Sustainability Appraisal (SA) for the Jersey bridging Island Plan

SA Report to accompany consultation on the draft bridging Island Plan

Government of Jersey

May 2021

Quality information

Prepared by	Checked by	Verified by	Approved by
Ryan Putt Environmental Consultant Nick Chisholm-Batten Associate Director	Alastair Peattie Associate Director	Steve Smith Technical Director	Steve Smith Technical Director

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Prepared for:

Government of Jersey

Prepared by:

AECOM Limited
Plumer House
Third Floor, East Wing
Tailyour Road
Crownhill
Plymouth PL6 5DH
United Kingdom

T: +44 (1752) 676700
aecom.com

Table of Contents

Introduction

1. Introduction 1

About the bridging Island plan 1
Current stage of plan making 2
What is the bridging Island Plan seeking to achieve? 4
Future Jersey 4
Vision and objectives for the bridging Island Plan 6

2. Sustainability appraisal for the bridging Island Plan 7

Sustainability appraisal explained 7
Undertaking an SA process for the bridging Island Plan 7
This SA Report 8

Part 1: What has plan preparation and SA involved up to this point?

3. Plan making and SA process to date 10

4. Scoping for the SA 11

SA Scoping Report 11
SA Framework 11

5. Assessment of reasonable alternatives for the SA 18

Reasonable alternatives in SA 18
Assessing short and longer term options through the SA 18

6. Assessment of short term options 19

Spatial strategy for the bridging plan period 19
Appraisal of sites for potential allocation 20
Assessment of distributions of available sites 22
Primary centre of St Helier 24
Secondary centre of Les Quennevais/ Red Houses/ La Moye and surrounding areas 27
Coastal strip to Gorey 30
A6 corridor (La Grande Route de Saint-Martin) 33
A9 corridor (La Grande Route de Saint-Jean), Trinity and St John 36
A12 corridor (La Grande Route de Saint-Pierre). 39
Island rural hinterland 42

7. Assessment of longer term options 43

Longer term growth options 43
Continued intensification of St Helier 45
Urban extensions to St Helier 47
Land reclamation and reconfiguration to the south of St Helier 48
Densification / growth around Les Quennevais / Red Houses / La Moye 50
Growth around the island's local centres 52
The delivery of a new settlement 53

Part 2: What are the appraisal findings at this current stage?

8. Appraisal of policy approaches presented in the consultation draft of the bridging Island Plan 56

Purpose of this chapter 56
Appraisal of earlier version of plan policies 56
Approach to the appraisal 56
Air, Land, Soil and Water Resources 57
Biodiversity and Geodiversity 60
Landscape, Townscape and Seascape 62
Historic Environment 64
Climate Change 67
Population and Community 70
Younger People 72
Health and Wellbeing 73
Transport 76
Economy 78
Cumulative effects 80

9. Monitoring programme for the SA 82

Monitoring in SA 82
Proposed monitoring programme 82

Part 3: What are the next steps?

10. Next steps 84

Next steps for the plan making / SA process 84

Appendix A: Scoping information 86

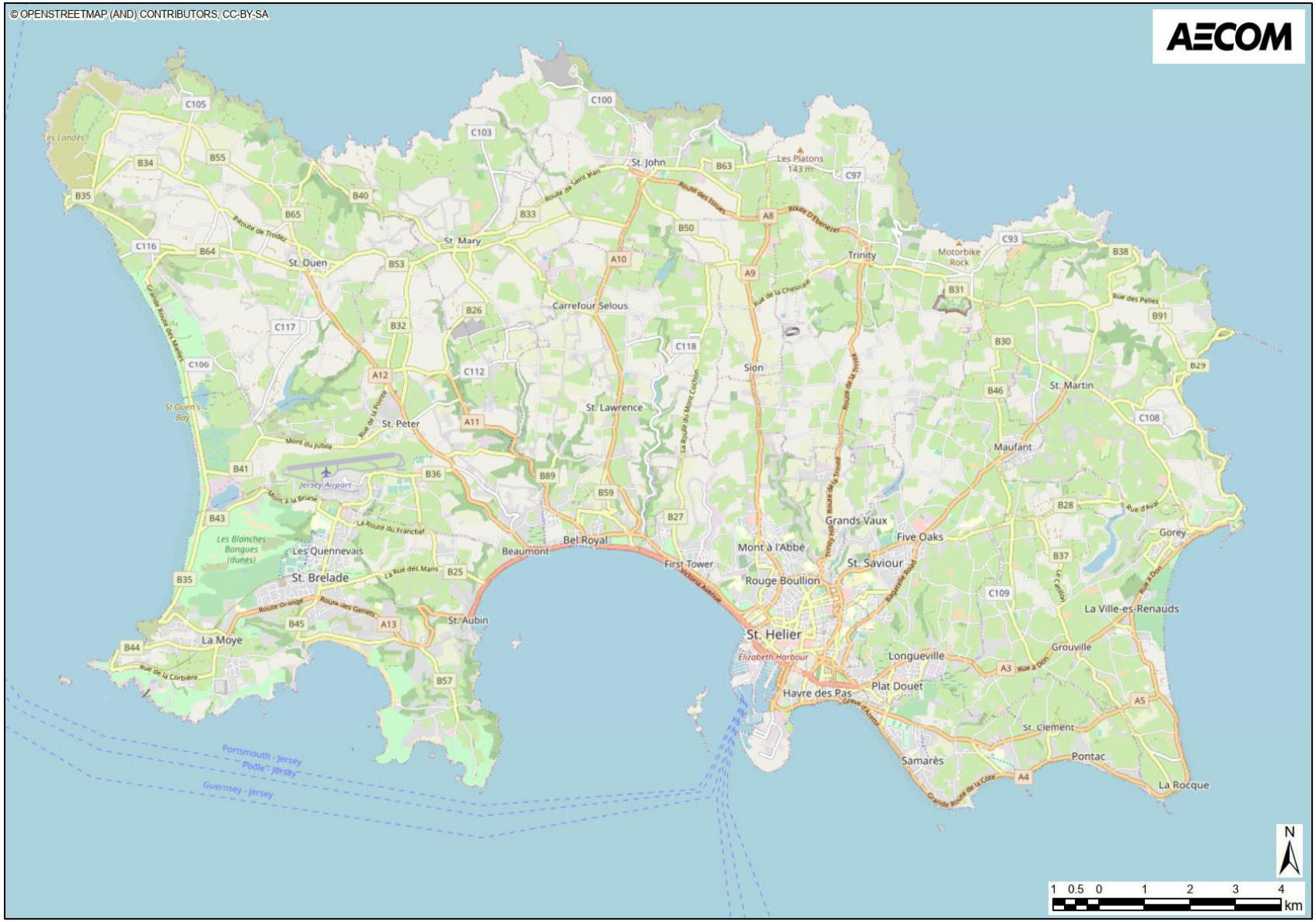


Figure 1.1: The island of Jersey

Introduction

1. Introduction

About the bridging Island plan

1.1 AECOM has been commissioned to undertake an independent Sustainability Appraisal (SA) in support of the Jersey Island Plan 2022-2025 (hereafter referred to as the bridging Island Plan).

1.2 The Government of Jersey (GoJ) is currently developing a new Island Plan to replace the current Island Plan 2011 to 2021. In 2019 the Minister for the Environment launched the Island Plan Review Programme, with a view to developing a new ten year Island Plan for the 2021 to 2030 period. However, the impact of the Covid-19 pandemic has meant that it is no longer possible to deliver an Island Plan as originally envisaged. To best respond to the current context, a shorter-term 'bridging' plan is now instead being developed that will sit between two longer-term plans (the current Island Plan 2011 to 2021, and a future Island Plan 2025 to 2034).

1.3 The key reasons GoJ is taking this new approach to the Island Plan is as follows:

- The bridging Island Plan makes an early response to current challenges, especially to address housing availability and affordability; strengthen protection from inappropriate development; respond to climate change; improve transport; and make improvements to town, particularly for residents;
- The bridging Island Plan represents an initial response to the period of significant uncertainty brought about by the Coronavirus pandemic and Brexit transition. This will subsequently be developed and refined through the subsequent Island Plan 2025, in particular to respond to the then current economic and population contexts; and
- The bridging Island Plan will enable stronger foundations for the next long-term plan by establishing updated strategic policies; updating and refining the spatial strategy; and setting out clear strategic proposals for the work that will ensure the next Island Plan can best respond to major long-term sustainability challenges.

1.4 In this respect, the bridging Island Plan is envisaged to set the means to facilitate the island's positive future growth over a period of significant uncertainty and provide a new framework against which planning decisions will be made. The plan will be key to ensuring that the GoJ can deliver sustainable development that will meet the needs of the community, while balancing the future economic, environmental and social needs of the island in a way that is best for Jersey and which reflects the vision and aspirations of islanders. Whilst the bridging Island Plan will be in force for a shorter period of time than the usual 10-year Island Plan, it will nevertheless be equally as comprehensive in scope and applied in the same way, to further the purpose of the Planning and Building (Jersey) Law 2002.

1.5 Key information relating to the bridging Island Plan is presented in **Table 1.1**.

Table 1.1: Key information relating to the bridging Island Plan.

Name of responsible authority	Government of Jersey
Title of plan	Bridging Island Plan
Subject	Spatial plan
Purpose	The bridging Island Plan will set out the strategy for future growth and appropriate management of development in the island of Jersey in the period 2022-2025. It will replace the Revised 2011 Island Plan.
Timescale	Three years from adoption.
Area covered by the plan	The Bailiwick of Jersey (including the island and the surrounding waters out to territorial limits).
Summary of content	The bridging Island Plan will present the spatial vision for the Island and include strategic planning policies, development management policies, site specific allocations and proposals map. The plan will be a 'bridging' plan between the current Island Plan 2011 to 2021 and a future Island Plan 2025 to 2034.
Plan contact point	Natasha Day, Senior Planning Policy Officer, Strategic Policy, Planning and Performance, Government of Jersey Email address: N.Day@gov.je

Current stage of plan making

1.6 **Figure 1.2** below sets out the stages of development for the bridging Island Plan.

1.7 At the current stage of plan-making, the GoJ is consulting on the draft bridging Island Plan (Stage 3 below).

1.8 The consultation follows previous consultation on the 'strategic issues and options' for the bridging Island plan, which was undertaken in July 2019. The aim of the strategic issues and options consultation was to canvass stakeholders' views on the approaches Island Plan policies could take to various key planning issues, including alternative development strategies for the island.

1.9 The current consultation, which this SA Report accompanies, seeks views on the proposed submission version of the bridging Island Plan, including a preferred development strategy, site allocations and planning policies. It will then be considered by an independent planning inspector at an examination in public. The inspector will submit a report to the Minister for the Environment who will then lodge final proposed amendments ahead of a debate in the States to seek approval of the Plan.

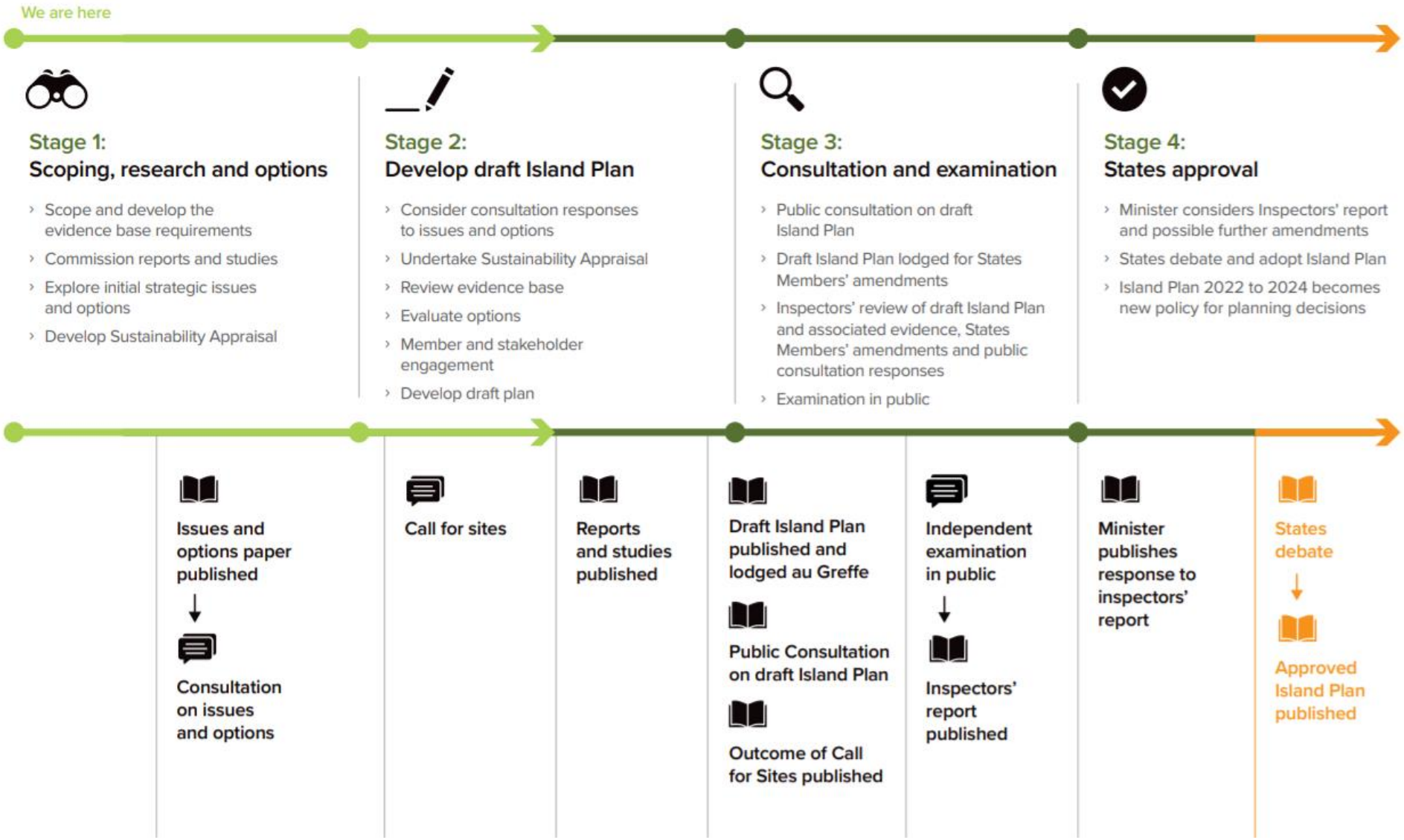


Figure 1.2: Development process for the bridging Island Plan

What is the bridging Island Plan seeking to achieve?

Future Jersey

1.10 The bridging Island Plan seeks to further the aspirations of Future Jersey, which is the GoJ's adopted long-term strategic vision guiding decision-making and performance review and improvement across Jersey's public service. Setting out a long-term community vision for the island, Future Jersey was developed to reflect Islanders' ambitions for the future and creates a means to track progress towards these ambitions over time. The overarching vision for Future Jersey, which was developed following extensive consultation with the community, is as follows:

"An Island loved for its beautiful coast and countryside, rich heritage, diverse wildlife and clean air, land and water. An Island where a sense of community really matters - a safe place to grow up and enjoy life. An Island that offers everyone the opportunity to contribute to, and share in, the success of a strong, sustainable economy."

1.11 Future Jersey's vision is broken down into ten key community, environment and economy outcomes, which seek to describe what success will look like:

Community outcomes:

- Safety and Security: Islanders feel safe and protected at home, work and in public
- Learn and Grow: Children enjoy the best start in life
- Vibrant and Inclusive: Islanders enjoy living in a vibrant and inclusive community
- Health and Wellbeing: Islanders enjoy long, healthy, active lives

Environmental outcomes

- Built and Historic Environment: Jersey's built and historic environment is valued and enjoyed
- Natural Environment: Jersey's unique natural environment is protected for future generations
- Sustainable Resources: Jersey's natural resources are managed and used responsibly

Economy outcomes

- Affordable Living: Islanders are able to afford a decent standard of living
- Attractive Business Environment: Jersey is an attractive place to do business
- Jobs and Growth: Islanders benefit from a strong economy and rewarding job opportunities

1.12 **Figure 1.3** below highlights how the Island Plan fits within the context of the wider Jersey strategic framework.

Figure 1.3: The bridging Island Plan in the context of the Jersey strategic framework

Vision and objectives for the bridging Island Plan

1.13 The vision and objectives of the bridging Island Plan have been framed within this strategic framework.

1.14 The overall vision for the bridging Island Plan is as follows:

"The Island Plan promotes the sustainable development of land and buildings to maintain and enhance Jersey as a special place, that faces the future; values and protects its environment and unique island identity; and acts with confidence to create the homes and jobs that sustain family and community life."

1.15 In particular, the bridging Island Plan seeks to respond to the key issues set out below:

- Making homes more affordable for Islanders;
- Making improvements for town residents;
- Responding to the climate emergency and improving transport; and
- Strengthening protection from inappropriate development.

1.16 In the context of the above vision and objectives, the bridging Island Plan sets out:

- Strategic proposals for the island, including a spatial strategy;
- A series of planning policies to guide development in the island in the period 2022 to 2025; and
- Site allocations for affordable housing.

2. Sustainability appraisal for the bridging Island Plan

Sustainability appraisal explained

2.1 SA considers and communicates the likely significant effects of an emerging plan, and the reasonable alternatives considered during the plan making process, in terms of key sustainability issues. The aim of SA is to inform and influence the plan-making process with a view to avoiding or mitigating negative effects and maximising positive effects. Through this approach, the SA seeks to maximise an emerging plan's contribution to sustainable development.

Undertaking an SA process for the bridging Island Plan

2.2 An SA is undertaken in the UK for Local Plans to reflect the requirements of the Planning and Compulsory Purchase Act 2004. This process is undertaken in line with the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations) which transposed into national law the EU Strategic Environmental Assessment (SEA) Directive.[1] SA also widens the scope of the assessment from focusing on environmental issues to also include social and economic issues.

2.3 Given it is not part of the UK, Jersey is not subject to the Planning and Compulsory Purchase Act 2004 and is not bound by the requirements of SEA Directive. For this reason, the GoJ is not formally required to undertake an SA or a Strategic Environmental Assessment (SEA) for the bridging Island Plan.

2.4 The GoJ however recognises that there are a range of benefits to undertaking a robust and proactive SA/SEA process for the new Island Plan. A key role of an SA process is to enable the relative sustainability merits and trade-offs associated with different approaches for a plan to be clearly visualised. This enables mitigation and avoidance measures to be established and opportunities for enhancements to be identified. By doing so, an effective SA process can help enable the bridging Island Plan to make the most of the significant opportunities available in the island for enhancing the built and natural environment and the quality of life of islanders and help the plan to maximise its contribution to sustainable development. For this reason, an SA process which incorporates the requirements of the SEA Regulations is being undertaken to inform and influence the development of the bridging Island Plan.

2.5 The SA process has, however, been tailored for the bridging Island Plan. In this respect it has engaged an appraisal process which proactively recognises the linkages between the environmental and human dimensions of Jersey. The SA process has therefore been designed to ensure that the strategic priorities of the Common Strategic Policy and the evolving aims of Future Jersey (discussed above) are fully supported through the SA process. As such it includes a full consideration of health and wellbeing issues, children's rights and the actions required to address the climate emergency.

[1] Directive 2001/42/EC

This SA Report

2.6 At the current stage of plan-making, the GoJ is undertaking full consultation on the draft bridging Island Plan.

2.7 This SA Report has therefore been produced with the intention of informing this stage in the bridging Island Plan's preparation. Specifically, this report presents an appraisal of the draft bridging Island Plan, and reasonable alternatives. This is for the benefit of those who might wish to make representations through the consultation and for the benefit of the plan-makers tasked with selecting preferred approaches for the bridging Island Plan.

