needs.

NB: References for the documents mentioned above are in Appendix E.

For PUSH consideration on 5th Dec 2018

3 Overall approach and benefits

3.1. The aim of this strategy is to prevent any net increase in bird disturbance as a result of additional recreational pressures arising from the approximately 64,000 new dwellings which are planned around the Solent SPAs up to 2034 (see Appendix A for the derivation of this figure). This will be achieved by:-

- raising awareness and encouraging behavioural change of coastal visitors;
- implementing projects to better manage visitors and provide secure habitats for the birds;
- providing and promoting new/enhanced greenspaces in less sensitive areas as an alternative to visiting the coast.

3.2. This overall approach of better managing visitors at the coast, rather than attempting to restrict access through bylaws, permits, etc, reflects the research (paragraph 2.4 above) which found that the level of disturbance is determined more by peoples' behaviour than purely by the number of visitors.

3.3. Public access to the coast provides benefits including health, education, inspiration, spiritual and general well-being. Visitor access is also important in the management of the sites for nature conservation, because people are more likely to want to be involved with and protect local sites if they have close links with them. So by maintaining public access but with measures to ensure that recreational activity and nature conservation interests are not in conflict, the coast can be managed for the benefit of both wildlife and the public.

3.4. Based on the findings on the level of disturbance caused by various recreational activities (paragraphs 2.5 and 2.6 above), this strategy places a particular focus on walkers, cyclists, and dog walkers, but with proportionate mitigation measures for other recreational activities. So the package of mitigation measures comprises:-

- A team of rangers
- Communications, marketing and education initiatives
- Initiatives to facilitate and encourage responsible dog walking
- Codes of conduct
- Site-specific visitor management and bird refuge projects
- New/enhanced strategic greenspaces
- A delivery officer (called 'Partnership Manager' from here on)
- Monitoring to help adjust the mitigation measures as necessary.

3.5. These measures are described in more detail in the next section. The package echoes the recommendations of consultants Footprint Ecology (paragraph 2.10 above) except for their proposal for watersport permits and enforcement. The latter would be contrary to the Partnership's overall approach which is aimed at managing rather than preventing activity at the coast. The consultants' recommendations for a review of watersports zones and parking may be considered again if monitoring of the Strategy's effectiveness suggests additional steps are required and these actions are judged likely to assist with providing further mitigation.

3.6. Implementation of these measures will help avoid disturbance to the birds which fly thousands of miles to spend the winter here. There will be benefits for people too, with a wider range of greenspaces and better facilities at many of them. It will be a win-win outcome: an enhanced range of quality recreational opportunities **and** safeguarding of the birds which are such an important feature of our shores.

For PUSH consideration on 5th Dec 2018

4 The mitigation measures

4.1. This section sets out the mitigation measures required. How they will be resourced is dealt with in section 5.

Rangers

4.2. The rangers are the key mitigation measure. A small interim team was established in late 2015. They have begun to establish themselves and their presence has generally been well received. However, a larger team is needed in order to a satisfactory minimum Ranger presence along the 250 kilometer Solent coastline and build the necessary profile amongst people who regularly visit the coast, local communities, land owners and partner organisations.

4.3. During the winter period (1 October - 31 March), a team of seven rangers will focus their time on engaging with visitors at the coast, explaining the vulnerability of the birds, and advising people how they can avoid bird disturbance.

4.4. Five of the seven will be employed all-year. During the summer period (1 April - 30 September), the five will undertake tasks for which there is insufficient time during the winter period or which are best done during better weather. Those tasks will include meeting with landowners and stakeholders, installing/maintaining signs and interpretation panels, assisting with dog walking initiatives, staffing a stand at outdoor shows/events; hosting school visits, and preparing codes of conduct in consultation with local clubs (see paragraph 4.9 below). Once the enlarged ranger team is in place, they will prepare the Access Management Assessments described in paragraph 4.18 below.

4.5. The Ranger programme seeks to bring positive changes in behavior through promoting a better understanding and appreciation of the Solent's birds and the threats they face. If the monitoring or new research suggests that this approach is not working or needs to be adjusted, the Ranger programme will be adapted to improve its effectiveness.

Communications, marketing and education initiatives

4.6. The overall approach of this strategy is to secure behavioural change through awareness raising. Communications, marketing and education are central to that mission. The 'Bird Aware Solent' brand name, a presence on Twitter and Facebook, and a high quality website provide sound foundations for further communications and education initiatives. Those further initiatives are likely to include further development of the website, regular press releases, longer articles for magazines, educational materials for schools, and a range of leaflets targeted at different coastal visitor groups. A gazebo or a mobile display vehicle would enable key messages to be disseminated at local events/shows events.

Initiatives to encourage responsible dog walking

4.7. Key messages for dog walkers will be part of the general communications, marketing and education initiatives described above, but online and printed materials specifically targeted at dog walkers will also be produced.

4.8. A dedicated member of staff for dog walker engagement will roll out a series of positive measures to actively work with this group and will draw from measures that have been successful in other areas.

