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Monmouthshire County Council Replacement Local Development Plan (RLDP) Severn Estuary Recreation Mitigation Strategy 2025

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Summary

This strategy sets out the mitigation requirements relating to impacts from recreation (associated with new housing in Monmouthshire) for the Severn Estuary. The Estuary is of international importance for their biodiversity, and the strategy ensures Monmouthshire Council meets legislative requirements and adequately protects the estuary when permitting development.

The Monmouthshire County Council Replacement Local Development Plan (the 'RLDP') allocates around 1,288 dwellings within the established zone of influence (12.6km from the estuary) over the period to 2033. Mitigation measures are set out in detail and comprise:

- SAMMS (Strategic Access Management and Monitoring); and
- Off-site infrastructure (including SANGs – 'Suitable Alternative Natural Greenspace').

Mitigation will be funded through developer contributions. This strategy will be updated on a rolling basis every 5 years, providing the opportunity to check the mitigation, scale of growth and update any costs. As such the strategy provides a long-term solution to recreation impacts. By addressing risks up front, the strategy provides a proactive, cross-boundary solution that ensures cumulative impacts of growth are taken into account. The strategy ensures necessary resources and costs are identified and provides clarity for developers when bringing forward sites for development.

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1. Introduction

1.1 This strategy relates to housing development within the Monmouthshire County Council Replacement Local Development Plan (the 'RLDP'). It addresses risks from increased recreation use (associated with local housing growth) on the Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site.

Background

1.2 The RLDP allocates land for sustainable development, designates land for protection and sets out policies to provide the basis for decisions on planning applications within Monmouthshire. It covers the period 2018 – 2033 and includes the whole county except for the area within Bannau Brycheiniog National Park (BBNP). The RLDP makes provision for 6,210 dwellings in total; once completions to date, sites already with permission and windfall and allowances are taken into consideration the Plan allocates land for 2,305 homes. These allocations include a range of sites, some near the Severn Estuary.

Legislative Context

1.3 This strategy has been produced in order to meet particular legislative requirements. Habitats sites are those afforded the highest level of legislative protection for biodiversity.

1.4 The designation, protection and restoration of Habitats sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. They include Special Protection Areas (SPA) classified under the 1979 Birds Directive and Special Areas of Conservation (SAC) designated under the 1992 Habitats Directive. In addition, Ramsar sites are afforded the same level of protection as Habitats sites, through long-established Government policy. In this strategy we use the term 'European site' to refer to both Habitats sites and Ramsar sites.

1.5 European sites are the cornerstone of UK nature conservation policy. Public bodies, including local planning authorities, have specific duties in terms of avoiding deterioration of habitats and species for which sites are designated or classified, and stringent tests have to be met before plans and projects

can be permitted. Public bodies are referred to as 'competent authorities' within the legislation. The duties set out within the Habitats Regulations in relation to the consideration of plans and projects are applicable in situations where the competent authority is undertaking or implementing a plan or project, or authorising others to do so.

1.6 The legislation is founded on the 'precautionary principle' and it is necessary to rule out harm, rather than demonstrate impacts. Assessment (Habitats Regulations Assessment, 'HRA') requires consideration of effects either alone or in-combination, and this strategy therefore relates to the cumulative effects of plan-led development across the combined authorities.

The Severn Estuary

1.7 The Severn Estuary is one of the largest estuaries in Europe and is internationally important for the habitat and species the estuary supports. Saltmarsh fringes the coast backed by grazing marsh with freshwater ditches and occasional brackish ditches. The subtidal seabed is rock and gravel with subtidal sandbanks. The site also supports reefs of the tube forming worm *Sabellaria alveolata*.

1.8 The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have one of the highest tidal ranges in the world. A consequence of the large tidal range is an extensive intertidal zone, one of the largest in the UK.

1.9 The site qualifies as a Special Area of Conservation (SAC) for a range of coastal habitats and for three fish species. The Severn Estuary Special Protection Area (SPA) is classified for its waterbird assemblage and for a range of species that occur on passage/over winter including a range of both wildfowl and wader species. The Ramsar interest overlaps with the SAC and SPA features and includes the bird interest. Further details of the conservation importance and qualifying features can be found in Appendix 1.

1.10 The SAC, SPA and Ramsar boundary and extent around Monmouthshire are shown in Map 1. It is important to note that many of the qualifying species (the fish and in particular the birds) are highly mobile and will use areas outside the designated site boundaries. For the birds, this will often mean individuals associated with the SPA/Ramsar will use wetland or low-lying land as feeding sites or roost sites at particular times of year or in particular

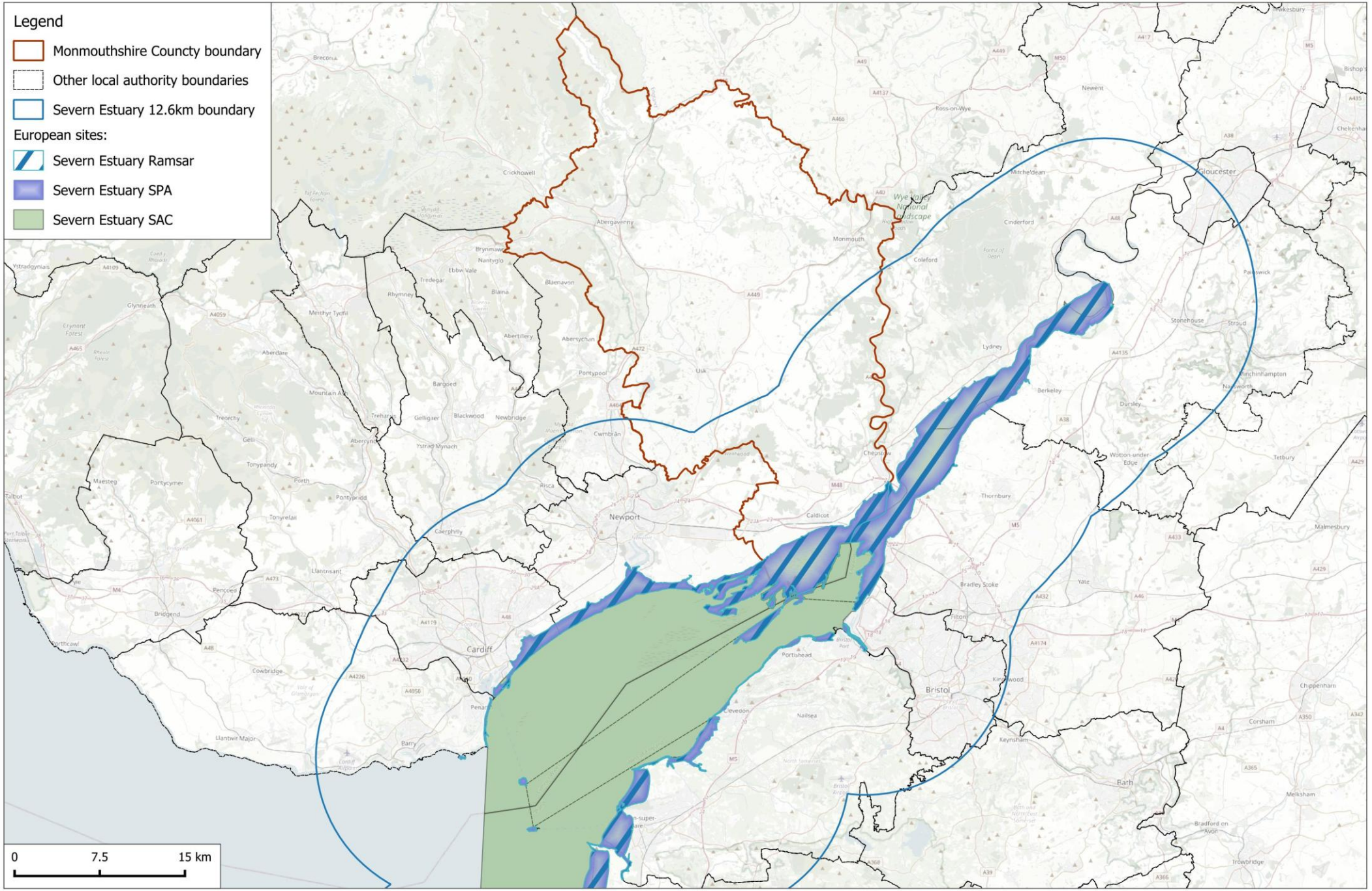
conditions. Such areas of land are functionally-linked to the SPA / Ramsar and as such need to be included within the mitigation strategy.

1.11 The HRA that accompanied the deposit version of the RLDP, undertaken by AECOM (Kenny, 2024), could not rule out likely significant effects from recreational pressure for the Severn Estuary SAC / SPA / Ramsar. The HRA was informed by visitor survey results that showed recreational use of the foreshore by local residents. The appropriate assessment concluded: "*Given the high sensitivity of the SPA / Ramsar to impacts resulting from recreational pressure, adverse effects on its site integrity due to additional residential development cannot be excluded. It is anticipated that mitigation measures will be required to avoid adverse effects on the SPA / Ramsar. These could be delivered in the form of Strategic Access Management and Monitoring (SAMM) in the estuary itself, and / or through access enhancements and improvements to appropriately sited, existing or newly developed greenspaces.*" The HRA also advises that adverse effects on the site integrity of the Severn Estuary could be avoided within the remit of a SAMM.