2.8 This SA Report has been structured into three parts, as follows:

- **Part 1** provides an outline of plan-making to date, in association with the parallel SA process, and presents an appraisal of the options considered 'reasonable alternatives'.
- **Part 2** appraises the current version of the bridging Island Plan, which this SA Report accompanies for consultation.
- **Part 3** sets out the next steps for the bridging Island Plan / SA process.

Part 1: What has plan preparation and SA involved up to this point?

3. Plan making and SA process to date

3.1 **Figure 3.1** highlights the stages of the SA in association with the relevant stages of the bridging Island Plan's development.

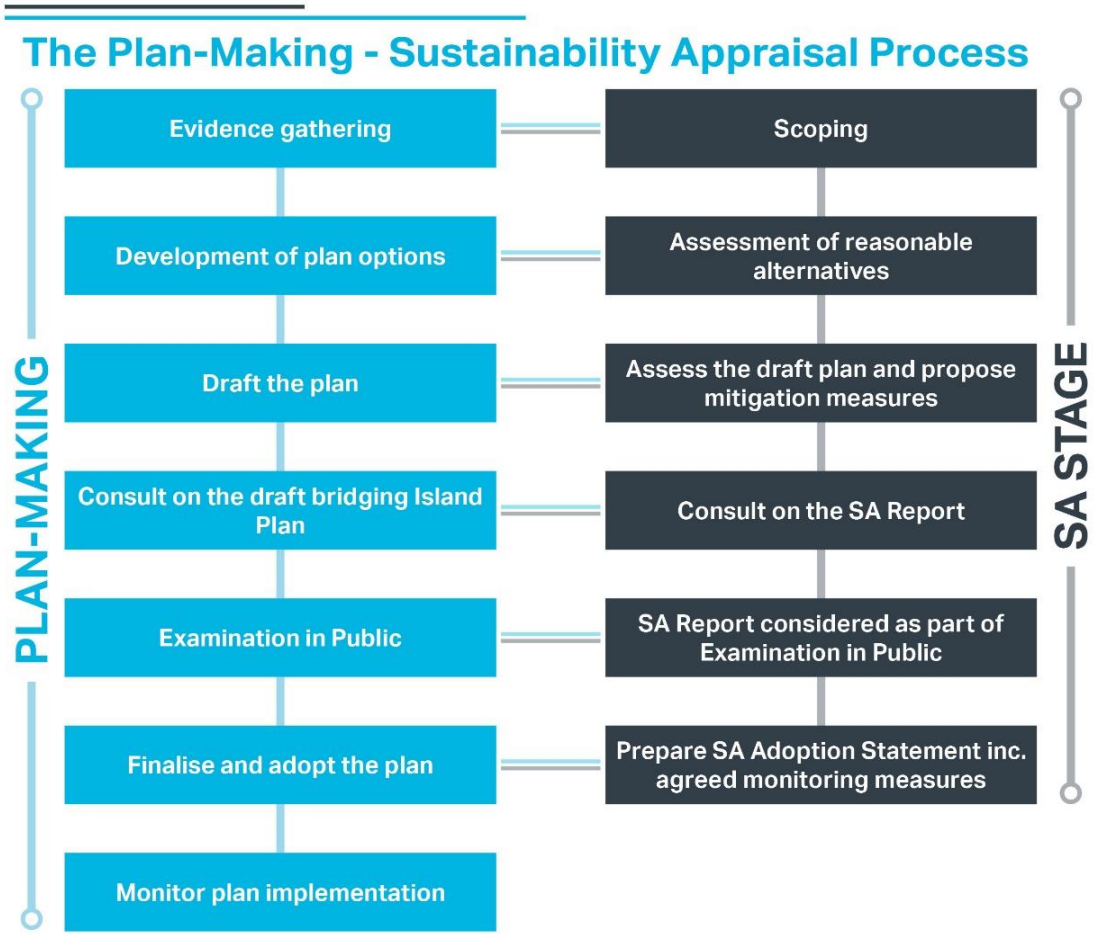


Figure 3.1: Stages of the SA in conjunction with the development of the bridging Island Plan.

3.2 To date, the first three stages in the SA process above have been undertaken:

1. Scoping;
2. Assessment of options as reasonable alternatives; and
3. Assessment of the draft bridging Island Plan (including earlier versions of plan policies).

3.3 This part of the SA Report therefore discusses the first two stages. **Part 2** of this SA Report subsequently presents the third stage, the appraisal of the consultation draft of the bridging Island Plan.

4. Scoping for the SA

SA Scoping Report

4.1 In 2019 a Scoping Report was prepared for the SA. The Scoping Report presented a baseline and context review for the SA, a series of key sustainability issues, and the SA Framework against which the bridging Island plan (including reasonable alternatives) could be appraised.

4.2 The relevant departments of the GoJ were consulted on the scope of the SA in November and December 2019, and comments received back.

4.3 The baseline information (including baseline data and context review) initially included in the SA Scoping Report has been updated in the period since and provides the basis for the SA process. The baseline information for the SA is presented in **Appendix A**.[2]

SA Framework

4.4 Drawing on the review of the sustainability context and baseline, the SA Scoping Report identified a range of sustainability problems / issues that should be a particular focus of the SA, ensuring it remains targeted at the most important sustainability issues. These issues were then translated into an SA 'framework' of objectives and appraisal questions.

4.5 The SA Framework provides a way in which the sustainability effects of the bridging Island Plan and alternatives can be identified and analysed based on a structured and consistent approach.

4.6 The SA Framework and the appraisal findings in this SA Report have been presented under ten SA Themes, reflecting the range of information being considered through the SA process. These are set out below.

Table 4.1: SA Themes

SA Theme	Elements covered by theme
SA Theme 1: Air, Land, Soil and Water Resources	• Air quality • Soil quality • Agricultural land quality • Water quality
SA Theme 2: Biodiversity and Geodiversity	• International biodiversity designations • Island biodiversity designations • Key habitats • Key species • Geological sites
SA Theme 3: Landscape, Townscape and Seascape	• Landscape, townscape and seascape character and quality • Designated and non-designated sites and areas • Visual amenity
SA Theme 4: Historic Environment	• Heritage assets • Setting, special qualities and significance of heritage assets • Locally important heritage assets • Historic character of the Island

[2] This baseline information presented in Appendix A was gathered prior to the Covid-19 pandemic.

SA Theme	Elements covered by theme
SA Theme 5: Climate Change	• Greenhouse gas emissions • Potential effects of climate change • Climate change resilience • Flood risk • Coastal change
SA Theme 6: Population and Community	• Population size and density • Age structure • Deprivation • Housing quality, mix and affordability • Community wellbeing and satisfaction
SA Theme 7: Younger People	• Education • Children's Rights • Equality
SA Theme 8: Health and Wellbeing	• Health indicators and deprivation • Influences on health and wellbeing
SA Theme 9: Transport	• Transportation infrastructure • Traffic flows and congestion • Accessibility • Car ownership • Travel to work
SA Theme 10: Economy	• Employment and Skills • Productivity and Growth

4.7 The SA Framework is presented in **Table 4.2** below.

Table 4.2: SA Framework for the bridging Island Plan

Air, Land, Soil and Water Resources	
SA objective	Assessment Questions
Ensure the efficient and effective use of land.	Will the option/proposal help to: • Promote the use of previously developed land?
Promote sustainable waste management solutions that encourage the reduction, re-use and recycling of waste.	Will the option/proposal help to: • Reduce the amount of waste produced? • Support the minimisation, reuse and recycling of waste? • Maximise opportunities for local management of waste to minimise export of waste? • Encourage recycling of materials and minimise consumption of resources during construction?
Use and manage water resources in a sustainable manner.	Will the option/proposal help to: • Support improvements to fresh water and sea water quality? • Minimise water consumption and help to reduce consumption of treated water? • Protect surface water resources? • Ensure that Jersey's fresh water resources and marine water resources are clean and sustainable?
Improve air quality and minimise and/or mitigate against all sources of environmental pollution.	Will the option/proposal help to: • Support a reduction of key pollutants affecting air quality? • Promote a shift to the use of less polluting forms of transport, including walking, cycling and use of electric vehicles? • Implement measures (such as appropriate planting and provision of green infrastructure) which will help support air quality?
Biodiversity and Geodiversity	
SA objective	Assessment Questions
Protect and enhance all biodiversity and geodiversity	Will the option/proposal help to: • Protect and maintain the integrity of designated areas within the island's marine environment? • Protect and maintain the integrity of designated sites of special biodiversity and geodiversity interest; and other areas of ecological value, within the island's terrestrial environment? • Protect and enhance Jersey's marine and terrestrial biodiversity and geodiversity? • Achieve a net gain in biodiversity? • Support enhancements to multifunctional green infrastructure networks? • Support access to, interpretation and understanding of marine and terrestrial biodiversity and geodiversity?

Landscape, Townscape and Seascape	
SA objective	Assessment Questions
Protect and enhance the character and quality of landscapes, townscapes and seascapes?	• Will the option/proposal help to: • Protect the integrity; and conserve and enhance the natural beauty, landscape value and qualities of the Coastal National Park? • Protect the integrity; and conserve and enhance the landscape character of the Green Zone? • Protect the integrity; and conserve and enhance the landscape and seascape value of the island's coast and marine environment, including its intertidal areas and surrounding waters, out to territorial limits? • Conserve and enhance the island's distinctive and varied urban character and townscape qualities, and appropriately respond to its local context? • Contribute to local distinctiveness and a sense of place? • Protect locally important viewpoints contributing to the sense of place, identity and visual amenity of Jersey?
Historic Environment	
SA objective	Assessment Questions
Ensure that Jersey's historic buildings and places are valued, protected and enhanced.	• Will the option/proposal help to: • Conserve, protect and improve the special interest of listed buildings and places, and their settings? • Conserve and enhance the character and appearance of areas of architectural and historic interest and a distinctive sense of place? • Support access to, interpretation and understanding of the island's historic environment and its contribution to a sense of place, character and the island's cultural identity? • In the context of development proposals affecting archaeology, support the undertaking of appropriate archaeological investigations and mitigation?
Climate Change	
SA objective	Assessment Questions
Reduce the contribution to climate change made by activities in Jersey	Will the option/proposal help to: • Reduce the need to travel; number of journeys made; or the distance travelled? • Promote the choice of travel options; and the use of sustainable modes of transport? • Increase the sustainability and environmental performance of development? • Generate energy from low or zero carbon sources? • Reduce energy consumption overall and/or from non-renewable resources?
Ensure the efficient use of resources to reduce negative contributions to and mitigate impacts of climate change	• Minimise need for energy and increase the share of energy from renewable sources? • Ensure that Jersey has secure, affordable and sustainable energy? • Increase energy efficiency?

Support the resilience of the island to the potential effects of climate change, including flooding	Will the option/proposal help to: • Ensure that inappropriate development; or development that is not resilient to the effects of flooding; does not take place in areas at higher risk of flooding? • Reduce vulnerability to climate change impacts? • Improve and extend green infrastructure networks to support adaptation to the potential effects of climate change? • Sustainably manage water run-off, reducing surface water runoff? • Ensure the potential risks associated with climate change are considered through new development?

Population and Community

SA objective	Assessment Questions
Jersey is supportive of improving community vitality, supporting the wellbeing of all islanders	• Will the option/proposal help to: • Support inclusive, balanced and mixed communities? • Help overcome barriers to integration for any islander? • Encourage and promote social cohesion and encourage active involvement of all islanders in community activities? • Support enhancements to the public realm?
Cater for existing and future islanders' needs as well as the needs of different groups in the community, and improve access to local, high-quality community services and facilities. Reduce deprivation and promote a more inclusive and self-contained community.	Will the option/proposal help to: • Appropriately consider the implications; and respond to the needs, of an ageing population? • Minimise fuel poverty? • Maintain or enhance the quality of life of existing islanders? • Improve the availability and accessibility of key local facilities for all parts of the community? • Protect people and property against crime and disorder, and help reduce their fear of crime? • Ensure that all islanders can independently afford a decent standard of living?
Provide everyone with the opportunity to live in good quality, affordable housing, and ensure an appropriate mix of dwelling sizes, types and tenures.	Will the option/proposal help to: • Support the provision of a range of types and sizes of homes? • Support enhancements to the current housing stock? • Meet the housing needs of all sectors of the community? • Provide quality and flexible homes that meet people's needs? • Promote the use of sustainable building techniques, including use of sustainable building materials in construction? • Provide housing in sustainable locations that allow easy access to a range of local services and facilities? • Maintain and enhance access to decent and affordable housing for all islanders?

Younger People	
SA objective	Assessment Questions
Ensure equality of opportunity through fair and equal access to services (health care, education, skills training, employment, shopping, transport), culture, leisure and recreation for younger people	Will the option / proposal help to? • Put children first by protecting and supporting them; by improving their educational outcomes; and by involving and engaging children in decisions that affect their everyday lives? • Increase young people's access to leisure and recreational facilities? • Improve the quality and quantity of publicly accessible greenspace? • Promote services that support the needs of younger people? • Provide every child with educational opportunities to help realise their potential?
Improve opportunities for developing community cohesion and increase understanding and learning between communities	• Will the option / proposal help to? • Create the best possible start for every child in Jersey? • Ensure quality for opportunity for all, regardless of age, disability gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender, sexual orientation or socio-economic status.
Health and Wellbeing	
SA objective	Assessment Questions
Improve the health and wellbeing for islanders	• Will the option/proposal help to: • Promote accessibility to a range of leisure, health and community facilities, for all age groups? • Support improvements to mental health and community wellbeing? • Provide and enhance the provision of community access to green infrastructure, including natural green and open spaces? • Promote the use of healthier modes of travel? • Ensure that people living with a long-term health condition or disability enjoys a good quality of life? • Ensure that islanders live healthier, active and longer lives and risks to poor health are reduced? • Protect islanders' health and safety at work and promote a healthy work/life balance? • Ensure that islanders have good accessibility to high quality care?

Transportation

SA objective	Assessment Questions
Promote sustainable transport use; reduce the need to travel; and reduce the adverse impacts of travel.	Will the option/proposal help to… • Support the key objectives within the Sustainable Transport Policy for the island? • Increase active travel, supporting modal shift? • Reduce the need to travel through sustainable patterns of land use and development? • Enable sustainable transport infrastructure enhancements? • Facilitate working from home and remote working? • Improve road safety and ensure Jersey's road users, particularly those that are most vulnerable, are safe? • Reduce the adverse impact of traffic on those who live, work or who are at or going to/from school, from the road network? • Promote wellbeing; help ensure strong, well-connected neighbourhoods and places; and safe, attractive infrastructure and public transport, that makes walking, cycling and taking the bus the obvious choices on a small island?

Economy

SA objective	Assessment Questions
Provide opportunities and benefits to the local economy	Will the option / proposal help to… • Nurture and strengthen the local economy, particularly the financial services industry? • Diversify the economy, increase resilience to external shocks? • Generate diverse new jobs for the area? • Support and encourage the productivity growth of businesses? • Increase the competitiveness of the island in a growing, global and digital economy? • Maintain the viability and vitality of St Helier as the island's primary commercial centre? • Support local shopping centres?
Create a skilled local workforce to meet the needs of the economy	Will the option / proposal help to… • Create job opportunities for islanders, including school leavers and the unemployed? • Secure and support the provision of local skills and training to match the needs of the local economy; and reduce the reliance on in-migration? • Help ensure the integration of key workers?

5. Assessment of reasonable alternatives for the SA

Reasonable alternatives in SA

5.1 A key element of the SA process to date has been the appraisal of 'reasonable alternatives' for the bridging Island Plan.

5.2 The SEA Regulations[3] are not prescriptive as to what constitutes a reasonable alternative, stating only that the SA Report should present an appraisal of the 'plan and reasonable alternatives taking into account the objectives and geographical scope of the plan'.

5.3 A focus of reasonable alternatives assessment work for the current SA has been with respect to the spatial development strategy for Jersey and the allocation of land in the island. The purpose of this assessment is to provide an understanding of the sustainability implications of different potential spatial approaches to planning for future development needs in the island, both in the short and longer terms.

Assessing short and longer term options through the SA

5.4 As discussed in Chapter 1, the bridging Island Plan will cover the period 2022-25, and act as a bridging plan for the Island Plan 2025. In this respect, the subsequent development of the Island Plan 2025 (which will cover the ten year period from 2025 - 35) will benefit from elements such as the findings of the 2021 Census, increased certainty surrounding the situation post Covid-19 and Brexit, and the potential implementation of an island-wide migration control policy and population policy from 2022.

5.5 In light of this, the reasonable alternatives work undertaken through the SA has been designed to cover both the shorter term time periods associated with the bridging plan and the longer term issues that will need to be addressed through the forthcoming Island Plan 2025 and beyond.

5.6 In this respect, the reasonable alternatives assessment has considered:

1. Appropriate spatial approaches for the delivery of growth over the short term (mirroring the plan period for the bridging plan of 2022-25); and
2. The longer-term spatial strategy approaches that might need to be considered in the context of the Island Plan 2025 and beyond.

5.7 This two-fold approach is designed to help inform consultation with regards to the choices to be made during the time period for the current bridging plan, whilst also providing early insight into the sustainability implications of the choices that may need to be made in the development of the Island Plan 2025 and beyond.

[3] Environmental Assessment of Plans and Programmes Regulations 2004

6. Assessment of short term options

Spatial strategy for the bridging plan period

6.1 The spatial strategy for the current and previous Island Plans has generally been based on the principle of integrating development within the island's existing built-up areas, based on a hierarchical categorisation of Jersey's settlements.

6.2 As a consequence of this, St Helier has, in recent years, absorbed much of the island's population and employment growth, with growth extending from the boundaries of the parish of St Helier to include parts of the parishes of St Saviour and St Clement, whilst also involving the reclamation of land to expand the town and meet other strategic requirements. This has encouraged the re-use and redevelopment of land that has already been developed, often resulting in relatively high density development.

6.3 This growth of St Helier has been coupled with the limited release of greenfield land on the edge of existing built-up areas elsewhere across the island to provide new affordable housing, usually in the form of family houses. This form of development has occurred principally in the parishes of St Clement, St Saviour and St Brelade, together with the more limited release of land around some of the island's rural parish centres.

6.4 Given the bridging Island Plan will be developed for a much shorter time period than a normal Island Plan, the extent of provision for development that needs to be made will be correspondingly less. There is also uncertainty about the extent of growth – and the subsequent demand for development – that the island will need to provide for over the longer term. This is in light of uncertainties surrounding the recovery from the Covid-19 pandemic, the implications of Brexit, and the potential implementation of an island-wide migration control policy and population policy from 2022.

6.5 In this respect, the following has been recognised for the bridging Island Plan:

- Government analysis currently suggests that inward migration to Jersey in the next five years will be around half the level seen in the last five years;
- Provision should be made for around 4,150 homes up to 2025;
- This level of provision includes almost 1,000 extra affordable homes to respond to the current housing shortfall that is currently increasing property prices and impacting on living standards; and
- There is a significant need in the island for a mix of housing types to meet the needs of families and older people.

6.6 In addition, the outcomes of community consultation undertaken at earlier stages of plan making has highlighted support for a generally conservative approach to the spatial strategy for growth.

6.7 In light of these factors, issues relating to the preferred spatial strategy for the bridging Island Plan were considered by the Council of Ministers in September 2020, alongside the various evidence base studies undertaken for the bridging Island Plan to date.