For public consultation 6th Dec 2016

Codes of conduct

4.9. Codes of conduct will be developed, in conjunction with user groups, as the mitigation measure for activities such as horse-riding and water-based recreation (sailing, rowing, kite surfing etc). This measure is proportionate to the impact of these activities which is small compared to walking, jogging and cycling.

4.10. Codes of conduct are particularly effective for club-based activities, but their availability - via smartphone access to the Partnership's website for example - can also be promoted to casual visitors through signs at locations where the activities take place. Preparing the codes in conjunction with local clubs/user groups will ensure that appropriate language is used and will help secure buy-in as a result of the clubs being signatories to the codes.

New/enhanced strategic greenspaces

4.11. The research showed that some coastal visitors would be prepared to visit alternative greenspaces for at least some of their recreational trips. That would help moderate the predicted increase in visitors at the coast and thus the potential for bird disturbance. It will be done through a combination of an enhanced portfolio of alternative greenspaces plus increased promotion of them by the rangers and through on-line/printed media.

4.12. The creation of two completely new strategic greenspaces and enhancements to other existing greenspaces is already underway[a]. In the medium-longer term, there may be a need for additional strategic greenspaces - known as Suitable Alternative Natural Greenspaces (SANGs). These could be created by a developer as part of a very large housing scheme or alternatively will be implemented through the Solent Recreation Mitigation Partnership. (NB: funding for these will not be from developer contributions – see paragraph 5.12 below.) Whether delivered by developers or the Partnership, new SANGs should be sited and be laid out in accordance with the guidelines in Appendix B.

Site-specific visitor management and bird refuge projects

4.13. These projects could include small scale minor works which are designed to help manage the impact of recreational visits on the coast: signs and interpretation boards, provision of a low wall/fence/planting to discourage coastal users from accessing particularly sensitive spots, screening to reduce visual and noise disturbance to birds (but low enough to enable people to still see the birds and the sea), bird roosts to make them more secure, improving an inland footpath to encourage walkers to skirt around a vulnerable site. Such measures may reduce the need for the rangers to visit the stretches of coast so frequently where they have been implemented.

4.14. Any party wishing to suggest a project within an identified site should make the local authority within which it is sited aware of the project and ask that they assess it and consider putting it forward for potential funding.

4.15. The projects put forward by local authorities are then assessed on their proposal in relation to the mitigation objectives of the Strategy and the evidence base that supports their ability to alleviate pressure on sensitive parts of the coast. Assessment factors relate

[a] At Alver Valley Country Park; Manor Farm Country Park; Horsea Island Country Park; Shoreburs Greenways.

DRAFT Form for consideration on 6th Dec 2018

to the project scale, deliverability, effectiveness, monitoring and cost. Projects are assessed by a team that includes representatives from Natural England, the RSPB, Hampshire and Isle of Wight Wildlife Trust, the New Forest National Parks Authority and the Partnership Manager.

4.16. Once assessed, the projects are then prioritised based on their overall score for the factors listed above and where possible funding will be recommended for those with the highest scores, in the annual budget report to PUSH.

4.17. The Partnership has evaluated an initial tranche of potential projects for implementation. These projects were identified by Partnership members as having the potential to contribute to the mitigation aims of the Strategy. This work will be refreshed/reviewed closer to the funding being available (anticipated to be 2020) and repeated annually thereafter. Once funding is available, the site specific projects and their scores will be published annually on the Bird Aware website.

4.18. Further projects will emerge from a detailed assessment of each section of coast, of the recreational uses, bird numbers, and what might be done to resolve any current and future potential bird disturbance. This work will form an Access Management Assessment. The first of those Access Management Assessments will be undertaken during 2017/18: the rest will follow once the enlarged ranger team is in place.

4.19. The Access Management Assessments will seek to review the activities of all coastal users and make recommendations about how their needs can be accommodated without causing recreational pressures and disturbance on the overwintering birds. These will include the identification of site specific projects (such a screening and creating all weather surfaces, re-routing of small stretches of footpath) as well as further establishing links with stakeholders.

Monitoring

4.20. Monitoring will help confirm that mitigation measures are working as anticipated, and whether refinements or adjustments are necessary. Monitoring is therefore integral to the mitigation ‘package’. In the longer term, it will establish whether the mitigation strategy is being effective. The monitoring is explained further on the Partnership's website at http://www.birdaware.org/article/28103/Monitoring

For PUSH consideration on 5th Dec 2018

5 Resource costs and funding

5.1. Implementation of the mitigation measures set out in the preceding section will require resources - a mix of staff and funds for projects, communications, monitoring etc.

Rangers

5.2. The cost of the ranger team (five all-year and two winter-only rangers - see section 4) is based on the rangers who are currently employed on the Partnership's behalf. It also includes the higher salary which will be paid to the lead ranger who will manage the team and reflects the cost of vehicles. Further details are in Appendix C.

Other staff and operating budget

5.3. The volume of communications, marketing and education initiatives and the specialist skills required justify a dedicated part-time communications post.

5.4. Drawing on the experience of the other established projects (see paragraph 2.13 and 2.14 above), a dedicated full-time officer will liaise with dog walkers to devise initiatives to encourage responsible dog walking.