1.12 The HRA applied a zone of 12.6km within Monmouthshire to identify a zone of influence and potential catchment where likely significant effects were triggered. This distance was selected to reflect that used around other parts of the Severn Estuary, where local planning authorities such as Stroud District Council have long-established mitigation strategies in place (see Liley and Caals, 2024 for background). The 12.6km distance band is shown in Map 1 for context. In parallel to this strategy, South Gloucestershire District Council is also producing a mitigation strategy to address impacts from recreation associated with their Local Plan.

1.13 This strategy therefore follows on from the HRA findings and aligns with mitigation work being undertaken by other authorities around the Severn Estuary. It secures the necessary mitigation to enable Monmouthshire County Council to be able to rule out adverse effects on site integrity for the Severn Estuary SAC / SPA / Ramsar for the levels of growth proposed.

Map 1: European sites in relation to the River Severn



Map produced by Footprint Ecology.

2. Strategy context

Overview

2.1 This section summarises the background evidence with respect to visitor survey data, the scale of growth proposed in the RLDP within the relevant catchment and how recreation could impact the European site features. Other relevant context includes current local conservation initiatives.

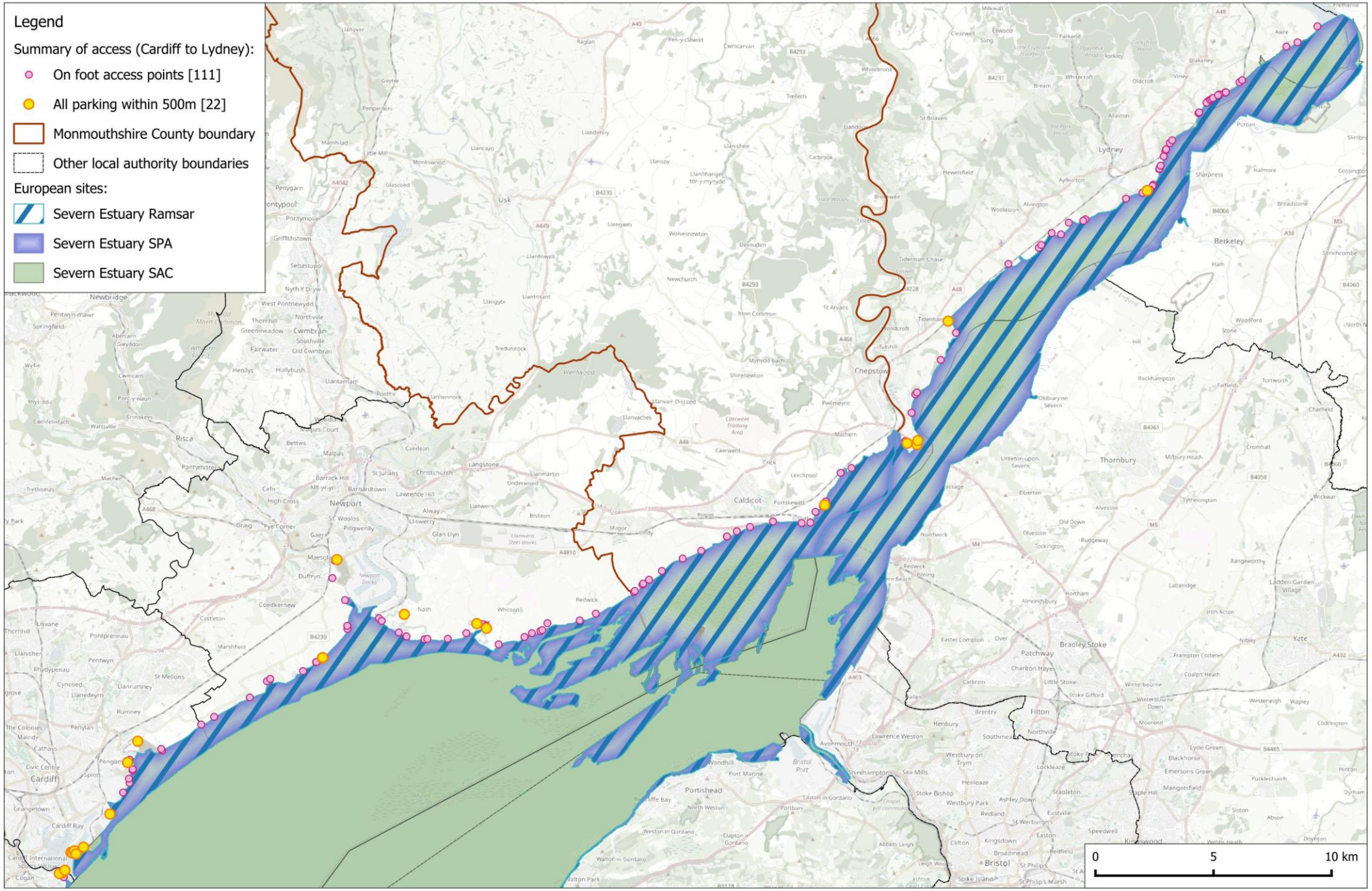
Access to the estuary

2.2 Map 2 shows the existing access points along the shoreline. Formal car parks within 500m (extracted from OpenStreetMap[1]) are differentiated from foot access points, for example where public rights of way reach the shoreline. The map shows those within 50m of the SPA / SAC / Ramsar.

2.3 The Welsh Coast Path follows the Severn and provides access along the seawall for most of the shoreline relevant to Monmouthshire. The character of the shoreline varies (see Figure 1). Around Caldicot, the motorway and the railway create a barrier between the main housing areas and the shoreline. There are a range of access points/crossing points and parking options at Black Rock and Sudbrook. There is a picnic area and dedicated car park at Black Rock with easy access onto the saltmarsh and edge of intertidal (Figure 1a-c). Moving westwards, the Coast Path runs along the seawall and the open mudflats (e.g. Figure 1i) are inaccessible on foot. The shoreline around Magor Pill and Portland Grounds is set back from roads and housing and can be accessed at various points along public rights of way across farmland. Parking options are fairly limited in these areas. At Goldcliff Pill there is a wetland reserve with hides and viewpoints, with roadside parking around 1km from the estuary. Access to the pools and along the shore is restricted here (see Figure 1h) and the Coast Path cuts inland, around the Pill.