6.8 To support this consideration, the SA team prepared a report to inform briefings with the Council of Ministers which explored the sustainability implications of potential distributions of growth to be taken forward through the bridging Island Plan.[4] This report identified the key opportunities and sustainability issues associated with the different elements of the potential spatial strategy for the bridging plan, including issues associated with:

- Intensification of St Helier and development of key opportunity sites;
- Urban extensions to St Helier;

[4] AECOM (September 2020) SA for the Island Plan Review: Note for Council of Ministers, September 2020

- Development at secondary urban centres;
- Expansion of key rural settlements; and
- Development in the countryside.

6.9 Following evaluation by the Council of Ministers, a preferred strategy for the bridging Island Plan was agreed. This was set out in the Preferred Strategy Report released in October 2020[5], which highlighted that most development should be accommodated in St Helier and other parts of the island that are already developed; but to meet the need for homes, and to help support parish communities, some greenfield land would need to be released for development.

6.10 In recognition of the preferred spatial strategy for the bridging Island Plan, the SA process subsequently undertook an appraisal of potential locations for growth in the island, in association with the sites available for allocation.

6.11 This process is described below.

Appraisal of sites for potential allocation

Call for sites and plan site assessment

6.12 To support the consideration of which sites to allocate through the bridging Island Plan, various site assessments have been undertaken through the development of the plan.

6.13 As a first stage in identifying the sites to be potentially allocated, developers, landowners, parishes and other interested parties were invited to submit sites through a 'Call for Sites' process in late 2019 and 2020. This was a view to highlighting to plan-makers the sites in the island which might be suitable for development (including affordable housing), or alternatively, appropriate to protect from development.

6.14 Subsequent to the Call for Sites process, in the region of 350 sites were assessed by the Island Plan team to support the choice of allocations taken forward through the bridging Island Plan. These were considered in relation to their suitability, availability and achievability for taking forward as an allocation through the bridging island Plan, or alternatively as locations to be protected from development.

SA site appraisal

6.15 To support these assessments, a separate appraisal of each of the sites in the island available for affordable housing (totalling 213 sites) has been undertaken through the SA process. This is with the aim of informing the proposed allocation of sites for this purpose.[6]

6.16 As part of the SA, the constraints and opportunities associated with each site were identified using a set of criteria which were developed specifically for the SA process. Based on these criteria, a 'red/amber/green' rating was then applied to each site for each criterion to provide an indication of site constraints and opportunities and the relative sustainability merits of the different sites.

6.17 The findings of the appraisal of the sites undertaken through the SA process, accompanied by an explanation of the approach and criteria utilised for the appraisal, is presented in the **Technical Annex** accompanying this SA Report (*SA Report Technical Annex to accompany consultation on the draft bridging Island Plan*).

6.18 The location of the sites appraised through the SA are presented in **Figure 6.1** below.

[5] Government of Jersey (October 2020) Island Plan Review Technical Evidence Base – Preferred Strategy Report
[6] All sites allocated for housing through the bridging Island Plan will incorporate affordable housing.

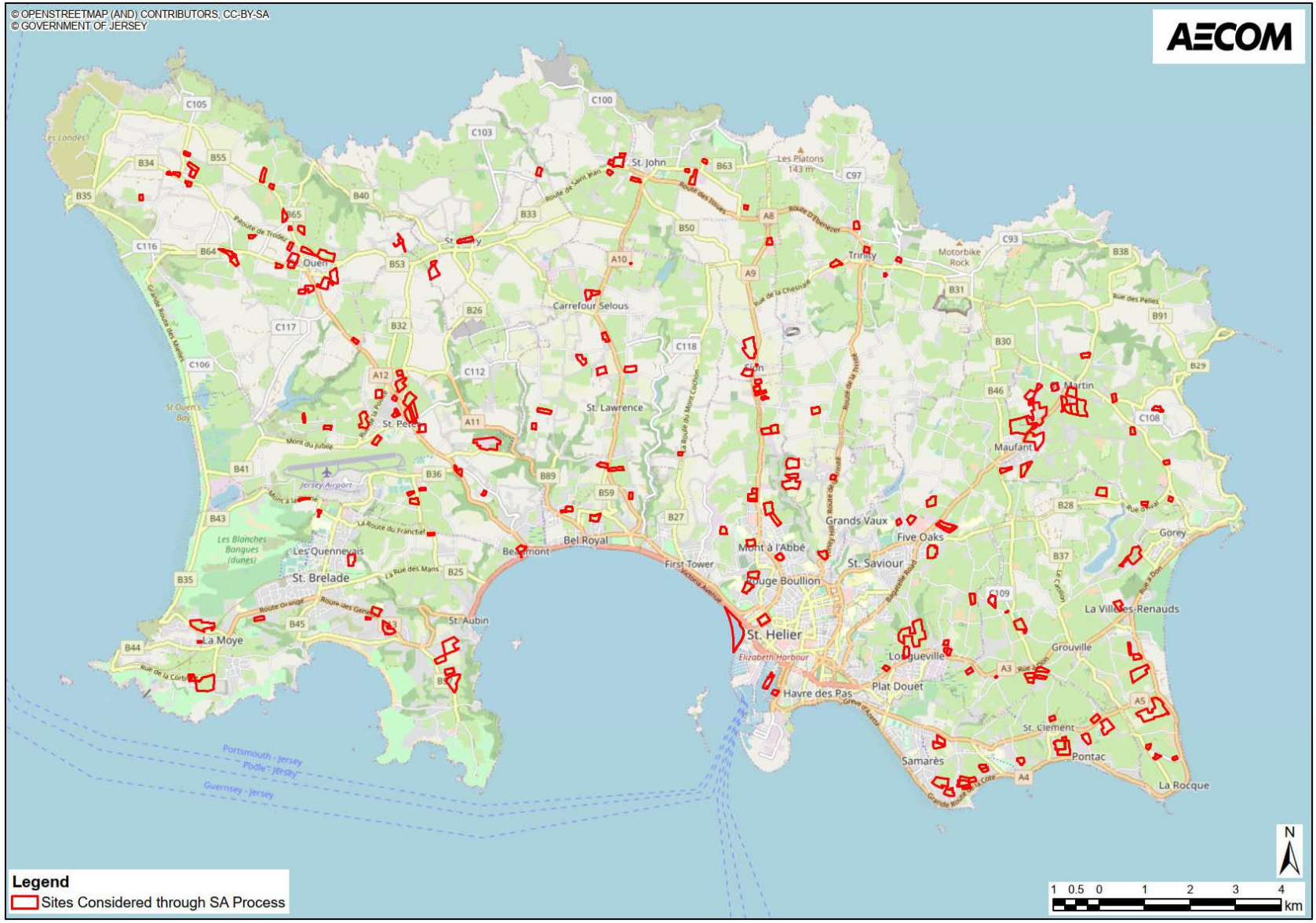


Figure 6.1: Sites considered through the SA site appraisal

Assessment of distributions of available sites

6.19 In light of the preferred spatial strategy for the plan, the key short-term choices for the bridging Island Plan period relate to the extent of intensification of uses and the planned release of greenfield land through extending some secondary built-up area edges and around some rural parish centres.

6.20 To provide an additional perspective on the choices to be made in this regard, a further assessment of the distribution of the sites currently available for affordable housing over the plan period has been undertaken. This has involved evaluating the sustainability issues associated with various clusters of sites available in different areas of the island.

6.21 The purpose of this exercise is to gain a better understanding of the potential spatial approaches that can be taken in each area relating to the available sites, and the likely sustainability implications.

6.22 To facilitate this assessment, the island has been divided into seven broad areas, as follows (these broad areas are mapped in **Figure 6.2**):

- Primary centre of St Helier, including area along A3/Longueville Road to the east;
- Secondary centre of Les Quennevais/ Red Houses/ La Moye and surrounding areas;
- Coastal strip to Gorey;
- A6 corridor (La Grande Route de Saint-Martin);
- A9 corridor (La Grande Route de Saint-Jean), Trinity and St John;
- A12 corridor (La Grande Route de Saint-Pierre); and
- Island rural hinterland.

6.23 Presented below is a commentary on the key environmental constraints and opportunities associated with the distribution of sites available for allocation in each area. These commentaries are accompanied by maps highlighting the location of available sites in conjunction with the environmental constraints in the area.

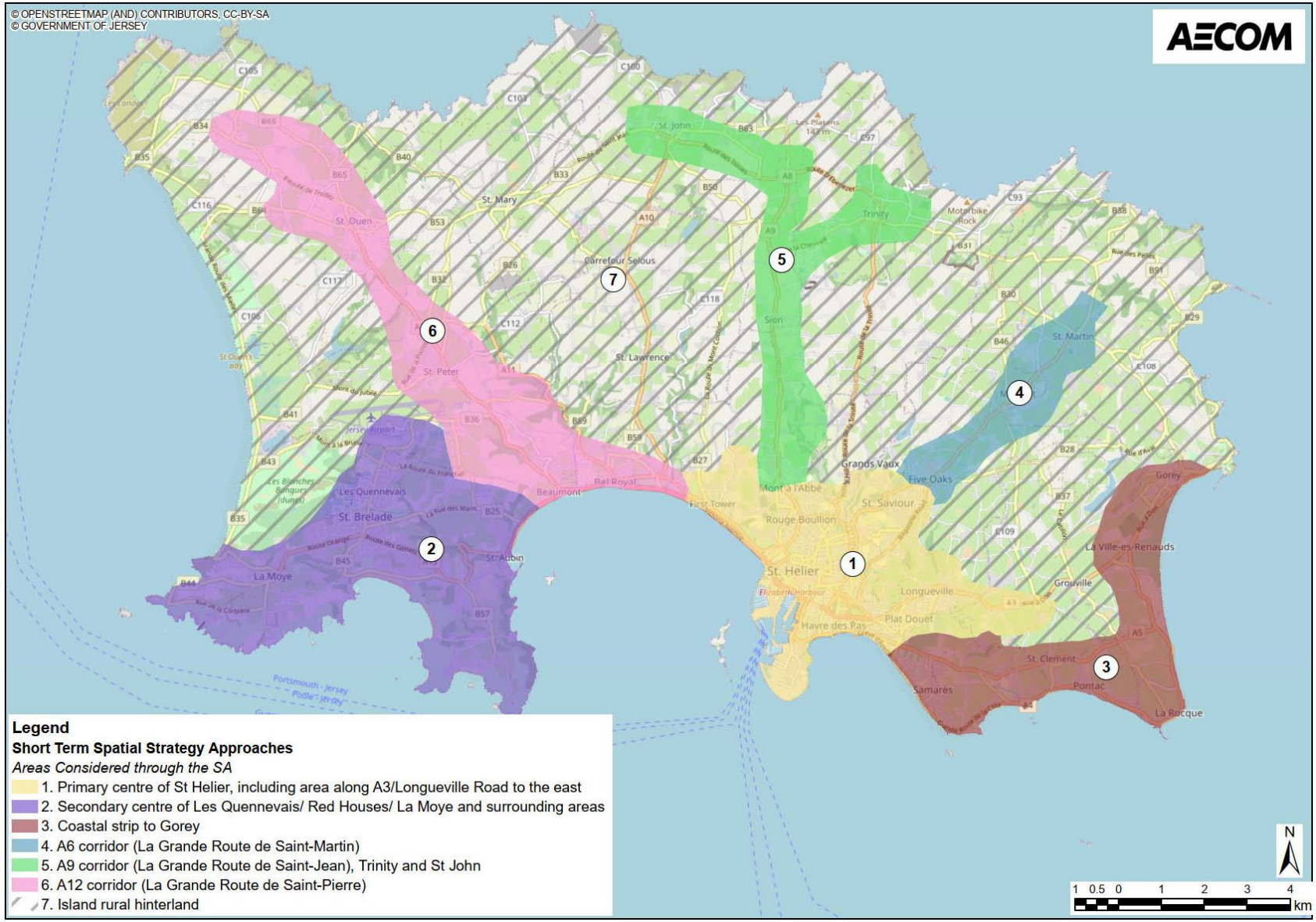


Figure 6.2: Broad areas considered

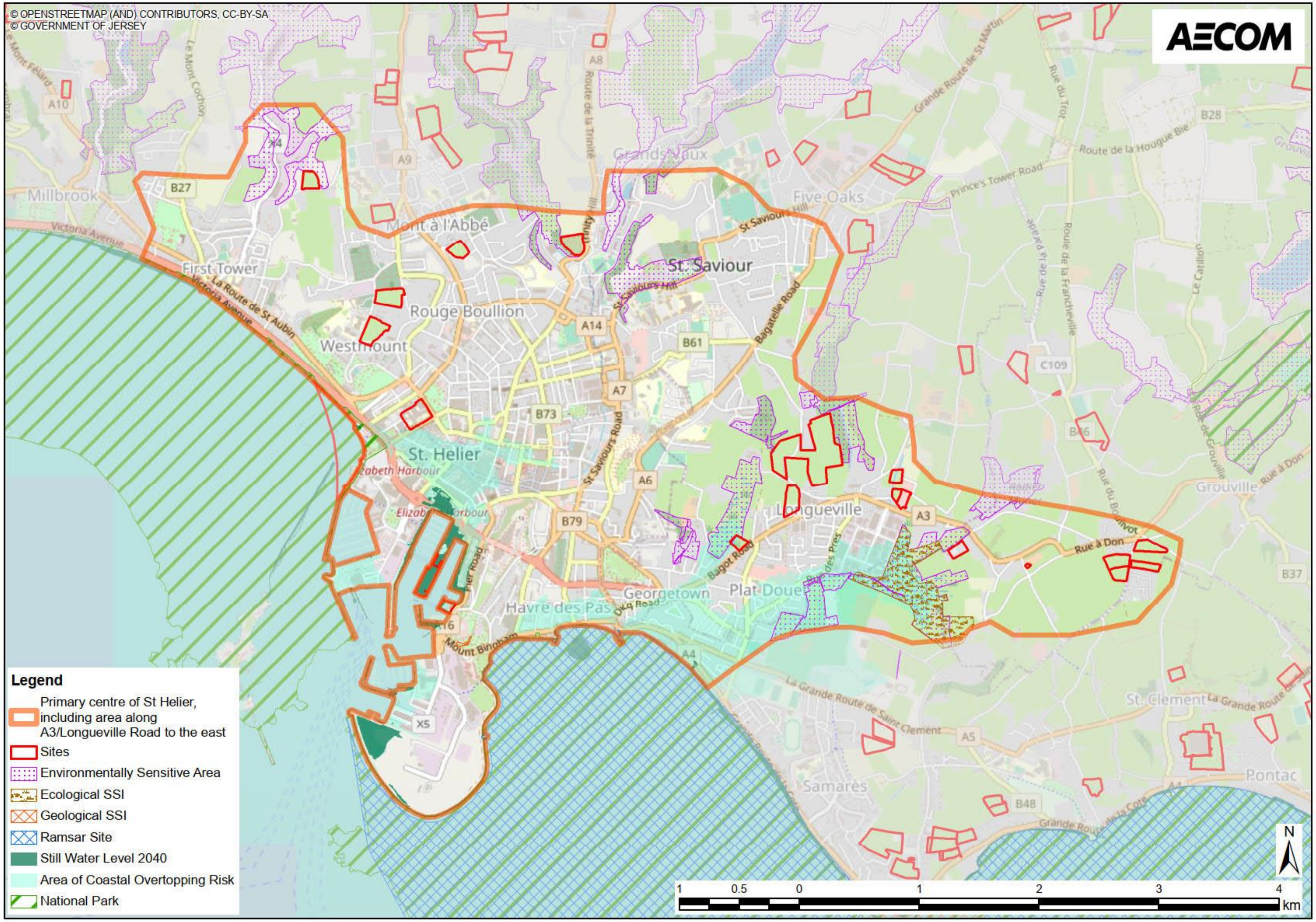
Primary centre of St Helier

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- In terms of biodiversity constraints, given the coverage of the South East Grasslands Environmentally Sensitive Area (ESA) to the east of the town, a number of the available sites to the east of St Helier are located adjacent or in close proximity to this ESA. Four of the sites located close to Longueville Road are within close proximity to the Rue des Prés Ecological SSI. One of the sites includes areas of Key Habitat (Field No. S836, Grenville Close, St. Saviour, which contains an area of wet meadow Key Habitat).
- St Helier has a rich historic environment resource, with the largest concentration of listed buildings, listed places and other heritage assets in the island. Whilst only two sites contain listed buildings (General Hospital, Gloucester Street, and La Folie Inn, Commercial Buildings), this does not preclude impacts on the wider significance of key historic environment assets. This is reflected by most of the available sites in St Helier having the potential to affect the setting of listed buildings or listed places.
- The potentially available sites at: General Hospital, Gloucester Street; Mount Martin, Old St. Johns Road; and La Folie Inn, Commercial Buildings are located within Areas of Archaeological Potential.
- A number of the available sites are key brownfield opportunity sites. Development at these locations would support the efficient use of land.
- None of the available sites have significant surface water/pluvial flood risk issues. However, the three available sites at the harbourside and waterside are at risk of flooding from coastal overtopping.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- St Helier has the widest range of services, facilities and employment opportunities in the island. As such, development at the available sites in the vicinity of the town would help reduce the need to travel to key amenities and opportunities. This will support accessibility and social inclusion.
- Given the proximity of services, facilities and amenities and public transport/active travel networks, development at the available sites would help support a limitation of emissions from transport (although it should be noted some of the available sites are less accessible by sustainable modes of transport than others).
- Development at the available sites would support the economic vitality of St Helier through supporting local markets and helping to reinforce the town's economic and community offer.
- Supporting health and wellbeing, the available sites are accessible to the health services and recreational and leisure facilities available in St Helier.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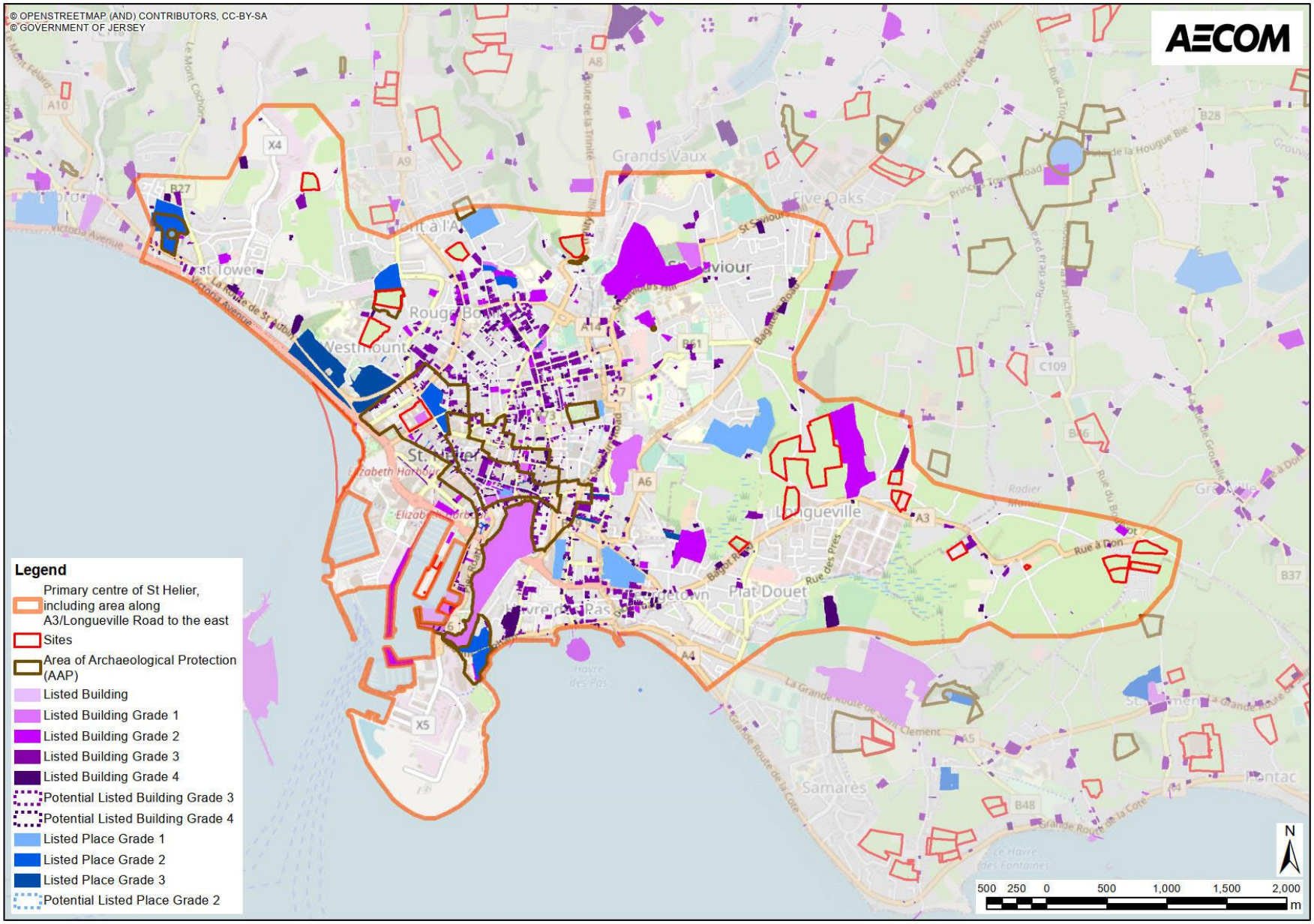
AECOM
Legend
Primary centre of St Helier, including area along A3/Longueville Road to the east
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
St. Helier
St. Saviour
Rouge Bouillon
Westmount
First Tower
Millbrook
Mont à l'Abbé
Grands Vaux
Five Oaks
Longueville
Georgetown
Plat Douet
Havre des Pas
Samarès
St. Clement
Pontac
Grouville
N
1 0.5 0 1 2 3 4
km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AECOM
Legend
Primary centre of St Helier, including area along A3/Longueville Road to the east
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
N
500 250 0 500 1,000 1,500 2,000
m