5.5. A dedicated Partnership Manager post is crucial to successful delivery of this mitigation strategy. The post will coordinate implementation of the mitigation measures, procure and manage the required staff and other resources, and provide the necessary reporting.

5.6. An operating budget will fund the procuring of graphic design skills, IT staff time to maintain/expand the website, leaflet printing etc. and any consultancy support which may be needed from time to time. A small contingency is provided for the possibility of some unforeseen essential but incidental expenditure.

Site-specific visitor management projects

5.7. The site-specific visitor management projects will be implemented through a rolling five-year programme with a budget of £400,000 per year. The completed projects will need routine maintenance: a 5% per annum figure for ongoing maintenance is included in the £420,000 figure in the table below.

5.8. It should be noted that a number of local planning authorities in the zone of influence of the New Forest Special Protection Area (SPA) / Special Area of Conservation (SAC) have adopted habitat mitigation strategies in place; and are liaising to explore opportunities to develop a co-ordinated strategic approach in the future to ensure significant adverse effects on these New Forest designated sites are avoided. In the vicinity of the New Forest, Bird Aware site-specific projects will provide mitigation for the Solent designated sites, but some may be able to also give some additional benefit to the New Forest SPA/SAC.

In-perpetuity

5.9. This strategy mitigates the recreational impact of new housing up to 2034, but the mitigation measures need to be in place for the duration of the impact. The Partnership has decided that this 'in-perpetuity' payment should be calculated on an 80 year basis and this has been accepted by Natural England. This is the same time period as that adopted for South East Devon European Site Mitigation Strategy for example.

For PUSH consideration on 5th Dec 2018

5.10. So this strategy includes a mechanism for funding the mitigation measures after 2034 when the developer contributions from those planned new homes will come to an end. That mechanism is described in more detail in Appendix D, but in summary, a proportion of the money received each year from developer contributions will be transferred into an investment fund. That 'in-perpetuity fund' will grow each year through those annual cash transfers and the interest earned. By 2034, the fund will be sufficiently large to fund the mitigation measures in-perpetuity.

5.11. Some of the mitigation measures will not continue after 2034 or will be resourced at a reduced level. The programme of site specific visitor management projects will end, the dog walking initiatives post and the communications & education post will be combined, the operating budget will reduce, monitoring will continue at a reduced scale, and the Partnership Manager post will cease. The work of the latter will be much diminished after 2034; the local authorities have agreed to take on the remaining tasks in-perpetuity.

Funding

5.12. The current strategic greenspace projects (paragraph 4.12 above) are funded through the Solent Local Growth Deal with complementary local funding from the local authority which is implementing it. Funding for the further strategic greenspaces will be sought from future local growth deals or other similar sources, unless the greenspace is provided as part of a large housing scheme in which case the developer will fund it. PUSH has produced a Green Infrastructure Strategy which may be able to help secure funding for further greenspace enhancements.

5.13. The other resource costs need to be funded from developer contributions. Those costs are summarised in the table below and are set out in greater detail in Appendices C and D.

Summary of annual costs up to the year 2034

	£thousands per annum
Rangers	272
Other staff	93
Operating budget and monitoring	90
Site specific visitor management projects	420
Contingency	10
In-perpetuity funding	1111
Total annual cost	**1996**

All figures are at 2016 prices because the developer contribution is index linked and will automatically rise with inflation.

5.14. This total cost when divided amongst the number of new dwellings to be mitigated each year (estimated as 3,538 - see Appendix A), means that an average developer contribution of £564 per dwelling is required (These figures will be increased on 1 April each year in line with the Retail Price Index (RPI) rounded to the nearest whole pound.)

5.15. Although that figure is the best estimate of the number of planned new homes, the number actually constructed could be different to the estimate. However, the package of mitigation measures in this strategy is 'scalable', which means that the amount of mitigation can be increased or decreased in line with actual housebuilding.

For PUSH consideration on 5th Dec 2018

For PUSH consideration on 5th Dec 2018

6 Developer contributions

6.1. As explained in the previous section, the baseline developer contribution is the equivalent of £564 per dwelling (though in practice this will be charged on a sliding scale based upon bedroom numbers per dwelling). These figures will be increased on 1 April each year in line with the Retail Price Index (RPI) rounded to the nearest whole pound.

6.2. Immediately following the adoption of the Strategy by a given local authority, the new developer contribution rate will apply to all relevant applications within the 5.6km zone, determined after that date within the authority's area. It is anticipated that all Solent local authorities will have adopted the Strategy by the end of March 2018.

6.3. That developer contribution will be required for every net additional dwelling within 5.6 kilometres of the boundaries of the Solent Special Protection Areas (see map below) unless the developer can demonstrate to the satisfaction of the local planning authority and Natural England that it will provide alternative 'bespoke mitigation' which will fully mitigate the recreational impact of the development.