[1] See https://www.openstreetmap.org/about

Map 2: Access to the River Severn



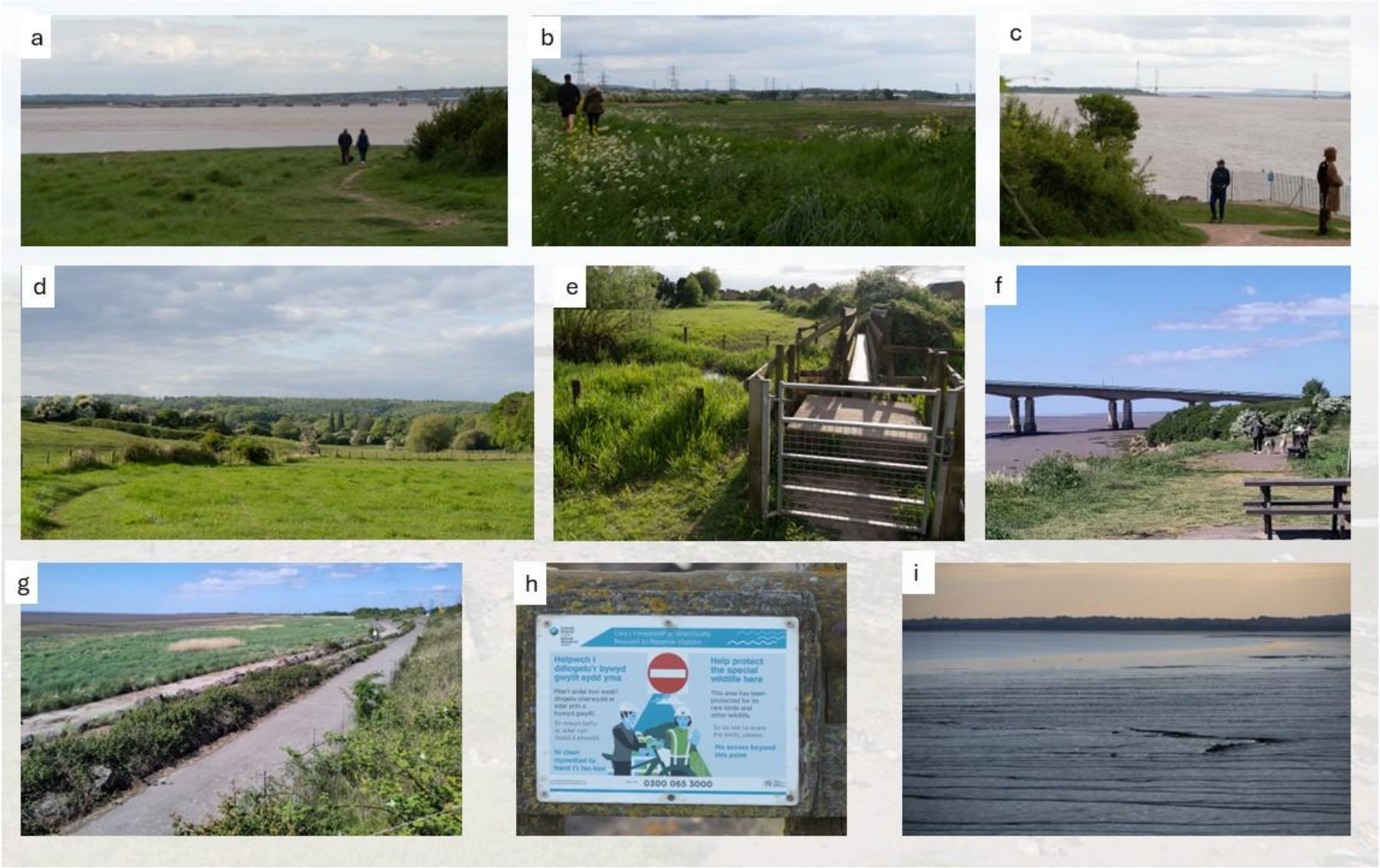


Figure 1: a – c) access at Black Rock; d) Nedern Brook viewed from Caldicot Castle Country Park; e) access to south end of Nedern Brook from existing housing; f) Sudbrook picnic area; g) Wales Coast Path at Caldicot Pill; h) signage to keep people off the seawall at Goldcliff; i) intertidal habitat at Goldcliff.

Visitor survey results

2.4 The most recent visitor survey along the River Severn in Monmouthshire (commissioned to inform the HRA of the RLDP) was undertaken between March 2020 and March 2022, and involved data collection at four sites along the coast[2]. In summary, the surveys included 188 face-to-face visitor interviews, which sought to build a visitor profile, asking questions about activities undertaken on site and their motivations for visiting, the frequency and duration of visits and awareness of the nature conservation importance of the River Severn.

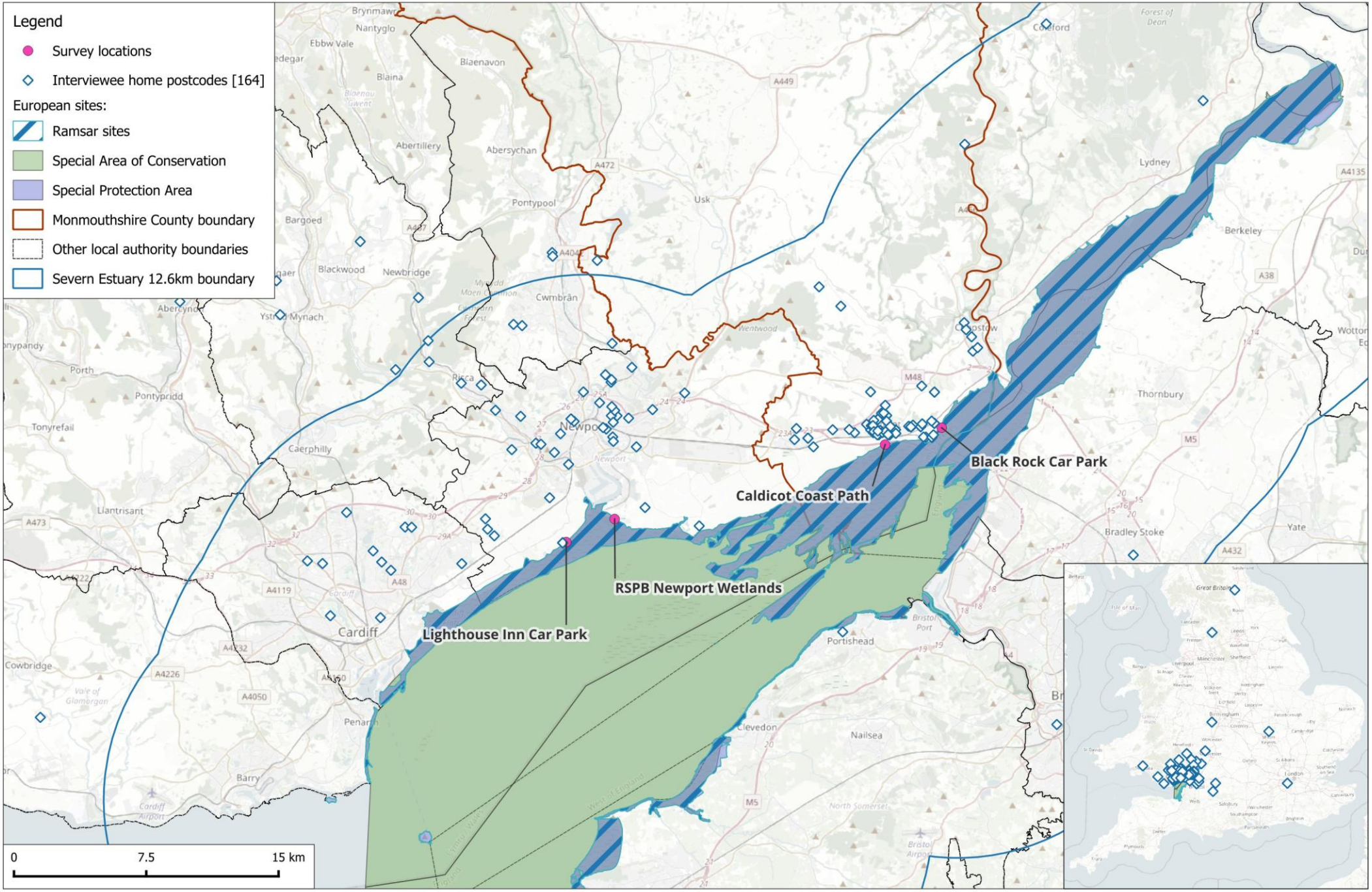
2.5 Almost all interviewees were on a day trip or visiting directly from their home (94%), suggesting a relatively local cohort of visitors to this area of coastline. This is supported by the frequency of visits, with most interviewees visiting at least weekly (50%), all year round (68%) and spending no longer than an hour (44%) on site. When asked why they were visiting the location at which they were interviewed, almost half said because it was close to home (49%). Activities undertaken on site varied, but most interviewees were either dog walking (49%) or walking (30%).

2.6 Home postcodes of interviewees were also collected and digitised, shown spatially in Map 3. The linear distance between home postcode and the estuary can be calculated to give the 75th percentile, i.e. the distance from which 75% of interviewees have originated. Of the 164 interviewees (87%) that provided a valid home postcode, the survey found that 75% of visitors originated within 6.5km of the Severn Estuary (Kenny, 2024).

2.7 Other visitor surveys on the Severn Estuary include those in Gloucestershire that included the Forest of Dean and locations near Chepstow (as well as locations round to Stroud) and were undertaken in 2022 (Caals and Liley, 2022). While these took place along the Severn shoreline outside Monmouthshire, 3% of those people interviewed on the estuary were residents of Monmouthshire, highlighting that recreational use will not be confided to a given local planning authority. Other data on recreation use of the Severn includes a summary by McNutt (2023) and results from an online survey investigating attitudes and awareness of visitors (Clubb and Phillips, 2023).

[2] Severn Estuary Visitor Survey conducted by Aecom. 'Marked-up Results Questionnaire' and raw data shared via Monmouth County Council in April 2025.

Map 3: Interviewee home postcodes



Scale of housing growth in the RLDP

2.8 Currently (2025) there are around 44,268 residential dwellings in Monmouthshire (based on national postcode datasets). The distribution of these is shown in Map 4, which shows a relatively high density of current housing along the Severn corridor, around Chepstow, Caldicot and Magor then moving westwards, much higher densities at Newport and Cardiff. Looking more widely, there are a total of 861,048 residential dwellings within 12.6km of the Severn Estuary SAC/SPA/Ramsar (a large geographic area that extends into England). These figures indicate there are around 5% of residential dwellings within 12.6km of the Severn Estuary SAC/SPA/Ramsar within Monmouthshire.

2.9 Using the same national postcode data, there have been around 34,000 dwellings built within 12.6km of the Severn Estuary since 2020 (i.e. over the period 2020-2025), of which 1,412 were in Monmouthshire. These figures highlight incremental growth in the level of housing around the estuary in recent years. This indicates that in the 2020-2025 period the amount of housing within 12.6km of the Severn Estuary SAC/SPA/Ramsar has increased by 3.9% and within Monmouthshire the change (within 12.6km of the SAC/SPA/Ramsar) has been 3.1%.

2.10 There are six allocations within the RLDP and within the 12.6km. These are shown in Map 5 and total 1,018 dwellings (distance from Estuary given in parenthesis):

- **HA2:** Near Caldicot (1.17km), will provide 770 homes, supports the extension of the active travel network and provides alternative greenspace.
- **HA3:** Near Chepstow (2.4km), will provides 146 homes.
- **HA9:** Near Caerwent (3.07km), will provide 40 homes.
- **HA13:** Near St Arvans (4.7km), will provide 16 homes.
- **HA14:** Near Devauden (8.93km), will provide 20 homes
- **HA18:** Near Shirenewton (6.07km), will provide 26 homes.