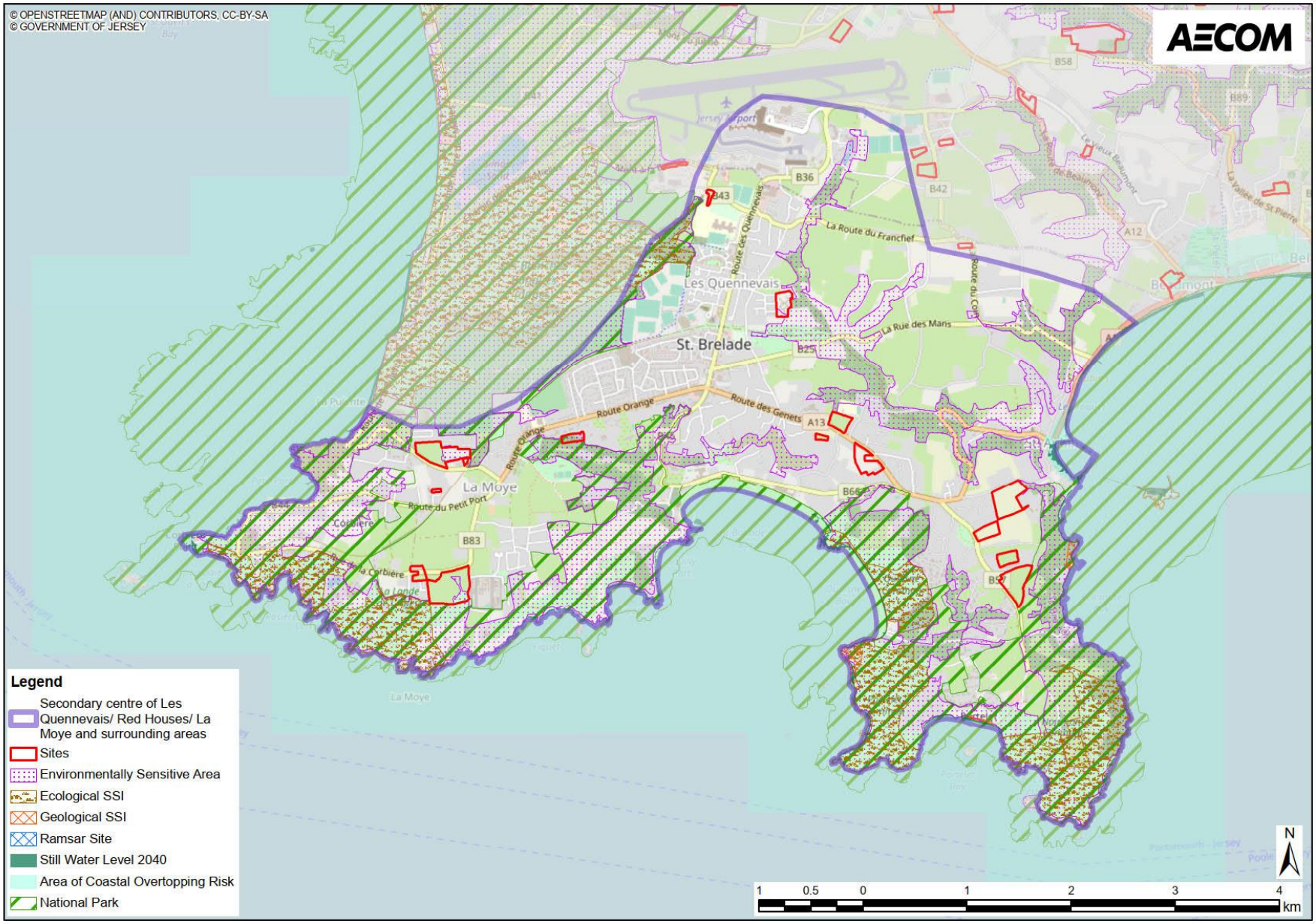
Secondary centre of Les Quennevais/ Red Houses/ La Moye and surrounding areas

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- There are a number of significant environmental constraints within this area that are likely to have an impact on the suitability of available sites and level of development. These particularly relate to landscape and biodiversity.
- ESAs, which represent the main areas of the island's key habitats, are a key constraint in this area. In this respect the available sites are in proximity to the South West Coast ESA (which adjoins the built up part of Red Houses and La Moye to the south), and the St Aubin Valley ESA and the St Ouens Bay ESA (which adjoin Les Quennevais to the east and west respectively). Two of the sites to the south are adjacent/within 100m of the La Landes Du Ouest Ecological SSI. In addition, a number of the available sites contain Key Habitats, including: Maison St. Brelade Residential Home; Field No. B206, La Petite Ruette, St. Brelade; La Petite Commune, St. Brelade; Field No. B494, La Route du Sud, St. Brelade; and Field No. B706, Le Vau Tocque.
- The recently expanded Jersey Coastal National Park, which adjoins the area to the west and south forms a significant constraint in the area. In this regard the available sites in the vicinity of La Moye and south of St Aubin are located adjacent or in close proximity to the National Park.
- The available sites are not in locations with the potential to lead to significant effects on listed buildings and listed places. Field No. B494, La Route du Sud and Field No. B698, La Route de Noirmont are within an Area of Archaeological Potential.
- Most of the available sites comprise greenfield land.
- None of the sites are at risk of coastal overtopping or have significant surface water/pluvial flood risk issues.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- Development at the available sites would facilitate development locations well served by amenities and connected by bus and cycle routes. This will support accessibility to services and facilities (including for younger people), and promote social inclusion.
- The sites are accessible to secondary education at Les Quennevais School.
- Development at the available sites, given their proximity to the secondary centre of the island, would potentially support climate change mitigation by locating development in an area well served by facilities and amenities and connected by bus and cycle routes. This will help limit emissions from transport.
- The available sites have good access to local green infrastructure networks and the coast and countryside. The area is also currently well served by health facilities. This will support health and wellbeing.
- Growth at the available sites will support the economic and community vitality of the area.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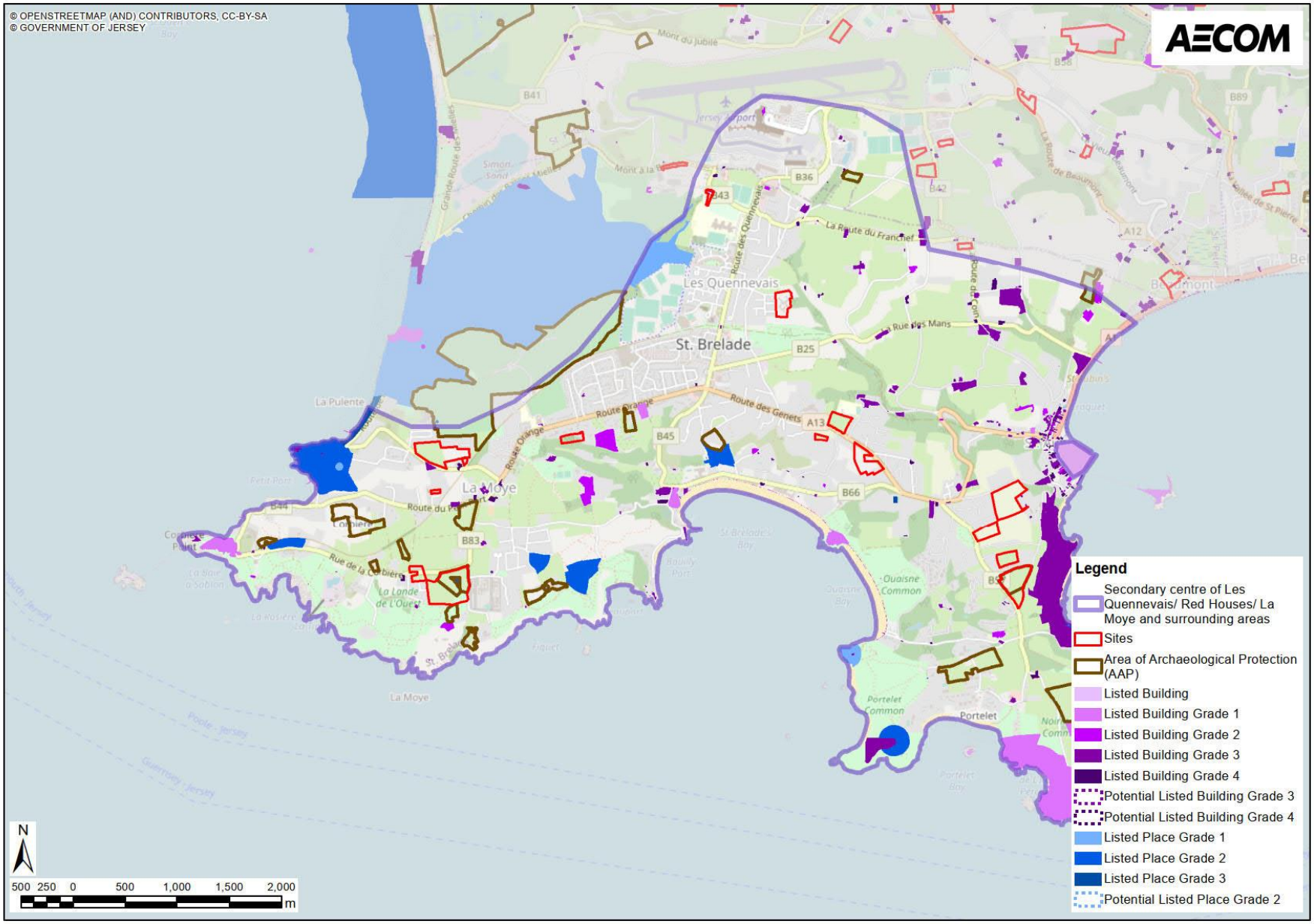
AECOM
St. Brelade
Les Quennevais
La Moye
Route Orange
Route des Genets
La Route du Francfief
La Rue des Mans
Route du Petit Port
Legend
Secondary centre of Les Quennevais/ Red Houses/ La Moye and surrounding areas
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
N
1 0.5 0 1 2 3 4
km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AECOM
Les Quennevais
St. Brelade
La Moye
Portelet
Legend
Secondary centre of Les Quennevais/ Red Houses/ La Moye and surrounding areas
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
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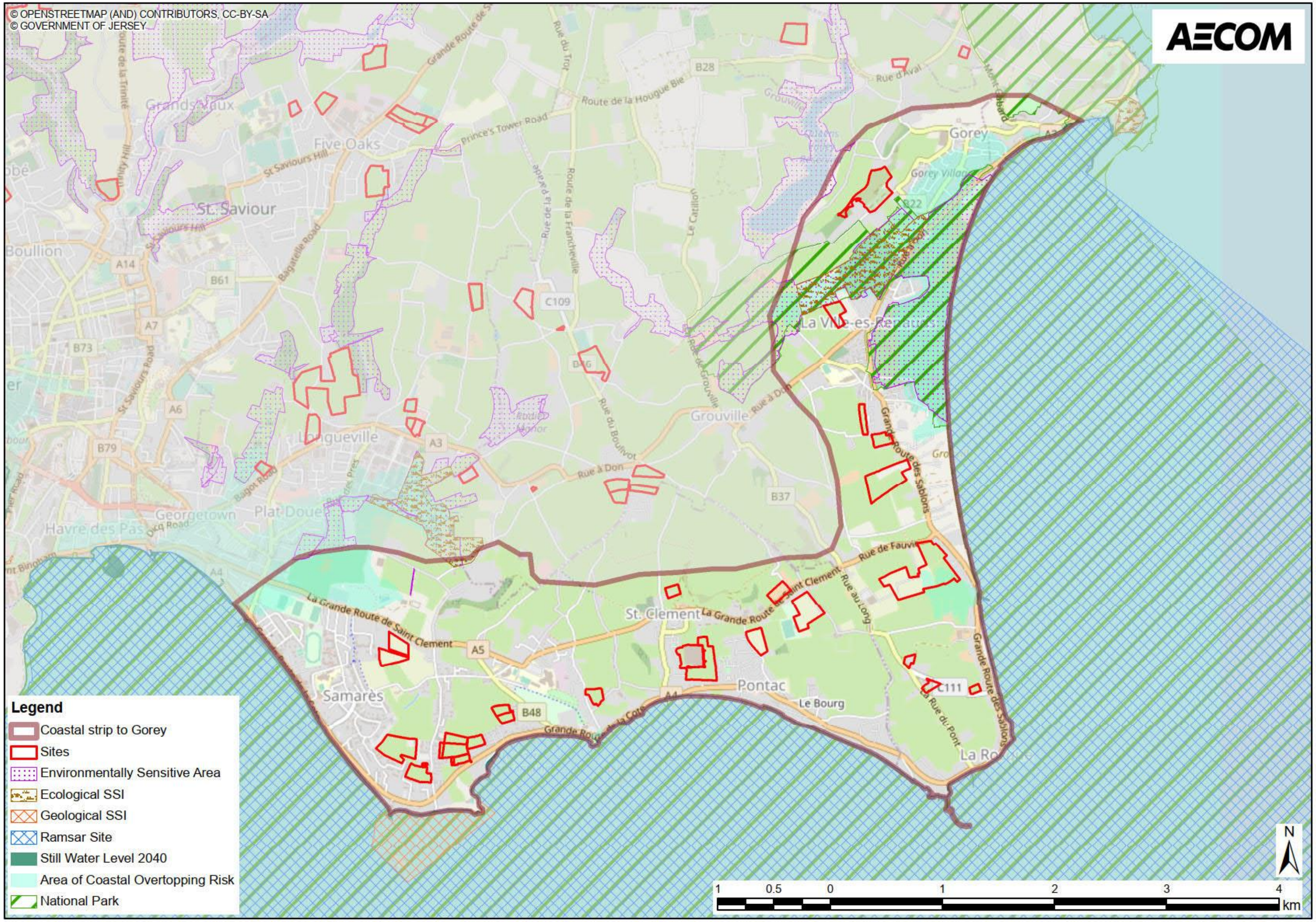
Coastal strip to Gorey

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- The available sites close to Gorey and La Ville-ès-Renauds are located in close proximity to the recently expanded Coastal National Park.
- The South East Coast of Jersey Ramsar site covers the inshore waters of the coast between St Helier to Gorey. With regards to the available sites in the area, these are largely set back from the coast, and are located to the north of the existing built up areas on the coast. As such, impacts on the Ramsar site on the coast from allocations in these areas would likely to be limited.
- Two of the available sites located between Gorey and La Ville-ès-Renauds (Field No. G153, Le Cotil Vautier and Field No. G234, Paddock End) are located adjacent and within immediate proximity to the Grouville Marsh Ecological SSI.
- Three of the sites located in the area (Field No. C127, Le Pont Close, Field No. C128, Le Pont Close and Field No. C125, La Grande Route de la Cote) comprise wet meadow Key Habitat. In addition, two sites (Field No. G403A, La Rue de la Forge, Grouville and Field No. G153, Le Cotil Vautier) contains more limited areas of Key Habitat.
- Whilst only one of the available sites in the coastal strip contains listed buildings or listed places (Homefields, La Grande Route de St. Clement), development at the sites available in the vicinity of St Clement have the potential to impact on the setting of Listed buildings and undesignated areas of historic environment interest. Field No. C52, Rue du Maupertuis, St. Clement is within an Area of Archaeological Potential.
- Most of the available sites comprise greenfield land.
- The two sites located immediately to the west of Pontac (Field No. C252, Rue de Jambart and Field No. C202, Le Grand Jardin de l'Est), one of the sites located to the west of (La Folie Inn) and one of the sites at Samarès (Field No. C86, La Rue de Samares) have surface water/pluvial flood risk issues. Part of one site (Fauvic Nurseries) is at risk of coastal overtopping.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- The available sites are accessible to the services, facilities and amenities present along the corridor.
- Development of the available sites have the potential to contribute to existing congestion issues along the coastal route. The available sites are however accessible to the public transport links serving the coastal route, including via bus services 1 and 1a. These provide good links to the services and facilities present in St Helier.
- The available sites in the south of the area are accessible to secondary education at Le Rocquier School.
- Development of the available sites will support the vitality of settlements along the coastal strip.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AECOM
Legend
Coastal strip to Gorey
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
St. Saviour
Five Oaks
Longueville
Gorey
La Ville-es-Renauds
Grouville
St. Clement
Pontac
Le Bourg
Samarès
La Grande Route de Saint Clement
Grande Route des Sablons
Rue de Fauvic
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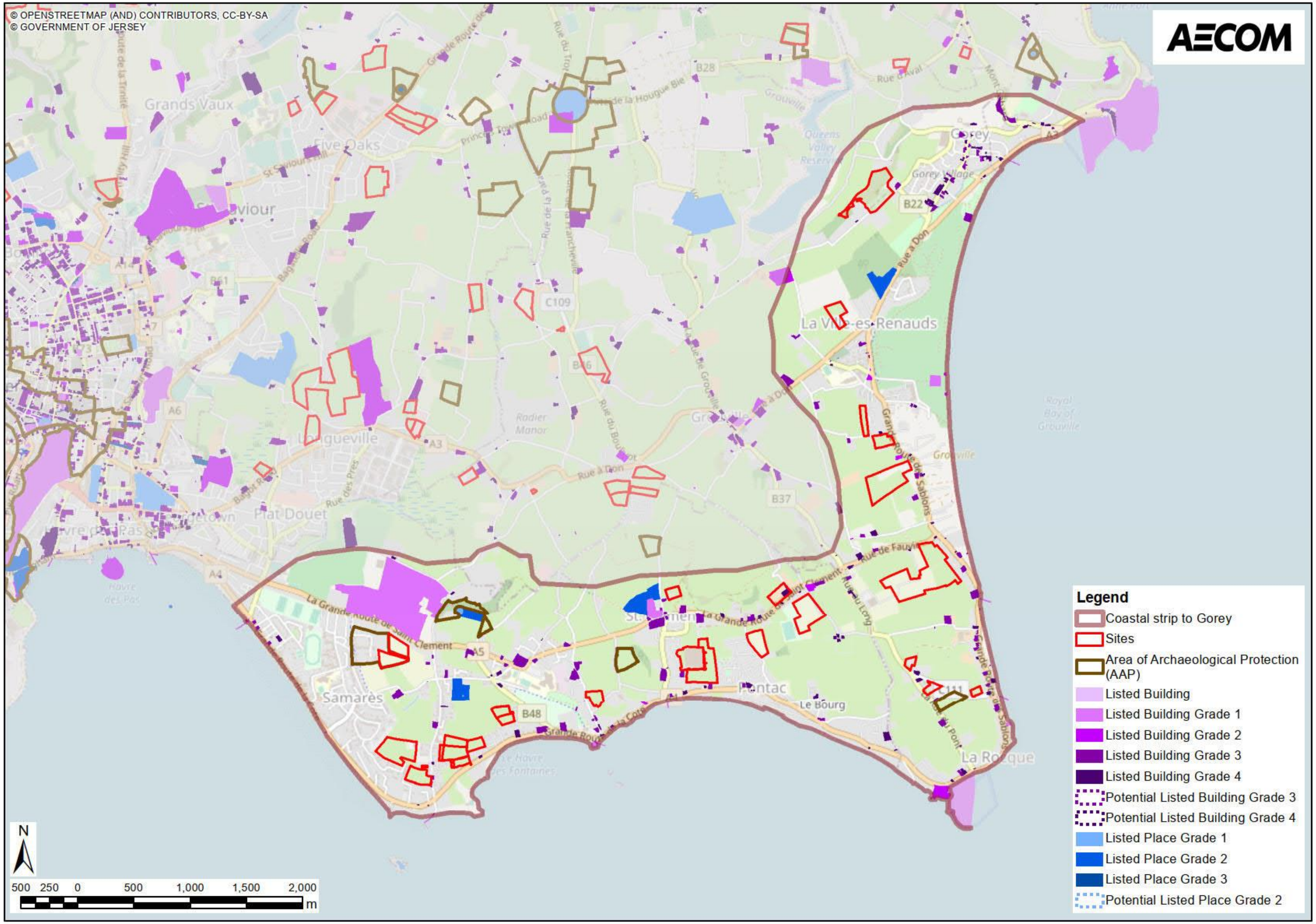
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AECOM
Legend
Coastal strip to Gorey
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
N
500 250 0 500 1,000 1,500 2,000
m
Grands Vaux
Five Oaks
Gorey
La Ville-es-Renauds
Longueville
Plat Douet
Samarès
Le Bourg
La Rocque