6.4. In this context, 'dwelling' includes net new dwellings created through the sub- division of existing dwellings, second homes, dwellings to be used as holiday accommodation, self-contained student accommodation, and new dwellings created as a result of approval granted under the General Permitted Development Order e.g. change of use from office to residential (including houses and flats). It includes permanent accommodation for gypsies and travellers; temporary/transit pitches will be assessed on a case-by-case basis by the local planning authority in consultation with Natural England.

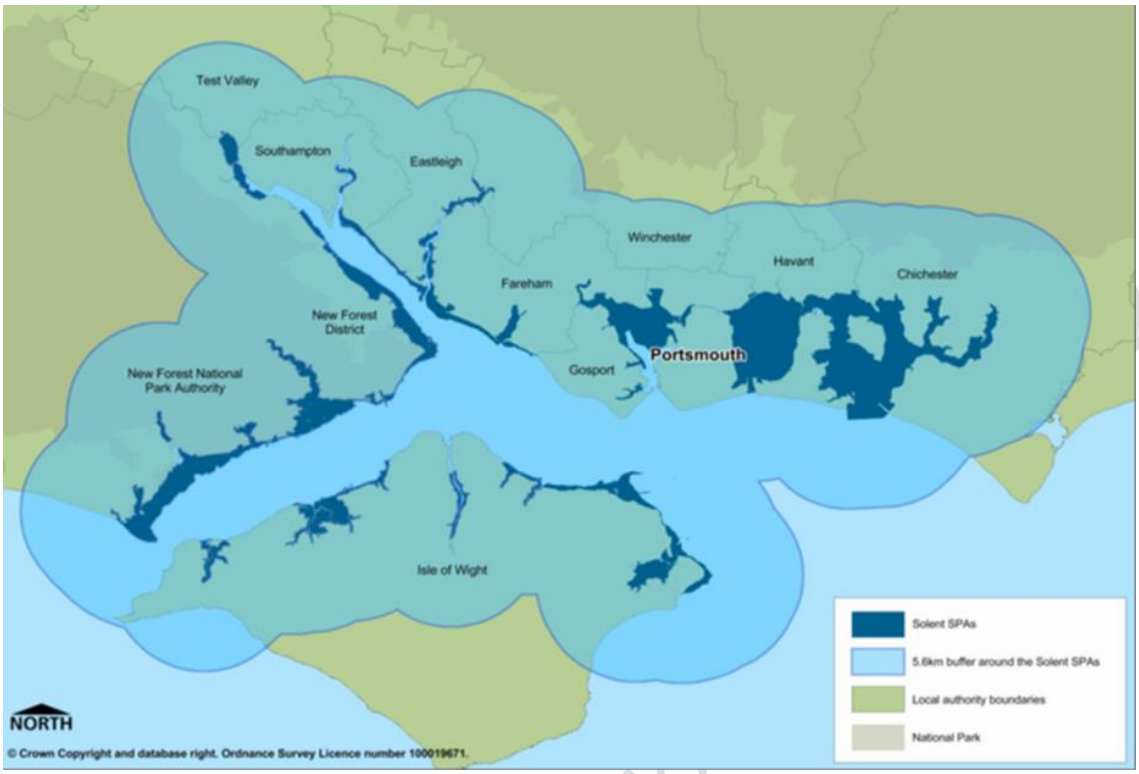
6.5. In the case of self-contained student accommodation, a case by case approach is taken because it is recognised that due to the characteristics of this kind of residential development, specifically the absence of car parking and the inability of those living in purpose built student accommodation to have pets, the level of disturbance created, and thus the increase in bird disturbance and associated bird mortality, will be less than dwelling houses (use class C3 of the Use Classes Order[b]). The SDMP research showed that 47% of activity which resulted in major flight events was specifically caused by dogs off of a lead. As such, it is considered that level of impact from purpose built student accommodation would be half that of C3 housing and thus the scale of the mitigation package should also be half that of traditional housing.

6.6. Whilst these units of accommodation are assessed on a case by case basis, not purely on their numbers of bedrooms, a general model for calculation follows: As the average number of study bedrooms in a unit of purpose built student accommodation is five, for the purposes of providing SPA mitigation, every five study bedrooms will be considered a unit of residential accommodation and charged accordingly (i.e. 50% of the rate of the 5 bedroom property charge). However, the final figure will be derived in consultation with Natural England and the local planning authority and developers are urged to hold early discussions with them on this matter.

For PUSH consideration on 7th Dec 2018

[b] https://www.planningportal.co.uk/info/200130/common_projects/9/change_of_use

The 5.6 kilometre zone around the Solent Special Protection Areas



6.7. Some housing schemes, when accounting for their scale or relationship with the SPAs, may need to provide bespoke mitigation measures in addition to making the financial contribution in order to ensure effective avoidance/mitigation of impacts on the SPA. A very large scheme could have a disproportionate impact on particular sections of coast compared to the dispersed impact of smaller schemes providing the same overall number of new homes. Similarly, mitigation in addition to the standard developer contribution may be needed for new dwellings which are close to the SPAs because the occupants are much more likely to visit the coast with the potential for a greater impact.