2.11 In addition to the allocations, there will be additional windfall and infill development, potentially resulting in a further 270 dwellings[3] within the zone

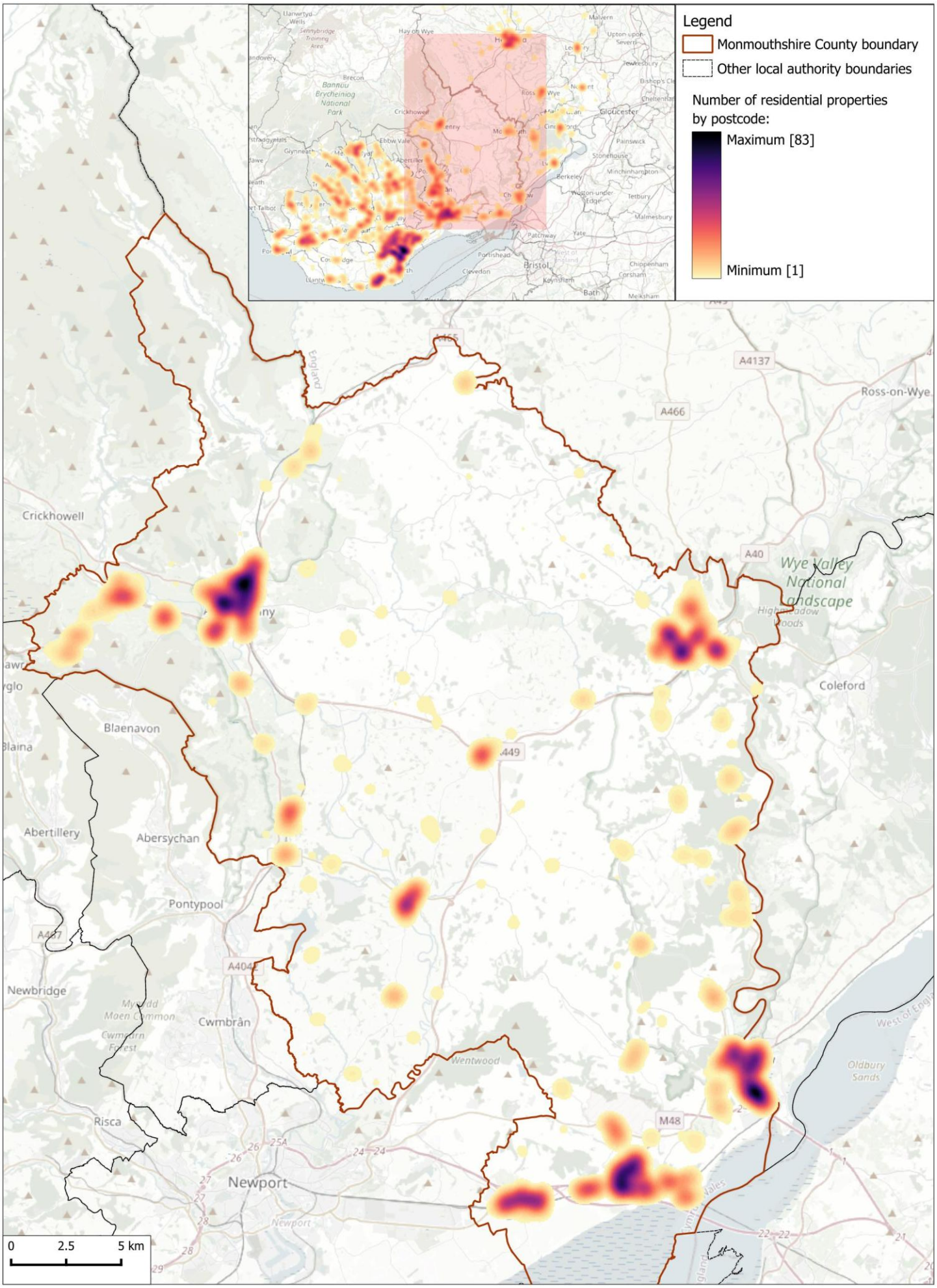
[3] This total is approximate and provided by MCC. Windfall (developments of 10+ units) within the zone of influence is estimated to be 70 homes, based on the findings of the Housing Potential Study. Infill opportunities (development of less than 10 units) are estimated to total 200 homes, a trend-based allowance projected forward for the remaining years of the plan.

of influence and that would require mitigation. This would mean this strategy needs to ensure mitigation for around 1288 dwellings.

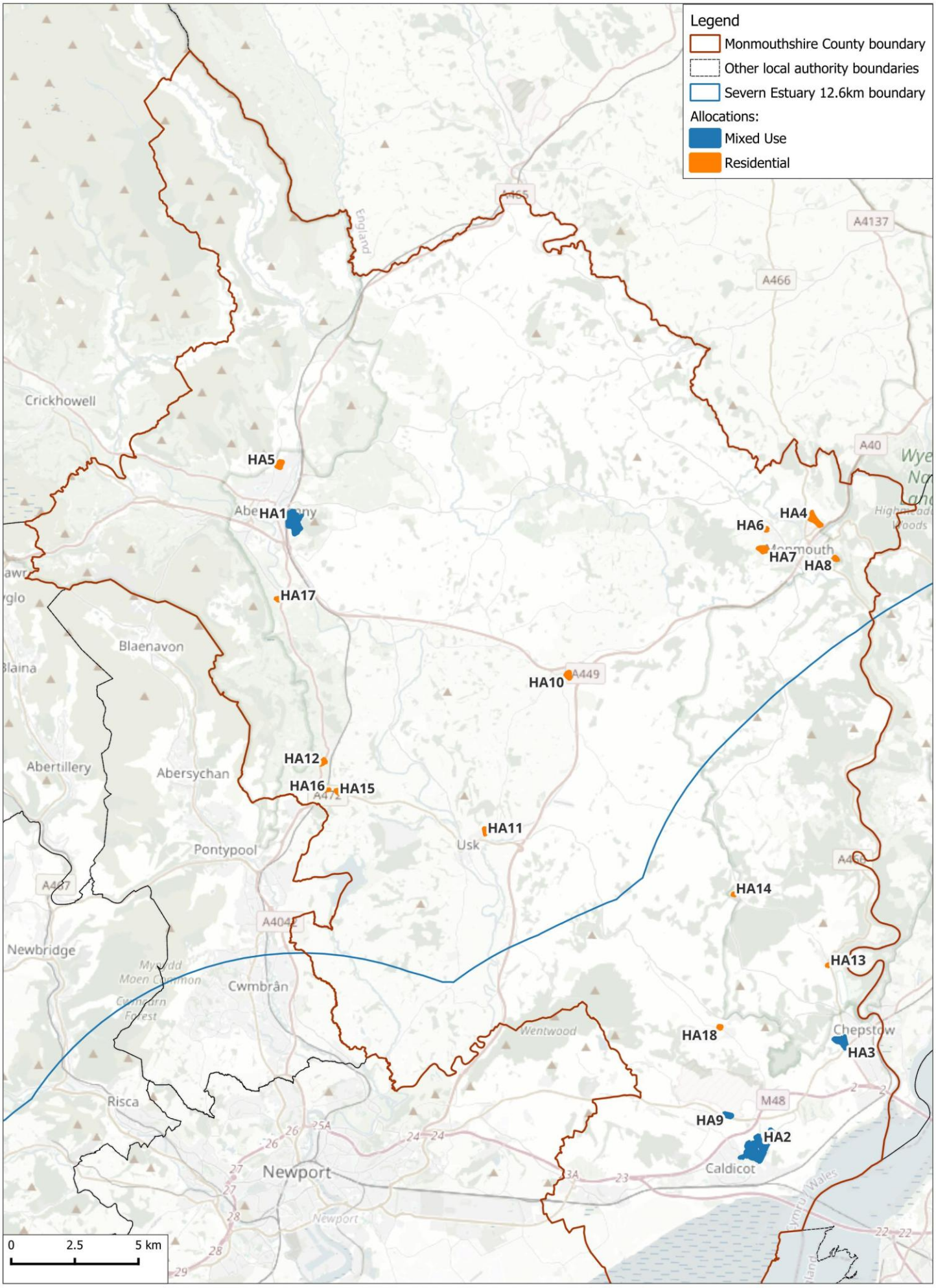
2.12 Postcode data from 2025 indicate there are around 19,797 dwellings within 12.6km of the SAC/SPA/Ramsar within Monmouthshire, and therefore 1,288 additional dwellings represents an increase of around 6.5%. The largest site (HA2) near Caldicot is in relatively close proximity to the Severn Estuary and also abuts the Nedern Brook Wetlands, Caldicot SSSI, which is important for wintering waterbirds and is functionally-linked to the Severn Estuary SPA/Ramsar[4]. As such the HA2 site is particularly sensitive.