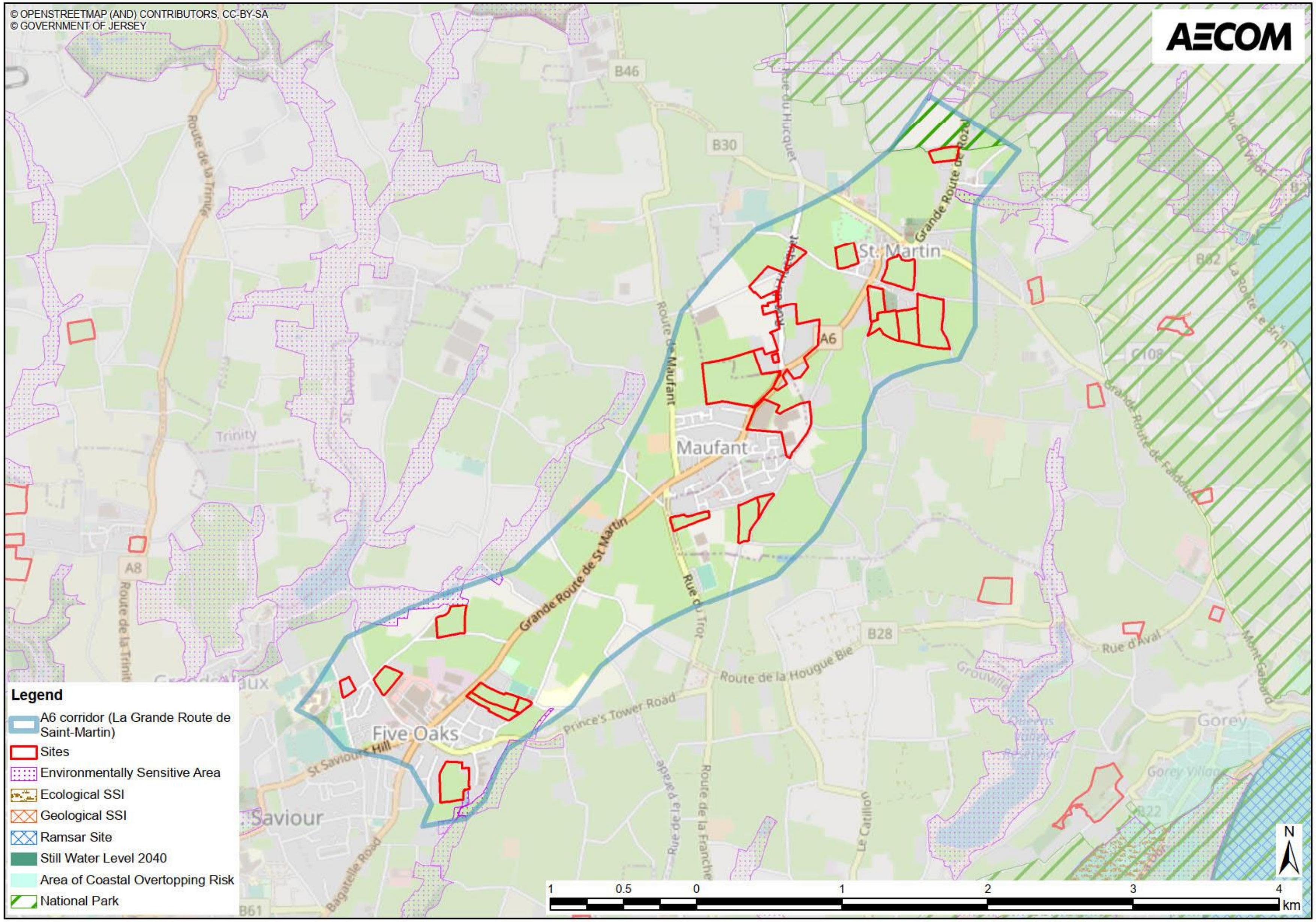
A6 corridor (La Grande Route de Saint-Martin)

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- None of the sites are significantly constrained by biodiversity considerations (including Key Habitats).
- Listed buildings are present within, adjacent or have immediate proximity to a significant number of the available sites within this corridor. The sites include: Field No. S341, Bel Air Lane, St. Saviour; Field No. MN676, La Rue de Neuilly; Field No. MN678, La Rue de Champ Colin; Le Mourin Vineries, La Chasse du Mourin; Field No. S202, La Grande Route de St. Martin; La Preference, La Rue du Huquet; Field No. MN410, La Rue des Buttes; Field No. MN391, Neville Holt Estate, St Martin; and Field No. MN323, Le Clos du Vivier, St. Martin.
- Most of the available sites comprise greenfield land.
- None of the sites are at risk of coastal overtopping or have significant surface water/pluvial flood risk issues.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- The available sites are accessible to the services, facilities and amenities present along the corridor.
- The sites are accessible to educational facilities, including secondary schooling at Grainville School and Hautlieu School.
- The sites are accessible to public transport links, including bus services 3, 13, 21 and 23. These provide links to the wide range of amenities and employment opportunities available in St Helier.
- Given the availability of facilities and public transport links, growth on the available sites would support a limitation of emissions from transport.
- Growth in the corridor has the potential to support the viability of community facilities.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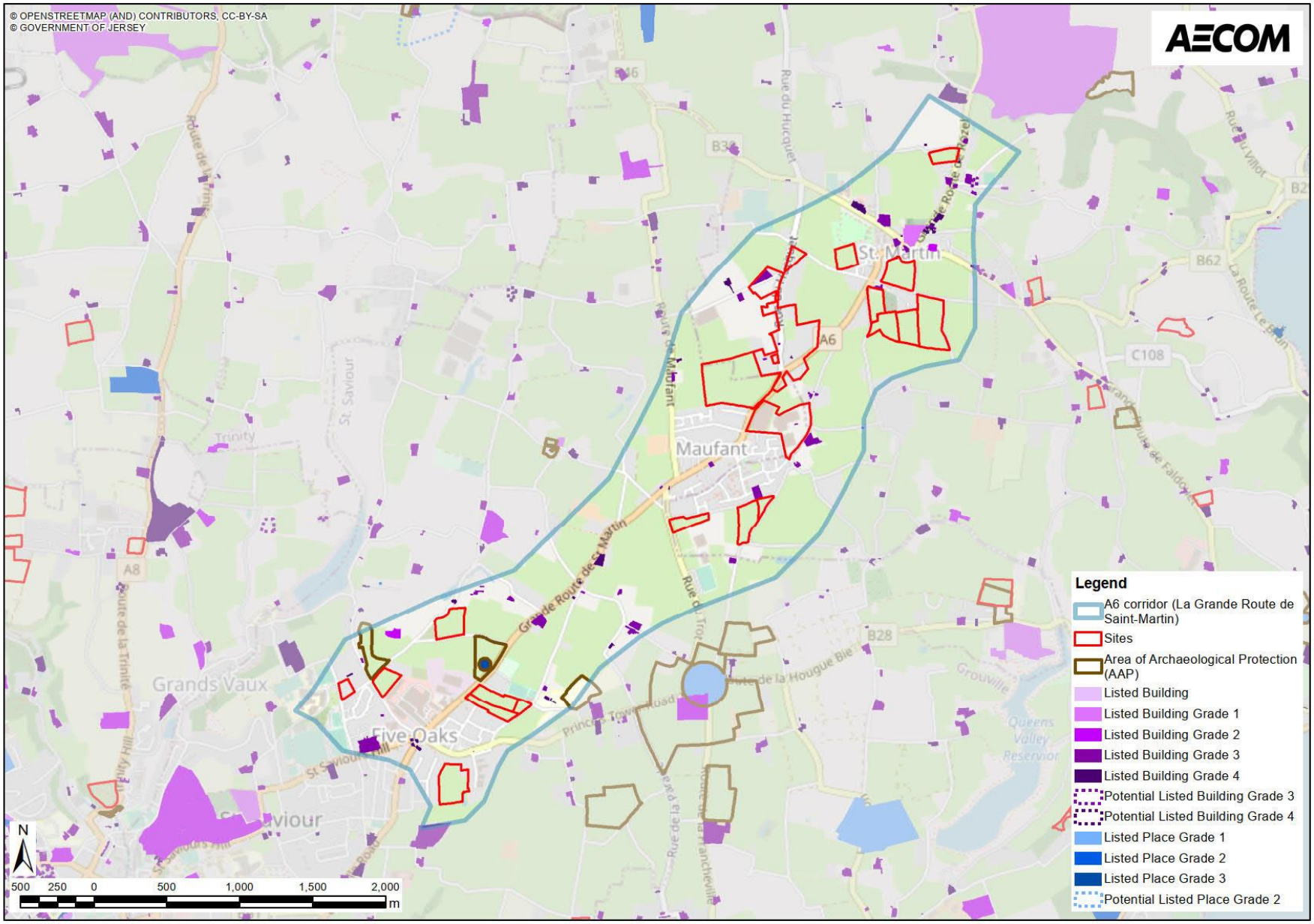
AECOM
Legend
A6 corridor (La Grande Route de Saint-Martin)
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
St Martin
Maufant
Five Oaks
Grande Route de St Martin
Trinity
Gorey
km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Legend
A6 corridor (La Grande Route de Saint-Martin)
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
N
500 250 0 500 1,000 1,500 2,000
m
St. Martin
Maufant
Five Oaks
Grands Vaux
A6
A8
B34
B62
C108
B28

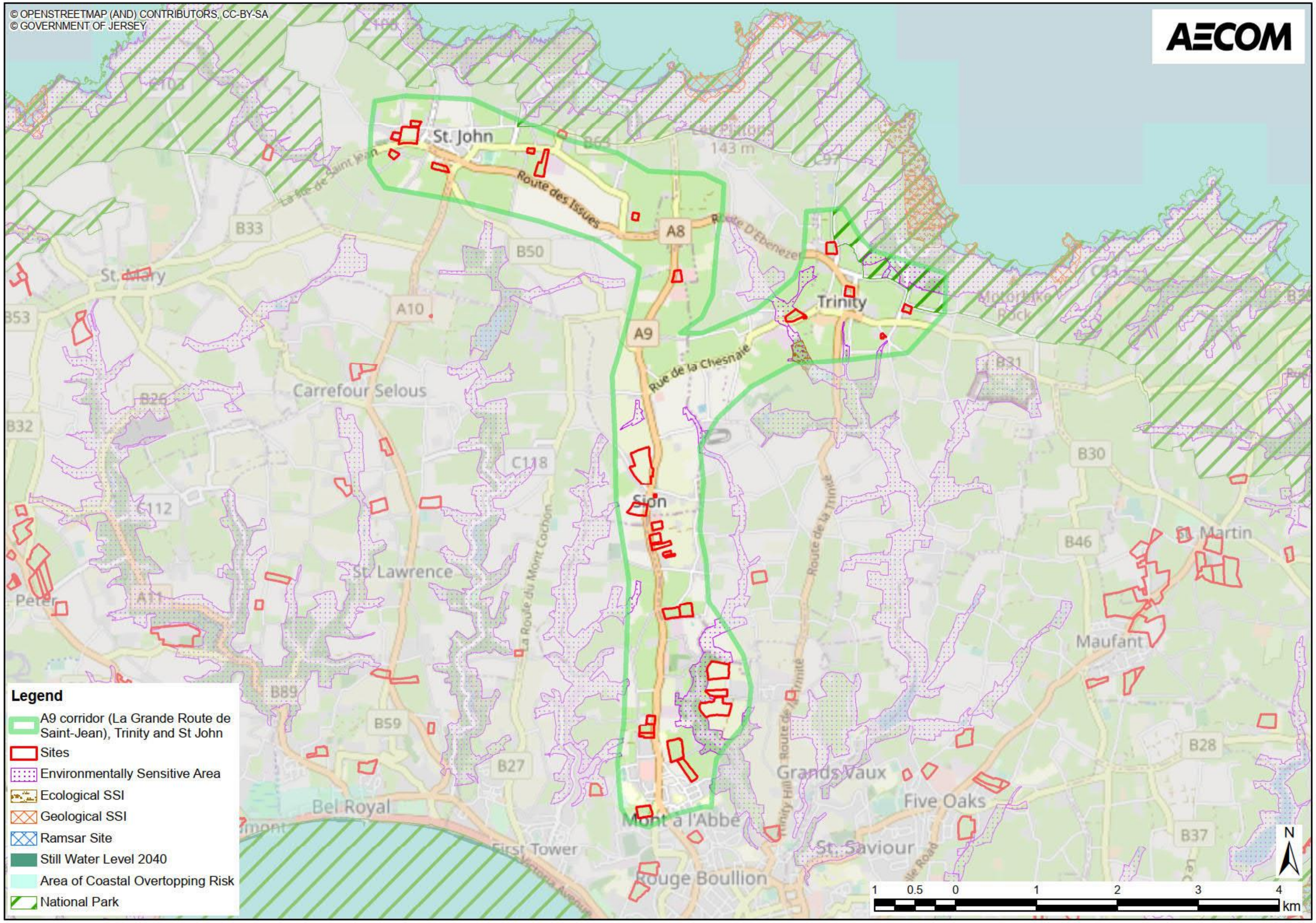
A9 corridor (La Grande Route de Saint-Jean), Trinity and St John

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- Many of the clusters of sites are adjacent to or within 400m of the Le Vallee des Vaux ESA. In addition the sites in Sion are located close to the Vallee de Bellosanne ESA and the sites in Trinity are close to Les Grands Vaux ESA.
- One site (Trinity Grange, La Rue du Presbytere, Trinity) contains Key Habitat.
- Whilst none of the available sites contain listed buildings or listed places, a number of the sites are adjacent or have immediate proximity to these designations. These include: Field No. H1219, La Grande Route de Mont a l'Abbe; Field No. H1189, N name road off La Grande Route de St. Jean; Field No. J1109, Le Clos de la Porte, St. John; Field No. J1092, La Rue des Servais, St. John; Trinity Grange, La Rue du Presbytere, Trinity; Field No. J236, La Rue du Cimetiere; Field No. J228, La Rue du Temple, St. John; Field No. J525, La Rue des Buttes, St. John; Field No. J358, La Rue des Chasses, St. John; Field No. J775, La Route des Issues; Field No. J801, La Rue de l'Eglise. In this respect, a high proportion of the available sites in St John in particular are in locations with significant historic environment sensitivity.
- The available sites located to the north of Trinity and St John are situated in close proximity to the Coastal National Park.
- Most of the available sites comprise greenfield land.
- None of the available sites are at risk of coastal overtopping or have significant surface water/pluvial flood risk issues.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- The available sites in St John’s Village and Trinity Village are in locations with accessibility to the day-to-day facilities available in these settlements.
- Development of the available sites in St John’s Village and Trinity Village would support the community vitality of the settlements and support the viability of local services and amenities.
- The available sites are accessible to public transport links, including bus services 4 and 5.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AECOM
St. John
Trinity
Carrefour Selous
Sion
St. Lawrence
St. Martin
Maufant
Grands Vaux
Five Oaks
Bel Royal
First Tower
Mont à l'Abbé
St. Saviour
Rouge Boullion
Route des Issues
Rue de la Chesnaie
A8
A9
A10
B33
B50
B30
B46
B28
B37
B59
B27
C118
Legend
A9 corridor (La Grande Route de Saint-Jean), Trinity and St John
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
N
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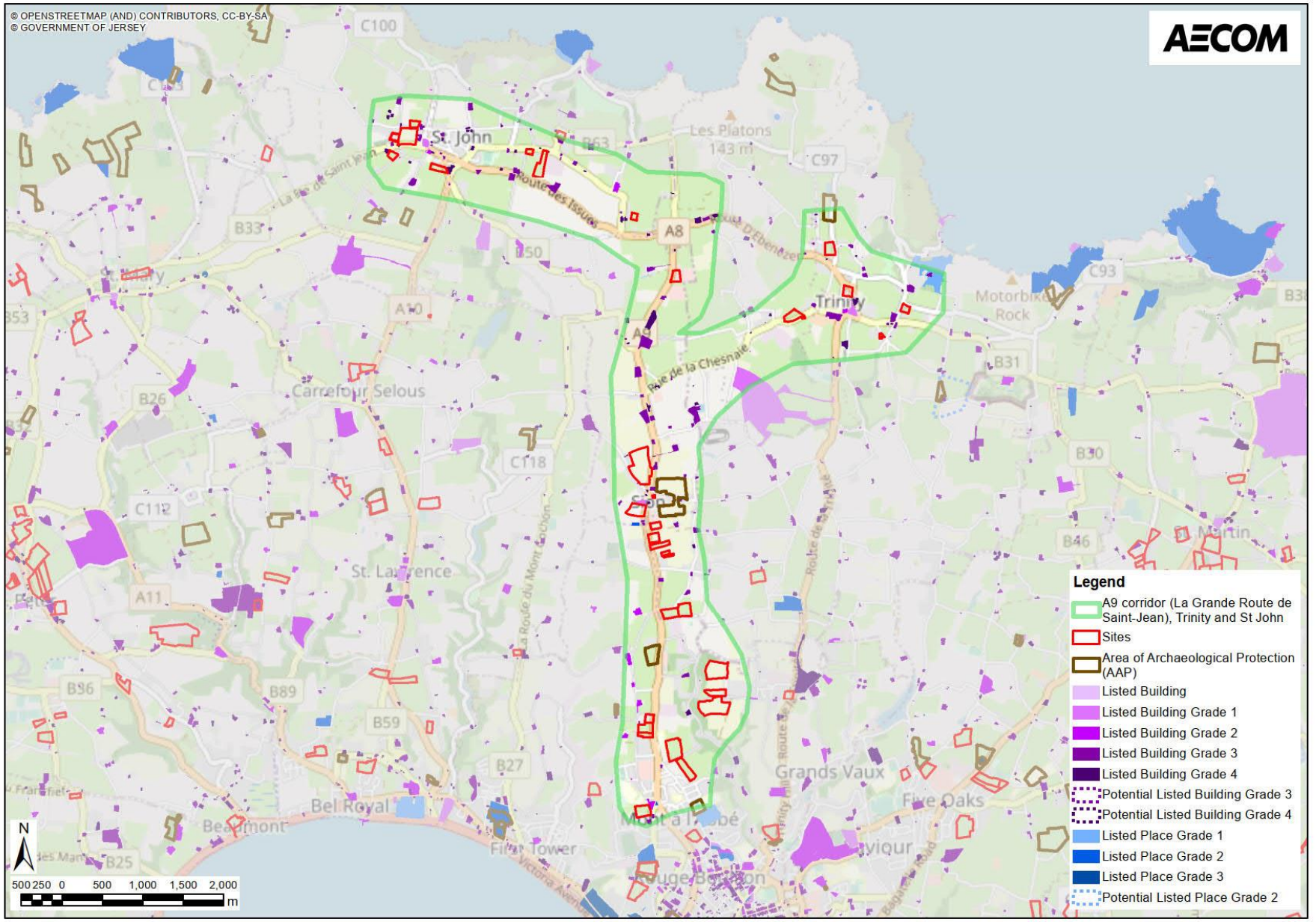
km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AECOM
St. John
Trinity
Carrefour Selous
St. Lawrence
Bel Royal
Beaumont
Grands Vaux
Five Oaks
Les Platons
143 m
Motorbike Rock
Legend
A9 corridor (La Grande Route de Saint-Jean), Trinity and St John
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
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500 250 0 500 1,000 1,500 2,000
m