6.8. Other influencing factors that might be considered in the need for additional mitigation could include (but are not be limited to), existing access to inter-tidal areas, type of frontage - beach, sea wall, adjacent habitats - deep mud or shingle/sand, the height of the site in relation to the inter-tidal level and proposed design of the new scheme. Therefore even very modest housing schemes could have a greater impact, whilst some larger schemes may have less of an impact due to their specific location. The assessment as to whether a particular scheme will require additional mitigation is complex and will depend on a range of factors so it is not possible to say, as part of Strategy, when development will need to provide further measures. The local planning authority, with advice from Natural England, will consider the mitigation requirements for such housing proposals on a case-by-case basis. Developers are encouraged to hold early discussions with Natural England and the local planning authority on the mitigation which will be needed for such schemes.

6.9. The need for mitigation for the recreational impact of other types of residential accommodation will be assessed on a case-by-case basis by the local planning authority. The key 'test' is bases around the likelihood of the proposed development generating additional recreational visits to the SPA(s). For example, in respect of residential

For PUSH consultation 2018

accommodation designed specifically for elderly people, a developer contribution (or bespoke mitigation) will be required for apartments for the active elderly, but not for secure accommodation such as a residential nursing home for people who are unable to independently leave that accommodation and which does not provide residents parking or allow pets (this would also apply to people living with conditions that limit their mobility). However, mitigation may be required for any staff living on-site. Retirement properties designed for independent living with parking provision and which allow pets will be treated the same as C3 residential properties.

6.10. New hotels and other holiday/tourist accommodation - defined as both wholly new establishments and extensions of existing ones - is a residential-related use with the potential to generate additional recreational visits to the SPA(s). The need for mitigation for new hotel accommodation will be assessed on a case-by-case basis by the local planning authority in relation to the 'tests' set out in the paragraph above. Mitigation is unlikely to be required for new hotel accommodation in a city centre for example, if the guests will predominantly be business people or those visiting the built heritage rather than the coast. On the other hand, mitigation is more likely to be required for new hotel accommodation close to a SPA where guests will probably spend some time walking or pursuing other recreational activities at the coast.

6.11. Where mitigation is deemed to be necessary for new hotel and other holiday/tourist accommodation, the mitigation may take the form of a developer contribution calculated on the basis of the number of new bedrooms and the monetary contributions (or a proportion thereof) in paragraph 6.1 above. Such contributions will be pooled and spent on mitigation measures in the same way as developer contributions from new dwellings.

6.12. This scope of this strategy is mitigating the recreational impact of new residential-related accommodation on the Solent Special Protection Area(s). Separate mitigation may be required for other impacts which may arise from new housing, e.g. impacts on water quality, noise disturbance, high buildings obstructing bird flight lines, loss or damage to supporting habitats. Those will be assessed by the local planning authorities, with advice from Natural England, at the planning application stage to identify whether, and if so what, mitigation is required. However, developers are encouraged to hold early discussions with Natural England and the Local Planning Authority

A sliding scale of developer contributions?

6.13. Currently, the same developer contribution is paid irrespective of property size - a 'flat rate' contribution. However, larger properties can accommodate more people, with the potential for a larger number of visitors to the coast, creating a higher level of impact so a sliding scale of contributions has been developed to reflect this. There are practical difficulties with trying to vary it by floorspace or sale price, but for some SPA mitigation strategies elsewhere in the UK, it has been determined fairest that the developer contribution varies according to the number of bedrooms in the new property.

6.14. So instead of a £564 flat rate, the Partnership will use a sliding scale of contributions. This will be:-

£337 for 1 bedroom dwelling
£487 for 2 bedroom dwelling
£637 for 3 bedroom dwelling
£749 for 4 bedroom dwelling
£880 for 5 bedrooms or more

For PUSH consideration on 5th Dec 2018

6.15. The figures above are based on an estimate of the mix of housing that will be proposed and the need to secure a total income level that is equivalent to that which would be raised through charging a flat fee. The methodology used to calculate the figures is based on that developed by LPA's within the Thames Basin Heaths mitigation scheme. It accounts for the existing occupancy of properties and the projected mix going forward based on a sample of authorities within this area. These will be reviewed every two years throughout the duration of the Strategy.

For PUSH consideration on 5th Dec 2018

7 Implementation, governance and reporting

Implementation

7.1. The developer contributions are paid to local planning authorities. Each authority decides which legal mechanisms to use to secure the developer contributions from schemes in its area and the potential for phased / staged payments in relation to specific proposals.

7.2. The authorities pool the developer contributions received and implement the mitigation measures through the Solent Recreation Mitigation Partnership. The contributions received by the authorities are transferred quarterly to the Partnership.

7.3. The Partnership sets a budget for each year, including the amount to be transferred that year into the in-perpetuity fund (see paragraph 5.13). Some money will be held in reserve at all times to cushion against variations in the amount of developer contributions received each quarter: such variations are inevitable due to market-driven fluctuations in the number of sites/development phases on which construction begins. The value of the contributions received by the Partnership each year and details of all expenditure, are set out in an annual statement of accounts.