[4] See the SSSI citation for details, https://nrwcmsv13-a3hwekacajb3frbw.a02.azurefd.net/644058/SSSI_0468_Citation_EN001fa3b.pdf

Map 4: Current level of housing density in Monmouthshire



Map 5: Proposed allocations within the RDLP



Impacts of recreation

2.13 There is a range of more general literature on recreation and impacts of people and their dogs that provides background and context (Liddle, 1997; Saunders *et al.*, 2000; Lowen *et al.*, 2008; e.g. Harris, 2023). The main impact is bird disturbance (e.g. impacts to birds from the presence of people, dogs, craft etc.). A range of other concerns are also relevant, such as damage, contamination and fire.

Disturbance

2.14 Disturbance to the wintering and passage bird interest is the principal concern and is relevant to the SPA and Ramsar features. Disturbance risks will extend to sites that are functionally-linked to the SPA/Ramsar. Disturbance to wintering and passage waterfowl can result in:

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

2.15 Disturbance is potentially associated with a range of activities including those on the shore (walking, dog walking etc.), on the water (such as jet skis, kayaks and paddleboards) and in the air (drones, paragliders and other airborne craft). The issues are long standing. For example, Habitats Regulations Assessment (HRA) work that accompanied the Stroud Local Plan around 2016 recognised that while baseline levels of recreational pressure on the Estuary were relatively low, disturbance could still have a high impact and recreational use was likely to increase as new housing, employment and tourism development comes forward. Around 2016, Forest of Dean District Council also commissioned dedicated work on recreation and disturbance around Lydney to mitigate the effects of housing growth around the town.

2.16 Changing recreation patterns, such as the increasing popularity of paddleboarding and an increase in dog ownership (e.g. Morgan *et al.*, 2020),

mean predicting future impacts can be challenging. Furthermore, impacts around recreation use have in recent years been exacerbated by climate change (effecting the species distributions, habitats, access patterns etc.) and the Covid pandemic which resulted in an increase in recreation use of local greenspaces and an increase in awareness of the importance of access for well-being and general health (Randler *et al.*, 2020; Natural England and Kantar Public, 2021; Poortinga *et al.*, 2021). Bird flu is also a current concern for a range of waterbirds and has impacted a range of species.

2.17 Further background and evidence on recreation impacts for the Severn Estuary can be found in a range of studies. Natural Resources Wales and Natural England's site improvement plan[5] for the Severn Estuary SAC / SPA / Ramsar identifies public access/disturbance as a current pressure and a threat and prioritises it above all other pressures or threats identified. The plan states: "*Public access and recreation (including third party activities) may have an impact on bird species sensitive to disturbance, causing displacement from feeding, roosting and moulting areas, and if severe could affect long term survival and population numbers and distributions within the Estuary. There are a wide range of recreational activities within the site (walking, dog walking, horse riding, biking, beach activities, angling, wildfowling, other shooting (e.g. clay pigeon)) that may cause damage to habitats where pressure is high*."

2.18 The marine conservation advice package produced by the statutory nature conservation agencies[6] highlights that bird communities are highly mobile and the activity of different species relates to the tide and a range of other factors, which vary between species. One important factor is the level of disturbance which needs to be maintained at or below levels necessary to provide favourable conditions for birds' feeding and roosting areas. The package goes on to state that management should aim to avoid both damage to the supporting habitats and disturbance to the birds.

2.19 A roost study on the South Gloucestershire and Bristol coastline (Archer, 2019) recorded some degree of disturbance taking place at a third of visits to roosts. Most roost sites experienced high or very high levels of disturbance during the project period. There was very little evidence of deliberate

[5] See the Natural England website: https://publications.naturalengland.org.uk/publication/4590676519944192
[6] Available from the Natural England website: https://publications.naturalengland.org.uk/publication/3184206?category=3212324

disturbance of roosts, with most occurring incidentally as people used and enjoyed coastal amenities. Dogs off leads and sea anglers fishing close to roosts together accounted for almost two thirds of recorded events. Walker disturbance accounted for almost one fifth of known disturbance events.

2.20 Burton *et al.* (2010) summarise the bird use of the Severn Estuary and Bristol Channel and highlight that the highest densities of waterbirds at low tide are found along the Gwent shore, specifically mentioning the area from Peterstone to Welsh Grounds that is directly relevant to Monmouthshire. Burton *et al.* also highlight that most intertidally foraging species are widely distributed across the estuary, with the exception of the central sandflats, though each favours different areas.

2.21 The overlap between the areas important for birds and the areas used for recreation are potentially relatively small. Reserves such as those at Goldcliff and Newport Wetlands provide safe roosting and loafing areas available to the birds at high tide. At low tide the open, soft mudflats provide wide open areas for birds to feed, and much of this habitat is well away from any shoreline areas where people might walk. Nonetheless there is clearly potential for the conservation objectives of the Severn Estuary SAC / SPA / Ramsar to be undermined as a result of recreation associated with new housing and it is not possible to rule out harm from future growth in the absence of mitigation.

2.22 Activities around the Monmouthshire shoreline that would potentially bring disturbance risks therefore relate to specific locations and circumstances which mitigation will need to take into account:

- Access onto saltmarsh and particularly dogs off-lead on saltmarsh such as at Black Rock and any areas where birds pushed closed to the shore (e.g. rising/falling tides);
- Access around the Pills, particularly dogs off-lead, as these areas are often key for birds;
- Fires/bbqs etc at locations such as Black Rock where beach fires could spread to other habitats;
- Any access on the water, close to intertidal habitats and roost sites;
- Access such as dog walking on sites that are functionally-linked to the estuary, e.g. Nedern Brook;
- Drones or other activities that may have particular disturbance risks.

Other types of impact

2.23 Alongside disturbance to birds, there are a range of other potential impacts from recreation use. These include:

- **Damage** (e.g. direct harm to vulnerable features from wear and footfall, e.g. trampling of saltmarsh vegetation)
- **Contamination** (potentially quite limited impacts given the qualifying features, however could include eutrophication through dog faeces/urine, water quality as a result of dogs entering water bodies, litter and possibly bio-security issues around the use of live bait for fishing)
- **Fire** (e.g. from barbeques, campfires etc and potentially a risk to habitats such as reedbeds)
- **Other** (public opposition to management, difficulty in grazing due to high levels of access and dogs off-lead).

2.24 Locations such as Black Rock are vulnerable to erosion and there are risks of damage and wear where people access the saltmarsh, including fishermen and bait diggers. Bottle hunting and treasure seeking occurs in some locations and also brings people down onto the intertidal. At locations such as Black Rock and Warren Slade, anti-social behaviour can result in bonfires and discarded drugs paraphernalia and litter. There are growing numbers of charity walks and other events that utilise the coast path, these don't always ask for permission and there is a risk of these deflecting other users and blocking access (e.g. parking in front of gates). These varied issues and activities make access provision and managing the impacts of that access a challenge.

Local conservation initiatives

2.25 The Gwent Levels have been the focus for a range of conservation work and projects in recent years. The Living Levels Landscape Partnership[7] came together in 2014 with funding from National Lottery Heritage Fund and the Rural Communities Development Fund. The partnership, led by the RSPB, has brought together a range of organisations conservation and heritage organisations to enhance the landscape, restore natural heritage, improve visitor experience and work with local communities. The Our Living Levels project, the successor to the Living Levels Landscape Partnership, was

[7] https://www.livinglevels.org.uk/

awarded a development grant by the National Lottery Heritage Fund in 2024. The new programme will include measures to help local people better understand and appreciate the landscape. This Living Levels therefore provides important context in terms of established partnership working and potential delivery opportunities.

3. Mitigation measures

Overview

3.1 The aim of this strategy and the mitigation set out below, is to ensure necessary measures are secured to allow Monmouthshire County Council to rule out adverse effects from recreation on the integrity of the Severn Estuary SAC/SPA/Ramsar in relation to the RLDP.

3.2 Mitigation will comprise SAMM ('Strategic Access Management and Monitoring') and new Green Infrastructure, as is standard for other mitigation strategies (see Beveridge *et al.*, 2024 for overview). SAMM comprise measures targeted at or around the estuary, such as signage, interpretation, ranger provision etc and extends to include monitoring linked to mitigation delivery and ensure the mitigation is targeted appropriately.

3.3 The green infrastructure relates to projects away from the European site and include SANG ('Suitable Alternative Natural Greenspace') associated with the HA2 allocation, to deflect visitors away from the Severn Estuary. HA2 is the focus for SANG provision due to the scale of growth in a single location and the proximity to the Severn Estuary.

3.4 It is essential that mitigation measures are joined up and work across local authority boundaries. All elements of the strategy are intended to provide the potential to integrate with those being undertaken in neighbouring authorities, or even in the future be implemented jointly at a more strategic level. Mitigation measures have also been carefully selected to be proportionate to the scale of risk and level of growth coming forward. This ensures mitigation can be funded through developer contributions yet will be of sufficient scale and ambition to be effective.

SAMM

3.5 SAMM elements are summarised in Table 1. A key component is ranger coverage which will involve providing a presence on-site through patrols, with these targeted to specific locations as necessary. This provides the confidence that mitigation is targeted towards direct engagement with those visiting the European sites and the ability to directly influence those spending time on those sites. The funds provide the ranger with the necessary resources including travel costs. Ranger time should be ring-

fenced and focussed on maximising their time out on the sites and talking to visitors.