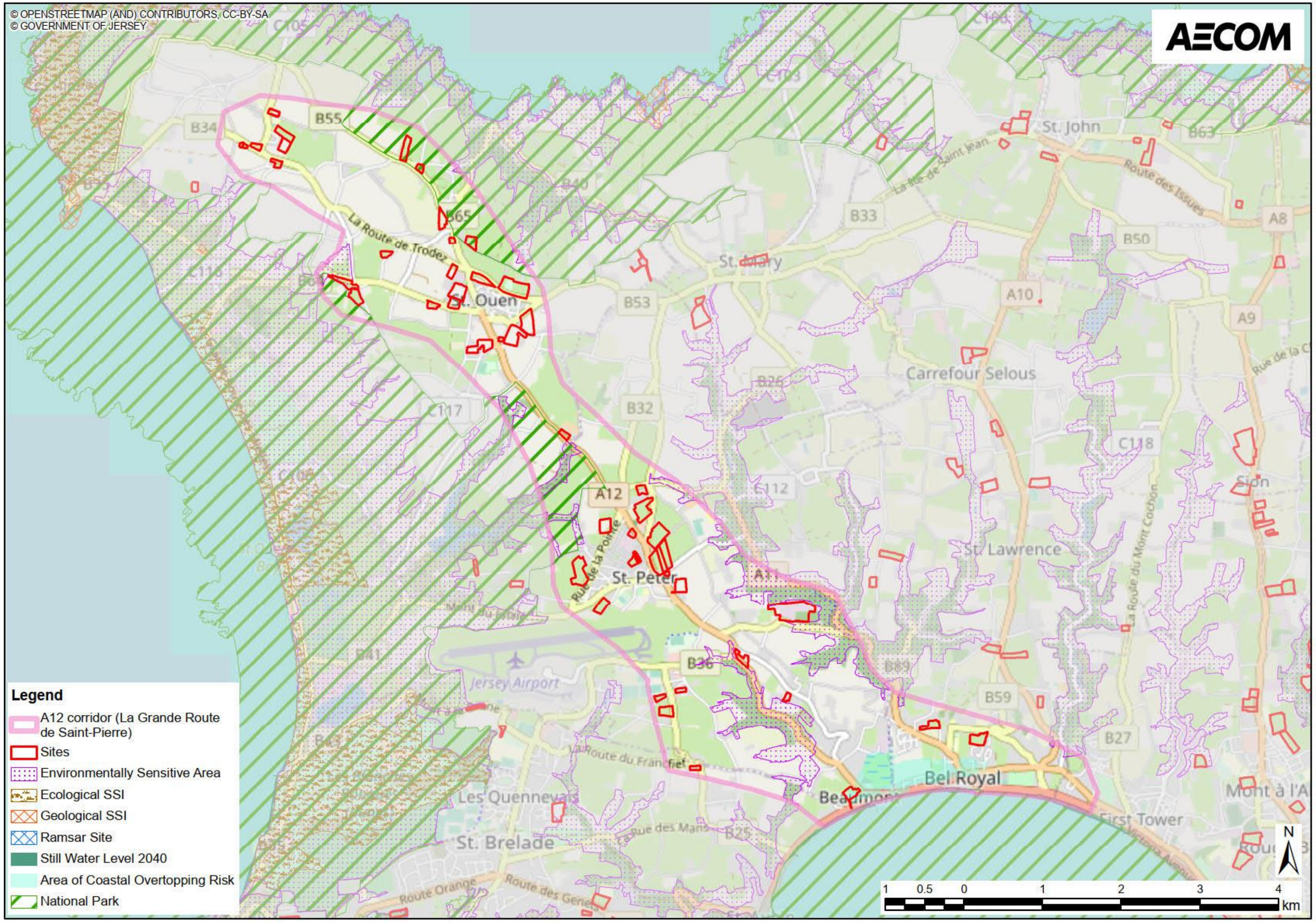
A12 corridor (La Grande Route de Saint-Pierre).

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- The available sites in the vicinity of St Ouen and those located to the west of St Peter are located in close proximity to the Coastal National Park.
- With regards to the ESAs located in the area, the site Field No. O1427, La Rue de la Fontaine, St. Ouen is within the St Ouens Bay ESA, with Field No. O1431, La Rue de la Fontaine is located adjacent to the ESA. Two of the smaller sites (Villa de L'Aube, Le Vieux Beaumont and Les Butieres, Le Vieux Beaumont) are located adjacent to the Beau Mont ESA.
- Two sites (Field No. O1427, La Rue de la Fontaine, St. Ouen and Field No. O657, La Route du Marais, St. Ouen) contain Key Habitats.
- In terms of the historic environment, many of the available sites in St Peter's Village (particularly those located east of the A12) have the potential to impact on the setting on listed buildings. In addition, a number of the sites in St Ouen are located in close proximity to listed buildings.
- Most of the available sites comprise greenfield land.
- None of the available sites are at risk of coastal overtopping, and only two sites (Field No. O1427, La Rue de la Fontaine, St. Ouen and Field No. O782, La Rue des Cosnets, St. Ouen) have surface water/pluvial flood risk issues.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- The two largest clusters of available sites in this area are in the vicinity of St Peter's Village and St Ouen. These sites are therefore accessible to the existing range of services, facilities and amenities in these settlements.
- Development of the available sites in St Peter's Village and St Ouen would support the community vitality of the settlements and support the viability of local services and amenities.
- The available sites are accessible to public transport links, including bus services 8 and 9.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St. Ouen
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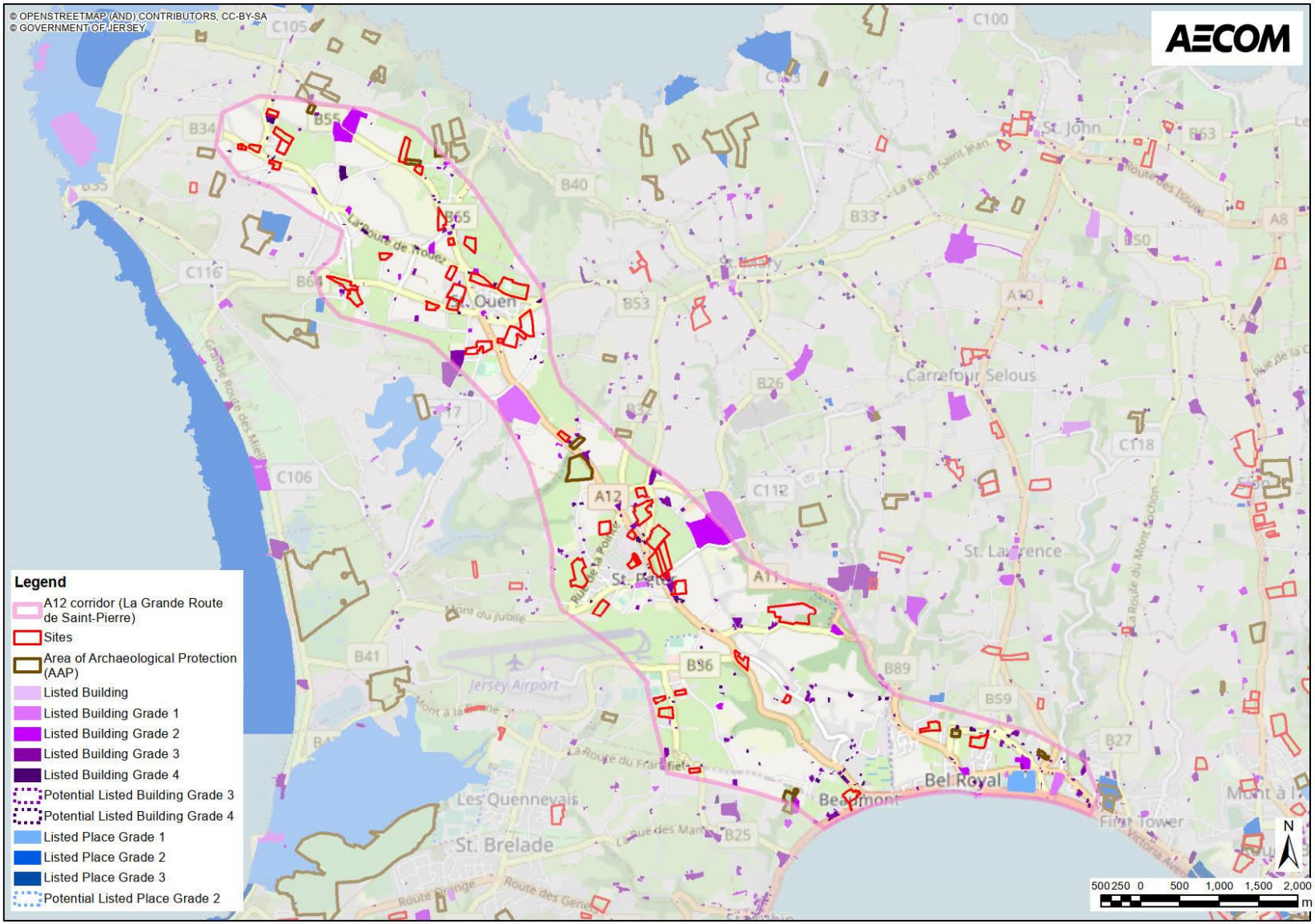
Carrefour Selous
St. Lawrence
St. Peter
Jersey Airport
Les Quennevais
St. Brelade
Bel Royal
First Tower
Legend
A12 corridor (La Grande Route de Saint-Pierre)
Sites
Environmentally Sensitive Area
Ecological SSI
Geological SSI
Ramsar Site
Still Water Level 2040
Area of Coastal Overtopping Risk
National Park
km
N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© GOVERNMENT OF JERSEY
AECOM
Legend
A12 corridor (La Grande Route de Saint-Pierre)
Sites
Area of Archaeological Protection (AAP)
Listed Building
Listed Building Grade 1
Listed Building Grade 2
Listed Building Grade 3
Listed Building Grade 4
Potential Listed Building Grade 3
Potential Listed Building Grade 4
Listed Place Grade 1
Listed Place Grade 2
Listed Place Grade 3
Potential Listed Place Grade 2
St. Ouen
St. Brelade
Jersey Airport
Les Quennevais
Beaumont
Bel Royal
Carrefour Selous
St. John
St. Lawrence
N
500 250 0 500 1,000 1,500 2,000
m

Island rural hinterland

SA Themes: Air, Land, Soil and Water Resources; Biodiversity and Geodiversity; Landscape, Townscape and Seascape; Historic Environment; Climate Change Adaptation:

- The available sites between Gorey and St Martin and those located west of St Peter are within or in close proximity to the Coastal National Park.
- Nine of the sites are located adjacent to the St. Peter's Valley Complex ESA.
- None of the available sites have Key Habitats within site boundaries.
- With regards to the historic environment, the sites located in the vicinity of St Mary's Village are within an area of historic environment sensitivity, with three of the sites located directly adjacent to listed buildings.
- Given the rural location of many of the available sites, development of these sites would often have the potential to lead to significant impacts on landscape character.
- Most of the available sites comprise greenfield land.
- None of the available sites are at risk of coastal overtopping or have significant surface water/pluvial flood risk issues.

SA Themes: Population and Community; Younger People; Health and Wellbeing; Transport; Climate Change Mitigation; and Economy

- The available sites in the rural hinterland are often at locations less accessible to services, facilities, amenities and employment opportunities.
- Many of the sites are poorly connected by public transport links (although it should be noted that the available sites in St Laurence, Carrefour Selous and St Mary's Village are accessible via bus service 7).
- Given their relative inaccessibility, development of the sites would have the potential to increase the contribution of transport to greenhouse gas emissions.
- The sites often have good access to the countryside.

7. Assessment of longer term options

Longer term growth options

7.1 In addition to short term options for growth which consider the current bridging Island Plan period, the SA has also considered the different approaches that could be taken in relation to the spatial strategy for the island over the longer term. This incorporates the ten-year plan period for the Island Plan 2025, and beyond.

7.2 Given it is not possible to determine the availability of sites over this longer-term period, a number of broad directions for future growth in the island have been identified. These are described below.

Continued intensification of St Helier

7.3 The town of St Helier has seen significant intensification over the current and previous Island Plan periods. A potential approach over the longer term is therefore to continue this approach, including through increasing densities in the town, increasing the size, scale, and height of new buildings and suburban intensification.

Urban extensions to St Helier

7.4 This approach would deliver urban extensions to St Helier in appropriate locations to the north, east and west of the town. This would deliver growth on the urban fringes of the town on open countryside.

Land reclamation and reconfiguration of land to the south of St Helier

7.5 This direction of growth would seek to deliver growth to the south of St Helier through land reclamation and the reconfiguration/repurposing of the La Collette, waterfront and harbour areas. Growth in these areas would be delivered through masterplanning exercises which would seek to deliver new communities at appropriate locations.

Densification / growth around Les Quennevais / Red Houses / La Moye

7.6 This approach would recognise the role of Les Quennevais / Red Houses / La Moye as the secondary centre for the island, as defined by the Island Plan settlement hierarchy.[7] Recognising the significant constraints present around these settlements, this direction of growth would involve a degree of intensification of uses in these areas.

Growth around the island's local centres

7.7 This would deliver growth around the island's local centres, as defined by the Island Plan settlement hierarchy.[8] This would enable the expansion of these settlements through the release of land on the edge of the settlements.

The delivery of a new settlement

7.8 This approach would deliver a new settlement in the island, or the significant expansion of an existing settlement. The settlement would be comparable in size to a local centre and would likely require an extensive process of land acquisition and the development of open countryside.

7.9 Indicative locations of these potential longer-term directions of growth are represented in the map below.

[7] GoJ (2nd November 2020) Council of Ministers Report: Island Plan Review Spatial Strategy Report
[8] Settlements defined as the island's local centres including: Bagot-Longueville; Beaumont - First Tower; Bellozane; Carrefour Selous; Five Oaks; Gorey Village; Grands Vaux; Grève D'Azette - Ville-ès-Renauds; Maufant; Sion; St Aubin; St Brelade's Bay; St John's Village; St Lawrence Church; St Martin's Village; St Mary's Village; St Ouen's Village; and Trinity Village.
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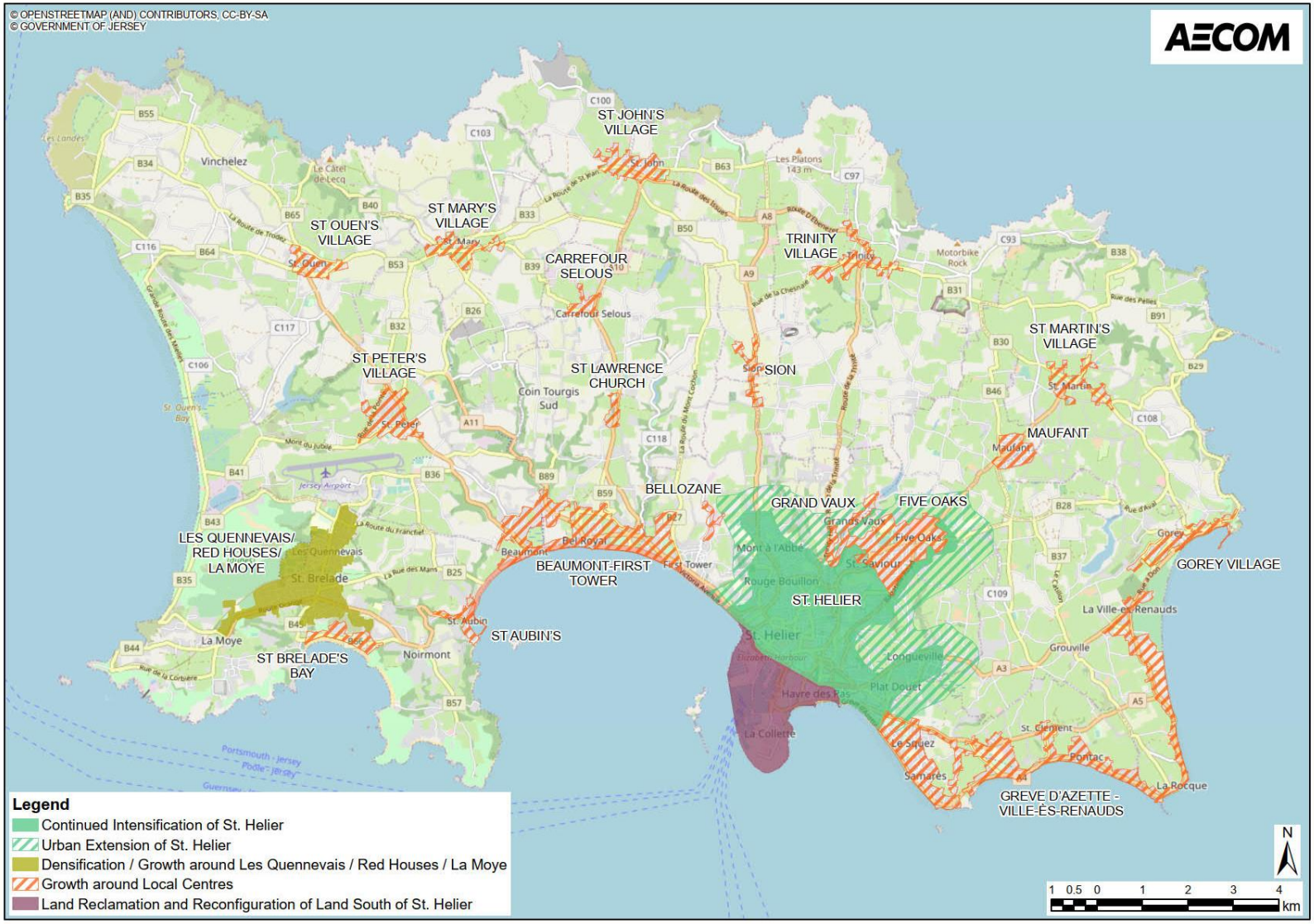

Figure 7.1: Longer term growth opportunities

7.10 The assessment presented in this chapter therefore sets out a narrative on the sustainability implications of delivering longer term development needs through these broad directions of growth. In this respect the following tables set out the relative merits of each of the directions of growth identified above against each SA Theme, in terms of constraints and opportunities.