7.4. The higher developer contribution will mean increased funding for mitigation. However, many developer contributions are only paid on the commencement of development, so there is a time delay between a planning permission being granted and the money being paid to the authority. For some schemes this can be a matter of weeks; for others it can be several years. So that time delay will mean that the amount of money received by the Partnership will increase only gradually over the next 2-3 years. This will constrain the implementation of mitigation measures in the short term: so, for example, it will probably not be possible to have the full ranger team in place until 2019 or 2020.

Governance

7.5. The Partnership's management structure comprises a small Project Board of senior officers and a Steering Group which includes an officer from each of the nineteen partner organisations. The Project Board sets the Partnership's overall direction and budget. Working within those, the Steering Group manages the operational tasks. The Partnership Manager has delegated responsibility for managing day-to-day activities.

7.6. Further details of the composition and roles of the Project Board and Steering Group are in the Partnership's Terms of Reference, which can be seen at: http://www.birdaware.org/CHttpHandler.ashx?id=27311&p=0

7.7. The governance, political steer and oversight of the Solent Recreation Mitigation Partnership (SRMP) is provided by the Partnership for Urban South Hampshire (PUSH) with the involvement of representatives of the three local planning authorities which are not members of PUSH - Chichester District Council, New Forest National Park Authority, and South Downs National Park Authority. This is done through reports to the PUSH Joint Committee, which comprises the Leader of each PUSH authority supported by their Chief Executive. A representative from each of the three non-PUSH authorities is invited to participate in the Joint Committee meeting whenever there is discussion of a SRMP-related matter.

For PUSH consideration on 5th Dec. 2018

Reporting

7.8. Normally, the SRMP presents two reports each year to the PUSH Joint Committee: one to seek approval for the proposed SRMP budget and Project Board membership for the ensuing year, and the other to seek approval of the SRMP's Annual Report. Those reports to the PUSH Joint Committee can be seen at: http://www.push.gov.uk/work/latest_joint-committee.htm

7.9. The Annual Report records the progress made in implementing the mitigation measures and summarises the conclusions of completed monitoring. It also contains the statement of accounts for the preceding year and the budget for the coming year. It is published immediately after approval by the PUSH Joint Committee.

7.10. Partnership reports on research and monitoring are published as soon as they have been completed.

7.11. All those reports, this strategy, and a range of other documents/information can be seen on the SRMP's website at: www.birdaware.org

Review

7.12. The Strategy seeks to provide mitigation for development planned until 2034. In order to keep the Strategy relevant throughout this period, regular strategic reviews will take place every 5 years from implementation (or more frequently if changes in legislation or evidence necessitate). This will allow for lessons learnt, new best practices and variations over time to be incorporated into the Strategy, making it more relevant for longer. Following each review, an update report will be made available on the website.

For PUSH consideration on 5th Dec 2018

Appendix A: Calculation of number of new dwellings mitigated

A1. This strategy has been prepared to mitigate the 63,684 new dwellings which are planned between 2016 and 2034 - an average of 3,538 per annum. This estimate is derived from the PUSH Spatial Position Statement which looks to 2034 [c] and an assumed continuation to 2034 of the currently planned building rate in the three non-PUSH authority areas.

A2. The PUSH Spatial Position Statement envisages an average of 4,537 new dwellings each year in the whole PUSH area. It is estimated that around 3,195 of these could be located within 5.6km of the Special Protection Areas. This estimate is based on information provided by the local planning authorities for a sub-regional transport model which uses localised zones and thus provides a reasonably good basis for calculating development within 5.6km. Working from these figures has provided the best available estimate.

A3. In the three non-PUSH authority areas - Chichester District, New Forest National Park, South Downs National Park - the currently planned building rate is a combined 343 dwellings per annum. The adopted Local Plans for those three areas only look ahead to varying dates between 2026 and 2031, so for the purpose of this strategy it is assumed that the currently planned rate of 343 dwellings per annum will continue to 2034.

A4. Therefore, the figure for the whole Partnership area is 3,538 per annum - a total of 63,684 between 2016 and 2034.

For PUSH consideration on 5th Dec 2018

[c] View at: www.push.gov.uk/work/planning-and-infrastructure/push_spatial_position_statement_to_2034-2.htm

Appendix B: Criteria for Suitable Alternative Natural Greenspaces (SANGs)

The following guidelines have been created to reflect responses to Solent specific research and may further evolve over time as more research is undertaken.

These guidelines are focused towards strategic SANGs, rather than bespoke mitigation packages for individual developments and include locational criteria for siting wholly new sites, and criteria for their design and facilities. The latter criteria are also relevant to projects to enhance existing strategic sites: they set out the priorities for new facilities to be provided, and the improvements to be made to the layout and design. The guidelines take account of the research findings[13] on the features/facilities which would make an alternative site attractive to people seeking places for recreation. Monitoring is being undertaken at the strategic SANGs which will further inform future SANG design.