3.6 Neighbouring authorities are looking to establish ranger presence using the Bird Aware Severn brand and it is anticipated that the costs from this strategy are pooled with neighbouring authorities to expand some ranger coverage to include Monmouthshire. This will ensure consistency of messaging, branding and bring cost savings though efficiencies of scale. The ranger provision is based on assumption of 0.25 of a full-time equivalent post, meaning the ranger coverage could be broadly equivalent to half a post if just focussed on the winter period.

3.7 Alongside the ranger provision, the strategy includes funding to audit existing parking, signage and interpretation, to identify opportunities to update, improve and influence visitor behaviour on site. Drawing on the results from these audits, annual funds are available for small projects, such as screening, fencing or changes to parking. It is anticipated local organisations (landowners, parish councils etc) can bid for these funds. Separate costs are ring-fenced for new interpretation panels.

3.8 SAMM elements also include direct work with dog walkers. Neighbouring authorities are working with the Coast and Countryside Canines Project[8], drawing on mitigation that has been developed on the Solent. This provides branding, messaging, signage and support around engagement with dog walkers. Joint work with neighbouring authorities will provide opportunities to expand the Coast and Countryside Canines work around the Severn, through events, promotion of responsible behaviour and support for local land-owners and managers.

3.9 Monitoring plays a key role in mitigation delivery. Monitoring of people will provide information to use for engagement, help focus ranger time, help the Mitigation Project Officer prioritise work areas and pick up any emerging trends or changes that require a redirection or different focus to the mitigation.

[8] https://coastandcountrycanines.org/

Table 1: Overview of mitigation measures. In the parties involved in delivery, LLP = Living Levels Partnership, MCC = Monmouthshire County Council, WWT = Wildfowl and Wetlands Trust, SEP = Severn Estuary Partnership

Mitigation measure	Description	Parties potentially involved in delivery	Justification	Notes
Ranger provision	Cost for ranger provision.	Other local authorities, MCC, WWT	Rangers are a cornerstone of mitigation for other strategies and in neighbouring authorities. Allows scope for flexible deployment, ability to target particular types of activities/visitors and targeted messaging relevant to the people being spoken to.	Bird Aware Severn branding has been established, and neighbouring authorities are in the process of establishing a small ranger team. Funding will allow this to expand to cover Monmouthshire ensuring continuity along the shoreline and consistency of approach. Part-time post - which could winter only.
Ranger support costs	Budget to cover travel, equipment (optics) etc.	Other local authorities, MCC, WWT	Budget required for transport and operational work.	
Social media and website	Creation of website/web content for information on mitigation package, work of rangers, monitoring results etc. Links to relevant organisations and feed.	MCC, neighbouring authorities, LLP, SEP	Web and social media are first places visitors will look for information about where to go and any current news/issues relevant to their visit. Extends reach of ranger team.	Content needs to work across different devices. Material needs to extend reach of rangers and provide guidance for those visiting. Potential to link to existing resources and Bird Aware Severn brand.
Dog project	Suite of work directly with dog walkers, including gazetteer on web of where to walk and a series of events, potentially posters etc in vets and other targeted venues.	MCC, neighbouring authorities	Budget covers external support and specialists (e.g. dog trainers) for events.	Potential collaboration with Coast & Countryside Canines Project.

Mitigation measure	Description	Parties potentially involved in delivery	Justification	Notes
Path improvements, fencing and other infrastructure projects	Funding pot to provide funding for projects proposed by organisations - focus on temporary fencing, signage etc that may be needed to address local issues around recreation. Includes ability to fund car park changes and other infrastructure.	MCC, LLP	Range of potential projects such as additional routes, fenced dog exercise areas etc.	Scope for funds to be used alongside funding from other sources. Part funding may be relevant where mitigation benefit is small or only part of the reason for a project. Steering group or some similar body could assess and sign off funds.
Visitor survey	Visitor survey to cover all Estuary and surrounding GI (SANGs etc) at 5-year intervals. Undertaken at estuary scale.	MCC, neighbouring authorities	Provides data on changing use patterns, demographics, visitor numbers and visitor origins.	Repeat surveys of a selection of locations in line with work undertaken to support HRA. Will need to align timing with other authorities so survey covers whole estuary.
Review and audit of signage and interpretation	Work to check all current signage and interpretation, liaise with relevant organisations programme changes/improvements as required, with scope to incorporate Bird Aware Severn branding and messaging.	MCC, LLP, SEP	Aligning messaging, Bird Aware branding	
Interpretation panels	Design, production and installation of new interpretation panels.	MCC, LLP, SEP	Permanent means to convey information to visitors	
Review and audit of parking	Covering all parking locations on and around the estuary, including functionally linked land, considering potential for charging to be adjusted (i.e. more expensive at sensitive locations), plus potential for improvements to focus use and activity. Potential to close some parking locations.	MCC, neighbouring authorities	Much recreational use is based around car travel and therefore provides scope to influence where people go and how they use sites	Aligns with work planned for neighbouring authorities and other mitigation strategies. Ideally will ensure estuary wide audit.

Green infrastructure & SANG

3.10 Off-site infrastructure will provide access or enhance existing countryside away from the Severn Estuary, with the aim of drawing some visitors and recreation use to alternative destinations. While contributions towards SAMM will be required for all development, SANG will be required solely for the HA2 allocation at Caldicot. This site is singled out as the focus for SANG provision due to its proximity to the Estuary and the scale of development expected in a single location.

3.11 SANG provision will be incorporated into the site design of HA2 from the outset and will provide the potential for creation of dog walking areas and greenspace on the doorstep for new residents. The costs for establishment of the SANG will be met by the developer and a means to secure the long-term maintenance and management will also need to be secured.

3.12 Guidance on SANG design and requirements is provided in Appendix 2 and principles relating to planning applications involving SANG are set out in Appendix 3. These two appendices are drawn from standard guidance and provide a basis to inform SANG design for HA2. Particular challenges for SANG delivery at this site will be the need to avoid any disturbance to the wintering waterbirds using the adjacent SSSI and how best to join to the existing access provision around Caldicot Castle (including the active travel route along the old railway line and the existing Country Park), to maximise the range of routes and potential opportunities for enhanced recreation. There may also be scope to connect with the council-owned Mount Ballan Wood area, to further maximise the potential for recreation opportunities in the area.

3.13 The guidelines in Appendix 2 establish a need for at least 15ha[9] of greenspace, however it may be necessary to exceed this level of provision in order to provide sufficient space and area for a reasonable dog walk. The median distance walked by dog walkers in the Severn Estuary visitor survey (Caals and Liley, 2022) was 2.3km and SANG provision should therefore aim to provide for this kind of scale of walk.

[9] At a level of provision of 8ha SANG per 1,000 new residents. A development of 770 dwellings (assuming 2.4 occupancy) would accommodate 1,848 residents and therefore need to provide 14.8ha of SANG.

4. Implementation

Types of development covered

4.1 This strategy applies to any future development granted planning permission that results in a net increase in residential units (i.e. C3 Use Class), located within the relevant zone of influence. It is anticipated that all development sites, large and small, contribute towards the mitigation which is designed to address the cumulative impacts of recreation. Contribution to the strategic mitigation will enable applicants to secure the appropriate avoidance or mitigation measures and enable the Council to conclude through appropriate assessment that there is no adverse effect on the integrity of the Severn Estuary SAC / SPA / Ramsar from recreation.

4.2 While the strategy is focussed towards C3 Use Class, there are other uses and forms of development that could come forward within the zone of influence and could trigger likely significant effects for the Severn Estuary SAC / SPA / Ramsar. Types of development are summarised in Table 2. For residential development contributions will be on a per unit basis, but this may not necessarily be directly transferable to other situations. Nonetheless it should be possible for such applications to be mitigated through the strategic approach, on a bespoke basis, if necessary. Such cases will require more detailed consideration, and the mitigation checked through appropriate assessment.

Table 2: Relevant types of development

Use Type/Class	Likely Significant Effect	Mitigation requirements
Dwelling houses (C3) Any net increase	Yes	Per dwelling contribution.
Dwelling houses (C3) Replacement dwelling	No, if demolition and replacement linked through same planning consent.	Per dwelling contribution where there is a significant delay (5 years or more) between demolition and replacement.
Residential Institutions (C2/C2A) Accommodation and care to people in need of care including nursing homes, hospitals and secure institutions	Possibly, case-by-case decision depending on whether residents likely to be mobile and independent.	Per unit contribution for relevant schemes (where residents potentially likely to visit Estuary).
Residential Institutions (C2/C2A) School, college or training centre	Possibly, case-by-case decision. If a training centre or college has associated adult accommodation, then residents can visit the Estuary.	Per unit contribution for relevant schemes (where residents potentially likely to visit Estuary).
Hotel (C1) Including boarding houses and guest houses	Yes	Contribution per room equivalent to a per dwelling contribution (possible exceptions if it can be clearly demonstrated residents won't access the Estuary).
Houses in Multiple Occupation (C4/Sui Generis) Including managed student accommodation	Yes	Contribution per bedroom equivalent to a per dwelling contribution.
Holiday Dwellings (Sui Generis)	Yes	Contribution per dwelling or pitch equivalent to a per dwelling contribution (possible exceptions if it can be clearly demonstrated residents won't access the Estuary).
Gypsy and Traveller Pitches (Sui Generis) Net new pitches that are either temporary or permanent	Yes	Per dwelling contribution.
Café, food outlet or visitor attraction	Possibly, case-by-case decision based on application, location and links to the Estuary.	Contribution decided on a case-by-case basis. Any food/drinks outlet or attraction within a 500m radius of the European site boundary likely to require mitigation. Level of contribution could be determined on a case-by-case basis.