7.11 Whilst it is recognised that these directions of growth are not mutually exclusive, and a future spatial strategy for the island is likely to reflect a combination of these approaches, it is anticipated that this commentary will, through providing a sustainability perspective on longer term spatial approaches, help support the role of the current bridging plan as a precursor to the Island Plan 2025.

Continued intensification of St Helier

Table 7.1: Longer term sustainability implications: Continued intensification of St Helier

SA Theme	Commentary
Air, Land, Soil and Water Resources	Intensification of the town centre has the potential to increase the urban population of St Helier, with increased traffic flows and associated impacts on air quality. However, given the accessibility of services, facilities and amenities in the town, and the local availability of public transport and walking/cycling networks, this approach will help reduce the need to travel and limit the need to travel by private vehicle. This will help support air quality in and around the town. Urban intensification and an increased use of previously developed land would help limit the loss of productive agricultural land elsewhere in the island. The approach also increases opportunities for the remediation of contaminated land and rejuvenation of underutilised land in St Helier, supporting the efficient use of land.
Biodiversity and Geodiversity	A focus on an intensification of St Helier would help limit the potential effects of delivering development on locations elsewhere in the island. This would help reduce adverse impacts from development on key biodiversity habitats, species and ecological networks outside of St Helier. The approach however has the potential to increase pressures on the habitats and species present in the town, as well as the town's ecological networks through the loss of urban habitats, trees and open spaces. Previously developed sites are also often important habitats for key species. An intensification of land uses in the town therefore has the potential to lead to the loss of important brownfield habitats in the town. In addition, there are a number of important biodiversity sites in the vicinity of the town which have the potential to be affected by pressures associated with intensification, including from disturbance, trampling and recreational pressures and impacts from air, noise and water quality issues. Key designations in the vicinity of the town include the Les Grands Vaux Environmentally Sensitive Area (ESA), the South East Grasslands ESA and Le Vallee des Vaux ESA, as well as, inshore, the South East Coast of Jersey Ramsar site.
Landscape, Townscape and Seascape	Intensification in the town (including potentially through the use of taller buildings) has the potential to have detrimental effects on the quality of the public realm, local distinctiveness and key viewpoints in and to/from the town. A focus on an intensification of St Helier would however help limit the potential effects on landscape/villagescape character and sensitive landscapes elsewhere in the island through reducing the scale of development in these locations.
Historic Environment	St Helier has a rich historic environment resource, with the largest concentration of listed buildings and other heritage assets in the island. Without high quality and sensitive design and layout, this longer term approach has potential to lead to significant impacts on the fabric and setting of key features and areas of cultural heritage interest. A focus on an intensification of St Helier would however help limit the potential effects of delivering development on locations elsewhere in the island. This would help reduce potential impacts on the fabric and setting of the historic environment in locations outside of St Helier.
Climate Change	With regards to climate change mitigation, an ongoing intensification of St Helier would deliver growth in the location in the island with the widest range of services and facilities, employment opportunities, public transport provision and active travel networks. In this respect this approach will help reduce the need to travel to access key amenities and limit the need to travel by private vehicle. This would support a limitation of emissions from transportation, which is significant given the sector accounts for over half of greenhouse gas emissions in the island. Higher density development also offers opportunities relating to the improved thermal

SA Theme	Commentary
	performance of buildings and delivery of schemes which will support mitigation, such as community heating schemes. In terms of climate change adaptation, longer term densification of the town has the potential to contribute to changes to microclimates caused by an increased amount of built form and a reduction in green / open spaces. This has the potential to contribute to longer term issues linked with climate change, including relating to increased hazard events associated with extreme weather events, associated impacts from flooding and surface water run off, and issues linked to the urban heat island effect. Longer term impacts depend though on the extent to which climate resilient development is delivered through densification. This includes through the provision of climate resilient design, planting and shading, and the delivery of high-quality green infrastructure networks through the densification process.
Population and Community	A focus on St Helier, which has the widest range of services, facilities and employment opportunities in the island, will help reduce the need for islanders to travel. This has the potential to support accessibility to key amenities, with benefits for social inclusion, the quality of life of islanders and the vitality of local communities in the town. Whilst the approach offers opportunities to secure the delivery of enhancements to existing community infrastructure in the town, increased densification of land may lead to pressures on existing community provision in St Helier from increases in the population of the town. Growth also has the potential to lead to impacts on the quality of the living environment, depending on the location, design and layout of development. An increased focus on St Helier may undermine the delivery of housing which meets the specific housing needs of other settlements in the island. In addition, it may reduce the ability to deliver larger family housing given the current physical constraints in the town. In this respect it is recognised that this longer-term approach would be likely delivered as part of a wider spatial strategy for the island.
Younger People	A focus on St Helier, which has the broadest range of services, facilities and employment opportunities in the island, will help enhance accessibility for younger people to key amenities and employment, leisure and recreational opportunities. The delivery of higher density development in St Helier may limit the scope for the delivery of larger family housing in the vicinity of the town, or access to garden space. This may have implications for the quality of life of younger people. This depends however on space standards applied to new development, and the delivery of (and access to) high quality green infrastructure networks, sports and recreation facilities.
Health and Wellbeing	Higher density development may lead to impacts on health and wellbeing from increased exposures to noise and air quality issues (including associated with exposure to traffic pollution), a reduction in public and private open spaces, the loss of access to, or overuse of public amenities, and issues relating to a lack of privacy and associated mental health issues. The delivery of higher density development may also limit the scope for the delivery of larger family housing with garden space. This may have implications for the health and wellbeing of those requiring more space. Impacts on health and wellbeing from densification depends however on the design, quality and space standards applied to higher density development, as well as the delivery of (and access to) high quality green infrastructure networks, sports and recreation facilities.
Transport	Intensification of uses has the potential to increase the urban population of St Helier, with increased traffic flows and congestion. The extent of impacts will however depend on the degree to which islanders are able to readily access places of employment and amenities through sustainable transport modes. In this respect, given the proximity of services and facilities, the approach has significant potential to encourage the use of sustainable modes of transport, including active travel modes and reduce the need to travel by private car. It also offers opportunities to deliver the improved organisation of public transport and active travel links to support new and existing development areas.
Economy	Continued intensification of St Helier will support the economic vitality of the town through increasing local markets and supporting an increase in the town's economic and community offer. The approach also offers the opportunity to support the vitality of particular neighbourhoods in the town, as well as the daytime and night-time economy of the town centre. The approach will also support access to employment opportunities.

Urban extensions to St Helier

Table 7.2: Longer term sustainability implications: Urban extensions to St Helier

SA Theme	Commentary
Air, Land, Soil and Water Resources	Urban extensions onto greenfield land around St Helier would be likely to lead to the loss of productive agricultural land in the vicinity of the town. In terms of air quality, impacts depend on the detailed location of a new urban extension. However urban extensions have the potential to increase traffic flows on existing routes of air quality concern.
Biodiversity and Geodiversity	Urban extensions have the potential to lead to the loss of key habitats and ecological networks on previously undeveloped land. The approach may also have the potential to lead to direct and indirect impacts on designated biodiversity and geological sites in the vicinity of the town. Key designated sites in the vicinity of the town to the north, west and east include Les Grands Vaux Environmentally Sensitive Area (ESA), the South East Grasslands ESA and Le Vallee des Vaux ESA. These comprise key habitats such as mixed woodlands and wet meadows. The delivery of larger scale urban extensions however has the potential to deliver net gains for biodiversity if development is accompanied by enhancements to habitats and ecological networks.
Landscape, Townscape and Seascape	Urban extensions to the town have the potential to affect landscape and seascape character and key views, with significant effects on the character of the urban fringe. A number of areas around the built up part of St Helier are sensitive in terms of landscape and seascape character, and the hinterland of the town comprises a range of landscape character types, including enclosed valleys, agricultural land and escarpment (Figure 3.2). The approach would be likely to lead to the increased urbanisation of the parishes of St Clement and St Saviour.
Historic Environment	Urban extensions have the potential to affect the fabric and setting of key heritage assets on the urban fringe of the town, including the numerous listed buildings and places in these locations. Urban extensions would also be likely to have significant effects on historic landscape character, depending on location. There are areas of significant archaeological potential around St Helier. However, this does not necessarily need to be a significant constraint if appropriate approaches are taken to recording, conserving and enhancing assets.
Climate Change	Urban extensions to St Helier have the potential to be situated in locations with good accessibility to services and facilities, as well as, potentially, public transport links and active travel networks. Whilst this depends on the detailed location of development, an urban extension offers opportunities to connect effectively with, or extend existing transport public transport and walking and cycling links along key route corridors.
Population and Community	Development taken forward through this approach would likely be in locations accessible to the services, facilities and employment opportunities present in the St Helier area. This will support accessibility to key amenities and employment, leisure and recreational opportunities located in the town. Greenfield development sites of larger size have the potential to deliver a broader range of housing types than many smaller urban intensification sites. For example, the approach has the potential to deliver a larger proportion of 3 bedroom family homes and older people's housing, which have been identified as key elements of housing need in Jersey. The delivery of urban extensions on larger sites also increase opportunities for the delivery of new community facilities to accompany growth. This includes through potentially sizeable developer contributions.
Younger People	Development taken forward through this approach would likely be accessible to the services, facilities and employment opportunities present in the St Helier area. This will help enhance accessibility for younger people to key amenities and employment, leisure and recreational opportunities.
Health and Wellbeing	New development areas taken forward through larger scale urban extensions to the town have the potential to deliver enhancements to multifunctional green infrastructure networks which link with existing urban areas. This will support health and wellbeing and the quality of life of islanders.
Transport	Whilst it is dependent on the detailed location of development, an urban extension approach offers opportunities to connect effectively with (or extend) existing transport public transport and active travel links. Urban extensions also offer the potential for a

SA Theme	Commentary
	masterplanning approach to be implemented which delivers high quality pedestrian and cycle networks and public transport provision.
Economy	The delivery of urban extensions to St Helier will support the economic vitality of the town through increasing local markets and supporting an increase in the town's economic and community offer.

Land reclamation and reconfiguration to the south of St Helier

Table 7.3: Longer term sustainability implications: Land reclamation and reconfiguration to the south of St Helier

SA Theme	Commentary
Air, Land, Soil and Water Resources	The La Collette area includes a number of contaminating uses, including the power station, fuel stores, recycling centre and refuse incinerator. In this respect, the reconfiguration of the area offers significant opportunities to remediate areas of land contamination. In terms of air quality, the reconfiguration of the area offers the potential to relocate polluting uses. The accessibility of the locations to St Helier town centre may help reduce the need to travel by private car, and encourage walking and cycling, limiting potential impacts from growth on air quality.
Biodiversity and Geodiversity	The marine zone and coastal area are sensitive locations for biodiversity and incorporate a range of habitats and species. The South East Coast of Jersey Ramsar site covers the inshore area south and eastwards from c.100m south of the La Collette Yacht Basin, and encompasses the areas south and east of the La Collette peninsula. Any land reclamation which takes place in these areas therefore has the potential to have significant effects on this internationally designated biodiversity site. No other biodiversity designations have the potential to be affected by growth in this area; in this respect the only other designation in the area is the small ecological / geological SSI located at South Hill, which covers a steep escarpment unlikely to be developed. Key biodiversity habitats present around the peninsula and waterfront area include intertidal sand and intertidal rock. These areas are currently susceptible to marine pollution and reclamation. In this respect a longer-term strategy of reclamation and reconfiguration in the Waterfront and La Collette area has the potential to lead to significant impacts on these habitats.
Landscape, Townscape and Seascape	Reclamation and reconfiguration of the La Collette and Waterfront areas have the potential to lead to significant changes in landscape, townscape and seascape character in the area. The coastline and inshore waters south and east from c.100m south of the La Collette Yacht Basin and westwards from the car ferry terminal comprise part of the Jersey Coastal National Park. The Waterfront and La Collette area are part of the 'St Helier & Continuous Urbanised Coast' landscape character area. In many respects the current land uses in the La Collette area (including the power station, fuel stores, recycling centre, refuse incinerator) detract from landscape and seascape character in the area. As such a reconfiguration of uses in the area has the potential to support enhancements to the quality of the public realm and landscape / townscape / seascape character. In both the Waterfront and La Collette area, impacts on landscape, townscape and seascape character depend however on the design, layout and type of development taken forward through such an approach.

SA Theme	Commentary
Historic Environment	The harbourside area and northern part of the La Collette area are of significant historic interest. This is reflected by the presence of Fort Regent and the South Hill fortifications, English and French Harbour, the North Quay Warehouses, the Victoria and Albert Piers and historic structures along Commercial Buildings, all of which are listed. In addition, South Hill Park and La Collette Gardens are designated at listed places. The southern part of La Collette and Waterfront area to the west are less sensitive in historic environment terms, with no historic environment designations present. Given the historic evolution of the area, a number of parts of the area have significant archaeological interest. This is reflected by the harbourside area and Mount Bingham/Fort Regent being covered by part of the St Helier Historic Town & Harbour Area of Archaeological Potential. The integrity of the historic environment is closely linked to historic landscape and seascape character. In this respect large scale changes to the area facilitated by land reclamation and reconfiguration have the potential to lead to significant effects on views to and from Elizabeth Castle, and also on the historic character of the harbourside area. The impact on the historic environment of longer term growth in the La Collette/Waterfront area will therefore depend on the design, layout and sensitivity of new development areas in conjunction with the fabric and setting of key features and areas of historic environment interest. As such, whilst poorly planned growth can have negative effects on the historic environment, high quality growth provides significant opportunities to support the rejuvenation and reuse of key features and areas of historic environment interest in the area, and support enhancements to their fabric and setting.
Climate Change	In terms of climate change adaptation, the La Collette and Waterfront area are vulnerable to coastal change and coastal flooding. 2040 still water levels cover significant parts of the harbour area, and large parts of the west of La Collette and the Waterfront area are at risk of coastal overlapping. However, the Shoreline Management Plan (AECOM 2019) has highlighted 'advance the line' proposals for the south-east and south-west of St Helier in response to flood risk, which would increase the resilience of these areas to rising sea levels. In terms of other types of flood risk, some parts of the area are at risk of surface water flooding, particularly the central part of La Collette and the harbour area. Whilst the area has high vulnerability to the effects of climate change, land reclamation and reconfiguration in the area provides significant opportunities for enhancing the area's resilience (and the wider area in the south of St Helier's resilience) from extreme weather events and increases in hazard events. In this respect there will be a need to deliver innovative solutions to delivering climate resilience which delivers multifunctional benefits across a range of themes. In terms of climate change mitigation, the La Collette and Waterfront areas are locations with good accessibility to the services and facilities and public transport links in St Helier town centre. This will help limit emissions from transport from reducing the need to travel, which includes by private vehicle. Reconfiguration of the area also offers significant potential to deliver development which is shaped by low carbon approaches, incorporating elements such as district heating schemes, and high quality walking and cycling and green and blue infrastructure networks.
Population and Community	Land reclamation and reconfiguration to the south of St Helier would be likely to take place in locations readily accessible to the services, facilities and employment opportunities present St Helier town centre. This will support accessibility to key amenities and employment, leisure and recreational opportunities available locally. Through proactive masterplanning approaches, the approach offers the potential to deliver high quality mixed use communities to the south of St Helier well connected to the existing offer of the town.
Younger People	Land reclamation and reconfiguration to the south of St Helier would be likely to take place in locations readily accessible to the services, facilities and employment opportunities present in St Helier town centre. This will support accessibility for younger people to key amenities and employment, leisure and recreational opportunities available locally. The approach also offers significant opportunity to enhance community offer to the south of St Helier.

SA Theme	Commentary
Health and Wellbeing	The delivery of new communities to the south of St Helier through this approach offers significant potential to deliver enhancements to multifunctional green infrastructure networks which link with the existing urban area and deliver new recreational and leisure opportunities in the area. The area is also readily accessible to key leisure and recreational facilities in the town centre and to the south of St Helier (such as Fort Regent Leisure Centre), and is linked by active travel infrastructure. This will support health and wellbeing and the quality of life of islanders.
Transport	The La Collette and Waterfront areas are locations with good accessibility to the services and facilities and public transport links in St Helier town centre. This will help reduce the need to travel and encourage the use of alternative modes of transport to the private car. The delivery of new communities to the south of St Helier through this approach also offers significant opportunities to link up with existing public transport links and facilitate enhancements to walking and cycling networks to the south of St Helier.
Economy	Reconfiguration and land reclamation in the La Collette and Waterfront areas offer significant opportunities for supporting the economic vitality of the areas and wider town. This includes through increasing the resident population of the area and delivering significant enhancements to local economic and community offer. It also opportunities for enhancing the offer of existing operations in the area, such as those associated with the port. This approach would be likely to require the relocation of existing economic activities, including associated with the existing harbour operations and operations at La Collette.

Densification / growth around Les Quennevais / Red Houses / La Moye

Table 7.4: Longer term sustainability implications: Les Quennevais / Red Houses / La Moye

SA Theme	Commentary
Air, Land, Soil and Water Resources	No significant air quality issues exist around the Les Quennevais / Red Houses / La Moye secondary centre. Given the significant physical and environmental constraints present in the area, the proposed approach would be likely to deliver the intensification of land in the area. This will support the efficient use of land and reuse of previously developed land.
Biodiversity and Geodiversity	There are significant biodiversity constraints in the area. Environmentally Sensitive Areas (ESAs), which represent the main areas of the island's key habitats are a key constraint. In this respect the South West Coast ESA adjoins the built up part of Red Houses and La Moye to the south, and the St Aubin Valley ESA and the St Ouens Bay ESA adjoin Les Quennevais to the east and west respectively. The Les Blanches Banques Ecological SSI, adjoins the western part of Les Quennevais. This comprises part of one of the ten largest single dune systems in the British Isles, and the fourth richest in flowering plants. The species-rich dune grasslands also support a very high density of insect life. In addition, the Jersey Coastal National Park adjoins the western and southern part of the built up area. Reflecting these designations, a range of important habitats are present in the area, which adjoin the existing built up area. These include dune grassland, mixed woodlands, dense scrub/gorse and wet meadow. More broadly the marine zone and coastal area are sensitive locations for biodiversity and incorporate a range of habitats and species. They are also rich in geodiversity. In this respect the biodiversity interest of the area provides a significant constraint to development, and would need to be central to decision making if significant growth is taken forward in the Les Quennevais / Red Houses / La Moye area over the longer term.