Locational criteria

Essential

- a wholly new site or an enhancement of existing public open space if the site is currently underused and has substantial capacity to accommodate additional recreational activity or could be expanded, taking into account the availability of land and its potential for improvement;
- be in a location where it will divert visitors especially dog walkers away from sections of SPA coast which are sensitive to additional human disturbance and where a significant increase in visitors is predicted;
- be located where it will attract visitors who would otherwise have gone to those sections of coast [d];
- be large enough to include a variety of paths which enable at least one circular walk of at least 5 km (approx. a 60 min walk);
- be in a location where a SANG would be acceptable in terms of planning policy and traffic generation, and would not have an unacceptable impact on biodiversity e.g. a nature conservation site protected under a local or national designation;
- be sufficiently large to be perceived as a cohesive semi-natural space, offering tranquility, with little intrusion of artificial structures (except in the immediate vicinity of car parks) and with no unpleasant intrusions of other kinds e.g. wastewater treatment odours;

Desirable

- has views of the sea which are not too distant or includes a sizeable water feature;
- has a varied topography with some gentle slopes, a mix of open and wooded areas, and a focal point such as a viewpoint, monument etc.

Criteria for design and facilities

Essential

- includes a variety of paths which enable at least one circular walk of at least 5km (approx. a 60 min walk);

[d] Generally, proposals will be within the Partnership area but sites located just outside might be considered.

For PUSH consideration on 5th Dec 2018

- includes adequate car parking for visitors with that car parking being well located in relation to the road network;
- be clearly signed at access points and at key junctions on the surrounding road network, with an information panel at each access point which explains the layout of the SANG and the routes available to visitors.
- access points for visitors arriving on foot must be well located in relation to nearby residential areas;
- designed so that the SANG is perceived by users as a cohesive semi-natural space which is safe and easily navigable;
- paths must be clearly discernible, well signposted/waymarked, and have firm, level, well drained surfaces (albeit unsealed to avoid any 'urban feel') in order to be useable throughout the winter;
- movement within the SANG must be largely unrestricted, with plenty of space away from road traffic;
- Dogs are welcome and the majority of the sites is suitable for safe off-lead dog exercise.
- Dog swimming area.
- Dog waste bins.

Desirable

- car parking would be free of charge in the winter and preferably all year round;
- has multiple access points and with car parking at each rather than in a single location;
- incorporates innovative and attractive dog walking facilities such as dog activity trails, agility courses, enclosed off-lead training/exercise areas, dog washing facilities.

For PUSH consideration on 5th Dec 2018

Appendix C: Resource costs

The table below sets out the estimated annual costs of each expenditure item, for the period up to 2034 and during the in-perpetuity period thereafter.

Expenditure item	**Up to 2034**	**After 2034**	**Notes**
All-year rangers	200,000	200,000	5 posts @ £40k pa[e]
Extra salary payment for Lead Ranger	5,000	5,000	
Branded vehicles for all-year rangers	25,000	25,000	£5k pa each (all-year rangers only)
Winter-only rangers	42,000	42,000	2 posts @ £21k pa
Sub-total	**272,000**	**272,000**	
Communications & education post and Dog Walking Initiatives Post	63,000	-	Total of 7.5 days per week
Combined communications, education and dog walking initiatives post	-	21,000	2.5 days per week
Partnership Manager	30,000	-	3 days per week
Operating budget	60,000	30,000	
Monitoring	30,000	15,000	
Site specific visitor management projects	400,000	-	
Maintenance of capital projects	20,000	20,000	5% of the £400k projects funding
Contingency	10,000	5,000	
Total expenditure	**885,000**	**363,000**	
In-perpetuity funding for expenditure beyond 2034	1,111000		See Appendix D
Grand total	**1,996,000**		
Divided by number of new dwellings	3,538		See Appendix A
Developer contribution - £ per dwelling	**564**		

For PUSH consideration on 5th Dec 2018

Notes

All the figures are at 2016 prices: the developer contribution is index linked, so that annual increase will cover inflation-related rises in the above figures.

The winter-only rangers costs provide for their employment for seven months from 1 September, in order to allow one month for training and familiarisation ahead of winter patrols between 1 October and 31 March.

Each all-year ranger will have a small van to transport equipment for displays to local events etc. The seasonal rangers will use their own vehicles to get to sites.

All the staff cost figures include the employer's national insurance and pensions contributions, office accommodation, IT costs, as well as the individual's salary.

The operating budget will cover website development and maintenance, graphic design and printing costs, display/exhibition materials, consultancy support. for all communications/education, dog walking initiatives and generic Partnership activities.

[e] This cost does not represent the Rangers salary level as it also includes other employment costs such as uniform, office space, national insurance and pension contributions.

Appendix D: In-perpetuity funding

D1. Paragraphs 5.9 - 5.10 explained the need to fund the key mitigation 'in- perpetuity' - defined in agreement with Natural England as 80 years beyond 2034 i.e. to the year 2114. In summary, a proportion of the money received each year from developer contributions will be transferred into an investment fund. That 'in- perpetuity fund' will grow each year through those annual cash transfers and the interest earned, such that by 2034 it will be sufficiently large to fund the mitigation measures every year thereafter. This Appendix provides more details of methodology and assumptions used in the in-perpetuity funding calculations.