Zone of influence

4.3 This strategy uses a zone of influence of 12.6km. This ensures consistency with other authorities and is based on the results of the Severn Estuary

visitor survey (Caals and Liley, 2022). It adequately covers the area within which people from Monmouthshire tend to visit the Severn Estuary (see paragraph 2.6).

HRA matters

4.4 This strategy provides a solution to address the cumulative effects of housing growth in terms of recreation impacts. The strategy does not by-pass the need for HRA in relation to recreation, it simply ensures that a mechanism is in place to facilitate the appropriate assessment of new development and it should allow a conclusion of no adverse effects from recreation to be reached. Certain developments, such as those that are particularly large, those very close to the estuary or those just outside the zone of influence may require bespoke consideration.

4.5 The strategy does not address other impacts from housing that might occur on the same sites, for example impacts associated air quality or water quality.

Costs per dwelling

4.6 The total cost of SAMM measures is estimated to be £769,125 (see Appendix 4 for details). With around 1,288 new dwellings allocated in the RLDP within 12.6km of the Severn Estuary SAC / SPA / Ramsar, this equates to a per dwelling contribution of £597.15 (plus any administrative costs).

4.7 The per dwelling cost is based on an estimate of windfall development and it is possible that the overall number of dwellings that require mitigation could be different from that forecast. The mitigation is flexible and measures can be scaled up or reduced as necessary (for example by increasing or decreasing the amount of ranger time). The tariff should be subject to review and will need to be adjusted on an annual basis to take into account inflation and any changes to housing numbers.

Long term delivery and in-perpetuity costs

4.8 Mitigation is secured for the duration of the impact, and it is assumed the implementation of the mitigation will run for as long as it is required, with money set aside to provide long-term stability and in-perpetuity delivery. The strategy will operate on a rolling basis into the future, adjusting as necessary to changing levels of house building and impacts arising.

4.9 Some measures in this strategy are short-term, one-off measures while others need to run for many years, often extending well outside the Plan period. Changes to access infrastructure, the provision of SANG (which are secured indefinitely) alongside the increased awareness raising should ensure that the need and annual cost for SAMM can decrease with time. As the SANG become better used and behaviour change (such as responsible dog ownership) is accepted, levels of ranger time and other such measures should change. It will be important for regular review and revision of costs as necessary to adjust the amount set aside for long term funding of mitigation measures. As such, SAMM is highly unlikely to need to be constant over time. We have derived costs for different measures to cover different lengths of time (see Appendix 4) and these will be reviewed and adjusted on a 5 yearly basis. Implementation of mitigation at an Estuary-wide level and on a strategic basis will provide opportunities to streamline delivery and save costs.

Governance

4.10 It will be important, looking forward, that there is flexibility and regular review as to how money is spent and what is needed on the ground. It will be essential that the mitigation delivery can respond to change. There is uncertainty, as the distribution of birds may shift in space and time and access patterns may change (for example in response to our changing climate). Mitigation will be best secured as a single Severn Estuary approach that ensures consistency of messaging and cost savings due to economies of scale. Such an approach will rely on collaboration on the English and Welsh sides of the estuary, multiple local authorities and two statutory agencies. Monmouthshire Council is committed to working closely with partners however it is likely to take some time for such an approach to be jointly adopted and accepted. In the meantime, this strategy provides a foundation and means to establish mitigation and address the risks associated with the RLDP.

4.11 If and when an estuary-wide approach is established, it can supersede this strategy. By working in collaboration with neighbouring authorities and the Severn Estuary Partnership, to establish a ranger presence and the use of the Bird Aware Severn branding, such a transition should be relatively seamless.

4.12 A steering group will be established to oversee the mitigation delivery, with the steering group comprising representatives from Monmouthshire County

Council and Natural Resources Wales. The steering group's role will include authorising funding for specific projects and major changes to the strategy approach. The steering group will work directly with neighbouring authorities and the Severn Estuary Partnership to maximise the benefits from collaborative working.

4.13 Any uncertainty is addressed through good monitoring, adaptive mitigation and regular review. Certain elements within the mitigation package have the scope to adapt and flex as conditions and priorities change. Furthermore, it is possible that additional opportunities may arise, for example as a result of changing land ownership. It is important therefore that the governance is flexible and responsive enough to enable developer contributions to be shifted to different components of the strategy easily.

4.14 While the strategy is focussed on an approach whereby all development contributes to mitigation (on a standard per dwelling basis), it may well be that this changes with time and is subject to review. If growth is focussed on a few, isolated and large developments then the burden of mitigation delivery could be weighted towards these sites.

Review and timing

4.15 The strategy will operate indefinitely on a rolling basis, with this strategy commencing prior to the adoption of the RLDP and running to around 2030. The strategy will be reviewed and updated approximately every 5 years, with these reviews checking housing numbers, delivery, costs and mitigation priorities.

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Appendix 1: Severn Estuary European sites

The qualifying features of the Severn Estuary Môr Hafren SAC/Severn Estuary SPA/Ramsar are summarised below. Links cross reference to the relevant section on the Natural Resources Wales website and the relevant designated site search page.

European sites	Qualifying features	Description
Severn Estuary/Môr Hafren SAC	• Estuaries • Subtidal sandbanks which are covered by seawater all the time • Mudflats and sandflats which are not covered by seawater at low tide • Atlantic salt meadow • Reefs • River lamprey *Lampetra fluviatilis* • Sea lamprey *Petromyzon marinus* • Twaite shad *Alosa fallax*	The Severn Estuary is located between Wales and England and is a large estuary with extensive intertidal mud-flats and sand-flats, rocky platforms and islands. Saltmarsh fringes the coast backed by grazing marsh with freshwater ditches and occasional brackish ditches. The subtidal seabed is rock and gravel with subtidal sandbanks. The site also supports reefs of the tube forming worm *Sabellaria alveolata*. The estuary's classic funnel shape, unique in the UK, is a factor causing the Severn to have one of the highest tidal ranges in the world. A consequence of the large tidal range is an extensive intertidal zone, one of the largest in the UK. The tidal regime results in plant and animal communities typical of the extreme physical conditions of liquid mud and tide-swept sand and rock. The species-poor intertidal invertebrate community includes high densities of ragworms, lugworms and other invertebrates forming an important food source for passage and wintering waders and fish.

European sites	Qualifying features	Description
		The fish fauna is very diverse with more than 110 species identified. The site is of particular importance for migratory fish.
Severn Estuary SPA	• Bewick's swan *Cygnus columnianus bewickii* • European white-fronted goose *Anser albifrons albifrons* • Dunlin Calidris alpina • Redshank *Tringa totanus* • Shelduck *Tadorna tadorna* • Gadwall *Anas strepera* • Internationally important assemblage of waterfowl	See above. The site is of importance during the spring and autumn migration periods for waders, as well as in winter for large numbers of waterbirds, especially swans, ducks and waders.
Severn Estuary Ramsar	• Estuaries • Assemblage of migratory fish species • Bewick's swan Cygnus columnianus bewickii • European white-fronted goose *Anser albifrons albifrons* • Dunlin *Calidris alpina* • Redshank *Tringa totanus* • Shelduck *Tadorna tadorna* • Gadwall *Anas strepera* • Internationally important assemblage of waterfowl	See above.

Appendix 2: Suitable Accessible Natural Greenspace (SANGs) guidelines

The role of SANG is to provide an alternative destination to those visitors who would otherwise visit the Severn Estuary. SANGs will be most effective if targeted to those visitors who have a big impact, such as dog walkers.

The effectiveness of SANGs will depend very much on the design and location, these need to work such that the SANGs has a draw equal to or greater than the estuary. In these guidelines we set out design and selection criteria for SANGs, drawing on that produced for other areas such as the Dorset Heaths (Dorset Council and BCP Council, 2020) or the Thames Basin Heaths (anon, 2021). The guidelines do not address or preclude other functions of green space, such as biodiversity net gain. Other functions may be provided within SANGs as long as these do not conflict with the specific function of mitigation. These guidelines reflect standards expected of SANG around the country that can be applied directly to HA2.

Character of the Severn Estuary

The Severn Estuary around Monmouthshire provides opportunities for a range of recreation. The estuary and the two bridges dominate the scenery; the scale of the Severn means visitors have a sense of expansive views and space. Parts of the shoreline to the south west of the Prince of Wales Bridge are relatively isolated and quiet. Locations such as Black Rock and around Chepstow are much busier, with housing close to the shore and a range of parking options.

The Severn Estuary has an extremely large tidal range, strong currents and shifting sandbanks, and as such the intertidal areas are dangerous to access and waters must be navigated with care. Nonetheless the estuary is popular for recreational boating. There is a slipway at Black Rock and a Boat Club at Chepstow.

These features are hard to replicate, however, visitor survey data shows proximity to home is an important draw (for 49% of visitors in the recent visitor survey, conducted to support the RLDP HRA). For dog walkers (a key target audience for SANG), the ability to exercise their pet in an area that is safe, easy to access and fun for the dog will be important.

Attributes of SANGs

In order to have confidence that greenspace is of a suitable size and quality the following attributes will need to be met:

- SANG should be provided at a minimum target rate of 8ha per 1,000 new residents; this per ha standard is equivalent to 0.0192ha per dwelling (assuming an occupancy rate of 2.4 people per dwelling) or 1.9ha per 100 dwellings.
- SANGs should be effective and available to local residents at the point of occupancy.
- Sites with sports grounds, playing fields or children's play areas are unlikely to meet the criteria for SANG or if such features are present they should not be counted towards the per ha standard.
- Where sites have existing visitor use, this existing use will need to be taken into account when applying the per ha standard. This will require visitor survey data to be available. Sites are likely to have additional capacity where average visitor use is less than 1 person per ha per hour[10]. Where existing sites are already well used, there will be a need to demonstrate that the measures will be effective, and this may require some delivery upfront.
- The focus for the SANGs should be large sites of at least 40ha (which will accommodate suitably long routes), however smaller sites may work, depending on the location and quality.
- SANGs should provide parking that is free or significantly cheaper than parking at the European sites. A guide to parking provision should be in the region of 1.5-2 spaces per ha of SANG[11].
- They should be quiet countryside locations, away from traffic noise, industrial sites etc. They should have a sense of space, openness and be viable alternatives to the European sites.
- They should contain a variety of habitats and be scenic, ideally with views.
- They should provide attractive, informal areas for dog walking: a range of walk lengths on relatively dry terrain, including at least 3km where dogs can be safely off the lead during the whole walk.
- They should provide routes that attract walkers, potentially including families. Walks are likely to need to be circuits with some interest (such as viewpoints, heritage features etc.).
- The site(s) should provide access all year round, without paths becoming waterlogged or inaccessible due to wet or muddy terrain.
- They should provide routes that work for cycling, potentially accommodating family cycling groups and mountain bikes as a low-key destination.
- Access points to the SANG(s) should be primarily within a 5km radius or 10 minute drive and easily accessible by road from the development they are intended to

[10] This provides a guide or approximate benchmark, typically busier than the relevant European sites but less than an urban park (see Liley et al., 2015). Sites will need to be considered on a case-case basis.

[11] This figure will depend on how close the SANG is to housing and the proportion of visitors that might arrive on foot or by bicycle. It is intended as a guide only.

mitigate. Some direct foot access and good access routes for cyclists would be ideal. Direct access on foot would mean some SANG provision within around 500m radius of proposed housing locations.

- New SANGs should be recognisable as a 'destination' such that sporadic visitors are drawn from a wide area and such that the site also attracts more regular (at least weekly) visitors. As such they will need to be positively promoted and welcoming.
- On-site infrastructure could include the following as appropriate:
    - Small scale visitor centre/shelter (not necessarily staffed);
    - Interpretation (providing information about the area);
    - Wayfinding infrastructure to direct people around the site;
    - Some surfaced paths/boardwalks;
    - Wildlife viewing facilities (such as screens);
    - Range of paths (some waymarked) that provide a range of different routes and circuits, potentially including some longer routes for cycling (perhaps family groups and relatively low-key mountain bike circuits) but not such that other access (e.g. appeal to dog walkers) is compromised;
    - Access to water for dogs to drink, bathe and splash in;
    - Benches/informal seating;
    - Viewpoints;
    - Natural Play (particularly for larger, strategic SANG);
    - Catering facilities (particularly for larger, strategic SANG).
- SANGs will need to be promoted through a range of different ways, including signage, so that they are easy to find and local residents (both new and existing) are well aware of the site.
- SANGs will need to provide access in perpetuity, and therefore require some legal mechanism to ensure this.
- Sites with significant nature conservation interest (SSSI) or particularly vulnerable species present are unlikely to be suitable as SANG.

Appendix 3: SANGs planning application principles

The following principles are adapted from the advice issued in Dorset (Dorset Council and BCP Council, 2020), with changes to reflect the local circumstance.

1. SANG maintenance and function should be secured and demonstrated to be in place for perpetuity (effectively the development needs to maintain a level of mitigation for the duration of any impact, extending to at least 80 years).
2. Applications for developments requiring a SANG are likely to require a Change of Use application for the SANG itself. This may be done through a separate planning application.
3. When the Local Authority considers the application for the development that the SANG is designed to mitigate, it will need to be certain that the SANG:

    - meets the SANG criteria;
    - is deliverable, i.e. ownership and appropriate management is secured;
    - can be managed in a suitable condition in perpetuity;
    - will be monitored for the first 5 years.

    This typically involves a draft Section 106 agreement, an implementation plan, long-term management plan and monitoring arrangements being submitted for agreement with the LPA.

4. Where the application for development is at an outline stage the applicant will need to provide sufficient information on the SANG to allow the SANG proposal to be considered.
5. The SANG land will have been assessed for its biodiversity features and the applicant will have confirmed that the proposal will not in principle lead to net harm to biodiversity. Where harm to biodiversity features is predicted then the capacity of the SANG will need to be adjusted.
6. A full SANG Management Plan will be required as part of a reserved matters application if not previously provided at outline stage. This will set out the implementation and maintenance of the SANG – it will record initial infrastructure (photographically) and management objectives by compartment. This will allow for future evolution of the SANG within the broad SANG criteria rather than a rigid approach.
7. If part or all of the SANG is already accessible to the public a visitor survey will need to be submitted as part of the application (outline or full where no-outline is submitted), and the SANG capacity discounted if necessary
8. Where a SANG is not co-located with a proposal the local planning authority will provide advice to the applicant concerning the SANG capacity/catchment on a case by case basis.

SANG Visitor Monitoring

Large developments may come forward in phases, so monitoring should commence prior to first occupation where there is existing SANG use. It does not have to be when the land has no existing public access. Monitoring should be phased at two/three years after each substantive phase and also at five years after the development is completed. It may be the case that monitoring will need to include nearby European sites. The primary aims of visitor monitoring are to inform the SANG delivery and allow for adjustments as well as demonstrating the SANGs functionality and use by existing local residents. Effective monitoring will provide a robust baseline which can be observed in future strategic monitoring events.

From 5 years after the final phase of a development future SANG monitoring will be incorporated into the ongoing SAMM programme on a strategic basis. SANG monitoring methodology may include visitor questionnaires, remote sensors and observational studies.

Strategic Access Management and Monitoring (SAMM)

SANGs are not intended to avoid all new residents accessing the protected sites, rather to enable a neutral level of visitor pressure with an equal proportion of existing European site visitors users being diverted. It is therefore necessary, as established in the Thames Basin Heaths area and Dorset, for applicants to secure SAMM relative to the level of residential development. Mitigation needs to be secured in perpetuity.

Appendix 4: SAMM costs

The table below summarises the mitigation measures as set out in the strategy and the relevant costs for each. These have been used to calculate the overall cost of mitigation. Costs are estimates only and intended to provide the overall level to set the tariff. The costs will be reviewed and updated as the strategy is implemented, with annual budgets adjusted according to housing growth. Where staff posts are referred to, 'fte' refers to full-time equivalent.

Mitigation measure	One-off/ Capital cost	Rolling cost	Multiplier for rolling cost	Total cost	Notes on how cost calculated
Ranger provision		£9,763	50	£488,125	0.25 fte. £30,000 annual salary, plus 35% (to cover NI, superannuation, etc.) and £5000 per annum support costs. 50 year period ensures long term funding for implementation. Potential to adjust as required, e.g. could be fte post for shorter time period. Total cost could be used to subcontract ranger provision or enter into agreement with neighbouring authorities rather than be employed directly by MCC.
Ranger support costs		£1,900	50	£95,000	40 days mileage at 50 miles a day (£0.45 per mile) plus an additional £1000 per annum.
Social media and website	£5,000	£2,500	10	£30,000	Costs approximate. One off cost to establish content and rolling cost to refresh and for social media - could include consultancy support, purchase of images etc.
Dog project		£3,000	10	£30,000	Cost estimated, potential to simply work as contribution to on-going work at Estuary scale with Coast & Countryside canines.
Path improvements, fencing and other infrastructure projects		£7,500	10	£75,000	Small annual budget for 10 years, covering plan period.
Visitor survey		£6,000	5	£30,000	Cost allows for 5 repeat surveys - potentially one survey every 5 years for 25 years.
Review and audit of signage and interpretation	£1,000			£1,000	Small budget to cover any resources and support if needed. Undertaken by local authority staff.
Interpretation panels	£7,500	£7,500	1	£15,000	3 panels at £2,500 per panel, with budget to replace 1x as necessary.
Review and audit of parking	£5,000			£5,000	Estimated cost for consultancy support to review all parking locations within c.500m of the estuary and identify and cost potential projects/opportunities to change.
TOTAL				**£769,125**	