Creating the in-perpetuity fund

D2. The amount of money which needs to be transferred into the in-perpetuity fund each year to 2034 is determined by the annual cost of the mitigation measures during the ensuing in-perpetuity period (£363,000 - see Appendix C) and predicted interest rates during that same period. Capita - a leading expert body which provides financial advice to many of the Solent local authorities - predicts that interest rates will rise from 0.25% in 2018/19 to 2.50% in 2024/25, and thereafter remain at 2.50%.

D3. As explained in paragraph 7.4, the amount of money received by the Partnership will only increase gradually over the next 2-3 years. Taking that into account, the £122,000 which was transferred into the in-perpetuity fund in 2016/17 needs to rise to £1,110,000 in 2020/21 and each year thereafter, in order that the value of the fund in 2034 is sufficiently large to fund the planned expenditure during the ensuing in-perpetuity period.

D4. The table below shows the situation in 2016/17 and 2017/18, and the predicted situation in the final year 2033/34. All the figures are at 2016 prices because the developer contribution is index linked and will rise with inflation. There is only space here to show three years, but full calculation for all 18 years is in an Excel spreadsheet which can be seen at: www.birdaware.org/faqs

		2016/17	***2017/18***						***2033/34***
a	Fund value at year start	£0	£122,000						£18,790,302
b	Interest rate	0.25%	0.25%						2.50%
c	Interest generated	£0	£305						£469,758
d	Money transferred in	£122,000	£267,000						£1,111,000
e	Fund value at year end	£122,000	£389,305						£20,370,060

row (a) = (e) of previous year row
(b) = forecast interest rate row (c) =
row (a) x row (b)
row (d) = amount transferred into the fund in that year rom
(e) = (a)+(c)+(d)

For PUSH consideration on 5th Dec 2018

Funding the mitigation measures during the in-perpetuity period

D5. At the start of the in-perpetuity period in 2034/35, the fund is predicted to have a capital value of around £20million. Spending on mitigation measures during the 80 year in-perpetuity period will be funded partly by drawing on that capital and partly from the interest earned on the remaining balance. So at the end of the in-perpetuity period in 2113/14, the capital will have reduced to around zero.

D6. This calculation incorporates an assumed inflation rate of 2% per annum during the in-perpetuity period. (That 2% rate is based on the latest OECD forecast which looks to 2060.) Factoring in that 2% assumption over an 80 year period has a big impact on the calculations. The planned spending during the in-perpetuity period is £363,000 at 2034 prices. Increasing that figure by 2% per annum means it becomes £1.74million by 2113/14.

E7. The table below shows the first and last years of the 2034-2114 in-perpetuity period. The full calculation for all 80 years is in an Excel spreadsheet which can be seen at: www.birdaware.org/strategy

		2034/5						***2113/4***
a	Fund value at year start	£20,370,060						£1,888,146
b	Spent during year	£363,000						£1,735,083
c	Amount left in fund	£20,007,060						£153,064
d	Interest earned	£500,176						£4,592
e	Fund value at year end	£20,507,236						£157,656

row (a) = (e) of previous year
row (b) is the cost of the in-perpetuity mitigation measures, increased by 2% each year to allow for inflation
row (c) = (a) - (b)
row (d) = (c) x 2.5%
row (e) = (c) + (d)

For PUSH consideration on 5th Dec 2018

Appendix E: References

1. Liley D, Stillman R & Fearnley H (2011) Solent Disturbance & Mitigation Project Phase II Results of bird disturbance fieldwork 2009/10. Paragraph 3.7
2. Ibid. Paragraph 3.15
3. Ibid. Figure 8
4. Liley D & Tyldesley D (2013) Solent Disturbance & Mitigation Project Phase III Towards an Avoidance and Mitigation Strategy. Paragraph 2.9
5. Liley D, Stillman R & Fearnley H (2011) Solent Disturbance & Mitigation Project Phase II Results of bird disturbance fieldwork 2009/10. Paragraph 3.18
6. Natural England (31 May 2013). Letter from to all local authorities
7. Liley D & Tyldesley D (2013) Solent Disturbance & Mitigation Project Phase III Towards an Avoidance and Mitigation Strategy. Paragraphs 5.1 - 5.66
8. Ibid. Paragraph 5.6
9. Liley D & Tyldesley D (2013) Solent Disturbance & Mitigation Project Phase III Towards an Avoidance and Mitigation Strategy. Paragraphs 5.61 - 5.63
10. Fearnley H, Clarke R T & Liley D (2010) Solent Disturbance & Mitigation Project Phase II On-site visitor survey results. Paragraph 2.26
11. Panter C & Liley D (2015) Alver Valley SANG Study
12. Liley D & Tyldesley D (2013) Solent Disturbance & Mitigation Project Phase III Towards an Avoidance and Mitigation Strategy. Paragraphs 7.28 – 7.30
13. Clarke C (2016) Market research relating to initiatives to encourage responsible dog walking
14. Jenkinson S (2016) Mitigation options for influencing the behaviour of walkers with dog in the Solent area
15. Ibid. Paragraph 9.4.2.1

All these documents can be accessed via:
http://www.birdaware.org/article/28102/Research

For PUSH consideration on 5th Dec 2018