SA Theme	Commentary
Landscape, Townscape and Seascape	The Jersey Coastal National Park adjoins the western and southern part of the built up area of Les Quennevais / Red Houses / La Moye, and provides a significant constraint to development. Development in this area therefore has the potential to impact on the special qualities of the National Park, including on views to and from the National Park. Key landscape character types with the potential to be affected by growth in the area includes the Quennevais Dunes Coastal Plain located to the west of the built up area, the Western Coast and Headlands to the south and the east, and the St Brelade Valleys landscape character type. It is recognised that, given the constraints present in the area, the impact on landscape character of growth taken forward through this approach may be limited by the necessity to intensify uses in the existing built up area rather than greenfield development. However, changes to landscape and townscape character brought about by a densification of uses in the area would be likely to continue to take place.
Historic Environment	A key historic landscape in the area is Les Blanches Banques Prehistoric Landscape located to the west of (and adjoining) Les Quennevais. This has been designated as a Grade I listed place in light of its association with the presence of features associated with a neolithic ritual and settlement landscape. La Moye golf course, located adjacent to this area has also been identified as an area with a rich archaeological resource, and is identified as the La Moye Golf Club Prehistoric Landscape Area of Archaeological Potential. Whilst the built up part of the Les Quennevais / Red Houses / La Moye area does not otherwise have a significant historic environment resource, in the region of ten listed buildings are located in the vicinity of the area. The fabric and setting of these features have the potential to be affected by growth and an intensification of land uses in the area.
Climate Change	Focussing an increased level of development in the secondary centre of the island has the potential to support climate change mitigation by locating development in an area well served by facilities and amenities and connected by bus and cycle routes. This will help limit emissions from transport, which is the largest contributor to greenhouse gas emissions in the island. In terms of climate change adaptation, the current built up area at Les Quennevais / Red Houses / La Moye is not at significant risk of flooding.
Population and Community	Growth in the area would facilitate development in a location well served by amenities and connected by bus and cycle routes. This will support access to services and facilities. Housing delivery in the Les Quennevais / Red Houses / La Moye area will also support the viability of services and facilities locally and facilitate enhancements to community infrastructure. The approach has the potential to deliver housing of a range of types and tenures which could help to meet local housing needs in the secondary centre of the island.
Younger People	Growth in the area would facilitate development in a location well served by facilities and amenities and connected by bus and cycle routes. This will support access to key services and opportunities for younger people.
Health and Wellbeing	The area has good access to local green infrastructure networks and the coast and countryside. It is also currently well served by health facilities. If growth is accompanied by an accompanying expansion of health facilities and green infrastructure enhancements, this will support health and wellbeing. However, it should be noted that densification in the area has the potential to lead to the loss of open spaces through development.
Transport	The Les Quennevais / Red Houses / La Moye area is well served by bus services and cycle routes. This will encourage the use of sustainable modes of transport. Additional development in these locations has the potential contribute to existing congestion issues along key routes around St Aubin's Bay (including the A1 and A2).
Economy	Additional growth in the area will support the economic and community vitality of the secondary centre of Les Quennevais / Red Houses / La Moye.

Growth around local centres

Table 7.5: Longer term sustainability implications: Growth around local centres

SA Theme	Commentary
Air, Land, Soil and Water Resources	No significant air quality issues exist around the local centres of the island. However, given the sometimes poorly connected nature of a number of these settlements, growth under this approach has the potential to contribute cumulatively to air quality issues at key air quality hotspots in the island through encouraging car use. Given the lack of brownfield sites in these settlements, this approach to growth would be likely to take place overwhelmingly on greenfield land, which has the potential to comprise productive agricultural land. This will not support the efficient use of land.
Biodiversity and Geodiversity	Many of the local centres are within areas of ecological sensitivity, with SSIs and ESAs located close by. In addition, the coastal area and marine zone within which a number of local centres are located in sensitive locations for biodiversity and incorporate a range of habitats and species. They are also rich in geodiversity. The biodiversity/geodiversity value of the coastal strip between St Helier and Gorey is highlighted by the presence of the internationally designated South East Coast of Jersey Ramsar site.
Landscape, Townscape and Seascape	These settlements are within sensitive landscapes which comprise a range of distinctive character types. Development in the vicinities of many of these settlements would lead to the loss of the existing Green Zone, which includes those areas of the countryside which have an intact character and comprise an important range of environmental features needing a high level of protection. Some of the settlements are particularly sensitive in landscape terms. For example, Gorey, St Ouen, St Mary, St John and St Martin are all in close proximity to the Coastal National Park. In this respect additional growth in the vicinities of the local centres have the potential to have significant effects on landscape character, dependent on the detailed location, design and layout of development.
Historic Environment	The local centres of the island have a rich historic environment which may be affected by development. The historic landscape setting of these settlements may also be affected by new development areas with inappropriate location, design and layout. A number of areas around local centres have significant archaeological potential; for example, the settlements within the coastal strip are within an area with a particularly rich archaeological resource.
Climate Change	With regards to climate change mitigation, some local centres are very well connected by public transport links and walking and cycling networks, whilst others are less so. In addition, some settlements have better accessibility to services, facilities and amenities. In this respect, the impacts of growth on greenhouse gas emissions from transport therefore depends on the location of the settlement where growth is delivered and the provision of enhanced transport links/community infrastructure. With regards to climate change adaptation, the local centres with significant pluvial/surface water and/or coastal flood risk issues include: Beaumont-First Tower; Greve D'Azette – La Rocque; St Brelade's Bay, Ville es Renauds – La Rocque; St Aubin's Village; St John's Village; and Gorey Village. An approach which delivers additional development in these areas may therefore contribute to existing issues relating to flooding. It should be noted though that development in some locations may support opportunities for the delivery of additional flood protection infrastructure.
Population and Community	The settlements defined as local centres have been identified, after St Helier and Les Quennevais / Red Houses / La Moye, as those in the island which are best served by services and facilities. As such, growth in these locations have the potential to support accessibility to the (sometimes relatively limited) day-to-day facilities available in these locations. However, significant growth in these settlements has the potential to place additional pressures on existing community amenities available locally. The approach has the potential to deliver housing of a type and tenure which could help meet localised housing needs in these settlements. In addition, housing delivery in the vicinity of the local centres has the potential to support the settlements' vitality through the delivery of additional households. This may serve to support the viability of existing services and facilities. Appropriately provisioned growth also has the potential to facilitate the delivery of new and improved community provision in these locations; this however depends on the extent to which growth is accompanied by new community infrastructure.
Younger People	In terms of accessibility to key amenities and education and employment opportunities, some of the settlements defined as local centres are well connected by public transport

SA Theme	Commentary
	links and walking and cycling networks, whilst others are less so. In addition, some settlements have better accessibility to services, facilities and amenities than others. In this respect the extent to which growth supports younger people's access to services and facilities and public transport and active travel networks depends on the location of growth.
Health and Wellbeing	Whilst growth in the island's local centres has the potential to increase pressures on local health services at some locations, an increase in population may also support the viability of such services. Growth also offers opportunities to enhance local health services, and/or facilitate enhancements to multifunctional green infrastructure networks. This however depends on the extent to which growth is accompanied by new community infrastructure.
Transport	Given the key urban centres of the island (i.e. St Helier and Les Quennevais / Red Houses / La Moye) have a greater concentration and range of services and facilities, additional growth in the smaller local centres has the potential to increase the need to travel and encourage car use. In this respect additional growth in local centres has the potential to contribute to existing congestion issues along key routes in the island, including around St Aubin's Bay (incorporating the A1 and A2) and along the A4 coastal route east of St Helier. However, it should be noted that a number of the local centres in the island are very well linked by bus services and, in the case of some settlements (e.g. along St Aubin's Bay), cycle routes. Growth in these locations would therefore encourage the use of sustainable modes of transport. Whereas growth in the less well connected local centres (such as St Mary's Village) would be likely to stimulate car use.
Economy	Additional growth in the island's local centres has the potential to boost the economic and community vitality of these settlements and support the viability of local economic activities. The approach, through increasing housing supply and the delivery of rural affordable housing also has the potential to reinforce the rural economy through helping to increase the accessibility of local people to employment opportunities available locally. This in particular has the potential to support those engaged in local employment activities, such as associated with agriculture, tourism, community provision or other activities important to rural areas.

The delivery of a new settlement

Table 7.6: Longer term sustainability implications: Delivery of new settlement

SA Theme	Commentary
Air, Land, Soil and Water Resources	The delivery of a new community would likely take place on greenfield land. This has the potential to lead to the loss of significant areas of productive agricultural land. The delivery of a new community also has the potential to lead to concentrated effects on air, noise and water quality, depending on the location, design and layout of growth areas.
Biodiversity and Geodiversity	The significance of effects from a new community on habitats and species depends on the location, scale, layout and nature of development, and the implementation of green infrastructure provision which delivers ecological connectivity. Whilst the scale of a new community has the potential to lead to significant impacts on habitats and species, large scale development offers opportunity for delivering biodiversity net gain at a landscape scale.
Landscape, Townscape and Seascape	The significance of effects from a new community on landscape character depends on the location, scale, layout and nature of development, and the implementation of appropriate landscaping and green infrastructure provision. However, given the likely scale of such development, and the loss of greenfield/undeveloped land, such an approach has the potential to have significant impacts on landscape character.
Historic Environment	The significance of effects from a new community on features of cultural, built and archaeological heritage assets depends on the location, scale and nature of development. However, given the likely scale of such development, such an approach has the potential to have significant impacts on the historic environment.
Climate Change	The sustainability performance of a new community (and associated impacts on greenhouse gas emissions) depends on elements such as the integration of energy efficient design within new development and the provision of renewable energy. It also depends on the delivery of active travel and public transport provision, and the new community's location in relation to existing services and facilities and sustainable transport

SA Theme	Commentary
	networks. While it is considered that this can only be assessed on a development by development basis, it is noted that there are generally more opportunities to integrate low carbon and renewable energy into large scale development. It is therefore considered that the delivery of a new community has the potential to lead to significant positive effects in this respect. The approach also has the potential to deliver significant accesible green infrastructure provision, which will support both climate change mitigation and adaptation, as well as sustainable transport infrastructure.
Population and Community	In comparison to a more limited sized development, the delivery of a large-scale new community has the potential to provide a critical mass which enables the delivery of a wider range of services/ facilities. Such an approach also offers opportunities for delivering comprehensive multi-functional green infrastructure networks, new or enhanced sustainable transport provision, a range of housing types and employment provision. This has the potential to deliver high quality growth which meets the needs of, and supports the quality of life of islanders. There may however be significant impacts on the quality of life of those living nearby from a new community, including from issues such as an increase in traffic and congestion, visual, noise or air quality impacts, or additional pressures on existing services and amenities.
Younger People	In comparison to a more limited sized development, the delivery of a large-scale new community has the potential to provide a critical mass which enables the delivery of a wider range of services/ facilities which may benefit younger people. Such an approach also offers opportunities for delivering comprehensive multi-functional green infrastructure networks, new or enhanced sustainable transport provision, a wider range of housing types and employment provision.
Health and Wellbeing	The delivery of a larger scale new community offers opportunities for delivering multi-functional green infrastructure networks, sport and recreation offer, and, potentially, new or improved health services or leisure facilities. Such an approach also offers opportunities for the delivery of high quality active travel networks. In this respect a well-designed and located new community has the potential to deliver new infrastructure which promotes health and wellbeing.
Transport	The accessibility of a new community to existing services and facilities and sustainable transport networks depends on the location of growth areas. However, a new community offers the potential to provide a critical mass which enables the delivery of amenities which reduces the need to travel to key day-to-day facilities. The approach also offers the opportunity to deliver high quality walking and cycling networks and new and improved public transport infrastructure.
Economy	A new mixed use community offers opportunities for the provision of a range of local employment types and premises and retail opportunities alongside new development. A new community also may support the economic vitality of nearby locations.

Part 2: What are the appraisal findings at this current stage?

8. Appraisal of policy approaches presented in the consultation draft of the bridging Island Plan

Purpose of this chapter

8.1 This chapter presents appraisal findings and recommendations in relation to the consultation draft of the bridging Island Plan (April 2021).

Appraisal of earlier version of plan policies

8.2 In the lead up to the finalisation of the bridging Island Plan for consultation in early 2021, initial versions of the draft plan policies were considered by the SA team, with a view to informing the development of the draft plan. Following this appraisal, recommendations were made for enhancing the plan policies, which were then considered by plan makers during the finalisation of the policies for consultation.

8.3 The following sections therefore present an appraisal of the current version of these plan policies, as presented in the consultation draft of the bridging Island Plan.

Approach to the appraisal

8.4 The appraisal of the policies in the consultation draft of the bridging Island Plan has been presented under the ten SA Themes. In undertaking the appraisal, the policies were reviewed to determine which are likely to have a positive or negative environmental effect under each SA Theme.

8.5 Where a causal link between polices and SA Themes is established, significant effects are identified through the professional judgement of the consultants with reference to the evidence base (i.e. the scoping information). The appraisal uses the criteria in Schedule 1 of the SEA Regulations, that is:

- the probability, duration, frequency and reversibility of the effects;
- the cumulative nature of the effects;
- the transboundary nature of the effects;
- the risks to human health or the environment (for example, due to accidents);
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- the value and vulnerability of the area likely to be affected due to-
  - special natural characteristics or cultural heritage;
  - exceeded environmental quality standards or limit values; or
  - intensive land-use; and
  - the effects on areas or landscapes which have a recognised national, community or international protection status.

8.6 Where likely significant effects have been identified, these are described in summary tables for each SA Theme.

8.7 Every effort is made to predict effects accurately; however, this is inherently challenging given the island-wide strategic nature of the bridging Island Plan. The ability to predict effects accurately is also affected by the limitations of the baseline data. Because of the uncertainties involved, there is a need to exercise caution when identifying and evaluating significant effects

and ensure assumptions are explained in full.[9] In many instances it is not possible to predict significant effects, but it is possible to comment on merits (or otherwise) in more general terms.

8.8 For each SA Theme, the appraisal has been presented two-fold.

- Commentary on the proposed bridging Island Plan spatial strategy; and
- Commentary on the consultation draft version of the bridging Island Plan as a whole.

Air, Land, Soil and Water Resources

Commentary on proposed bridging Island Plan spatial strategy

8.9 The bridging Island Plan's spatial strategy's focus on the island's built-up areas, in particular on St Helier, but also within the secondary main urban centre of Les Quennevais, will help reduce the need to travel and limit the need to travel by private vehicle. This is given the accessibility of services, facilities and amenities in the St Helier and Les Quennevais area, and the local availability of public transport and walking/cycling networks. This will help support air quality through limiting emissions from transport.

8.10 In terms of land and soil resources, the spatial strategy also seeks to facilitate the reuse of previously developed land through optimising the density of development. This supports the efficient use of land, and increases opportunities for the remediation of contaminated land and the rejuvenation of underutilised land. The approach will also help limit the loss of productive agricultural land in the island, which is significant given the importance of Jersey's agricultural sector.

8.11 However, 15 of the 16 proposed site allocations for affordable housing are greenfield sites. In this respect, new development areas have the potential to result in the permanent loss of agricultural land which cannot be mitigated. The site assessments presented in Appendix 1 of the bridging Island Plan are accompanied by an assessment of quality of land and its value to agriculture.

8.12 With regards to minerals resources, the bridging Island Plan seeks to protect the island's strategic reserves and production of aggregates through the designation of three mineral safeguarding areas: Ronez Quarry, La Gigoulande Quarry, and Simon Sand and Gravel extraction site (see Policy MW1 'Provision of minerals'). Where appropriate, additional extraction will be supported at two of these locations (Ronez Quarry and La Gigoulande Quarry) but only where the benefits outweigh any environmental impacts. In this respect, all proposals for extended mineral extraction sites must be accompanied by an environmental impact assessment and a comprehensive after-use site restoration plan.

8.13 In relation to the water environment, it is important that the island's aquifers and watercourses are protected from pollution, so as to maintain a high-quality water supply and prevent harm to the natural environment and ecosystems. Recognising this, development within the water pollution safeguard area that would lead to unacceptable impacts on the aquatic environment, including surface water and groundwater quality and quantity, will not be supported (see Policy WER5).

8.14 In terms of waste, the island's solid waste service includes the management and disposal of industrial, construction and demolition materials, commercial and household refuse, incinerator ash and agricultural, clinical and hazardous waste. The GoJ's landfill facility at La Collette is currently the only licensed terrestrial inert waste disposal site in the island. The facility is reaching the end of its operational life. In order to optimise the recovery and recycling of materials and to minimise the volume of material being disposed of at La Collette during the plan period, the bridging Island Plan designates a small number of inert waste management or disposal sites which will be safeguarded through the policy regime from any new developments

[9] As stated by UK Government Guidance (The Plan Making Manual, see http://www.pas.gov.uk/pas/core/page.do?pageId=156210): *"Ultimately, the significance of an effect is a matter of judgment and should require no more than a clear and reasonable justification."*

that may adversely affect their operation or capacity. Specifically, Policy MW2 safeguards the following locations:

- La Collette (management and disposal);
- La Gigoulande Quarry (management and disposal);
- Broadlands, Le Mont Fallu, St Peter (management only); and
- Barette Plant Hire, La Route de Beaumont, St Peter (management only).

8.15 Additionally, the bridging Island Plan supports the establishment of new (or the extension of) existing waste management sites, where a proven need has been identified and where this can be achieved without unacceptable impact upon the environment (Policy MW3 'New, extended and existing waste management sites').

Commentary on the consultation version of the bridging Island Plan as a whole

8.16 Air quality in Jersey is generally good, due to the location of the island and the prevailing weather conditions, together with the structure of the local economy and the limited amount of industrial and manufacturing processes that take place in the island. The current air quality monitoring programme[10] demonstrates that pollution levels in Jersey are below thresholds of concern to human health and the environment[11]. In this respect, Policy ME4 'Air quality and increased emissions associated with new development and activities' states that where a proposed development has the potential to lead to adverse impacts on air quality, an assessment must be undertaken and submitted alongside the proposal. In cases where it is understood that some air quality impacts will arise, the policy also stipulates that development will only be supported when suitable mitigation and offsetting measures are in place.

8.17 It is expected that the bridging Island Plan will positively promote the most efficient and sustainable use of land. In this regard, the spatial strategy for the bridging Island Plan seeks to deliver development in the most accessible locations in the island, primarily within proximity to the primary, secondary and local centres (later discussed under the 'Population and Community' SA theme). This will support the limitation of negative effects on the open countryside. The bridging Island Plan also takes a precautionary approach to the protection of agricultural land by seeking to resist its loss (see Policy ERE1 'Protection of agricultural land'). Specifically, agricultural land will be protected from loss and its alternative use will only be supported where it can be justified relative to the nature of the proposed use and the value of the land to agriculture. Sustaining a viable rural economy will, however, involve diversification with implications for the use of some agricultural land; as may other initiatives that seek to provide for specific community needs. This is further explored within the 'Economy' SA theme.

8.18 In relation to the water environment, it is important that the island's aquifers and watercourses are protected from pollution, so as to maintain a high-quality water supply and prevent harm to the natural environment and ecosystems (see Policy WER5 'Water pollution safeguard area'). In relation to water consumption, the bridging Island Plan seeks to promote water efficiency in new housing (see Policy UI3 'Supply and use of water' and Policy WER7 'Foul sewerage'). Supporting the protection and sustainable use of water resources, the bridging Island Plan proposes to develop a water resource management strategy for Jersey alongside a catchment flood management plan to inform future planning within the subsequent Island Plan. The implementation of these proposals has the potential to deliver multiple environmental benefits such as improvements to land management, adopting sustainable practices that deliver a demonstrable reduction in water pollution, enhancing ecosystem services, and reducing impacts of surface water runoff on water and soil quality.

8.19 There is also a strong focus through bridging Island Plan policies in delivering sustainable construction and design to minimise pollution. For example, the following policies state that

[10] Government of Jersey (2019): 'Air Quality Monitoring', [online] available to access via: https://www.gov.je/Environment/ProtectingEnvironment/Air/Pages/AirQuality.aspx
[11] States of Jersey (2013): 'Jersey Air Quality Strategy', [online] available to access via: https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/ID%20Air%20Quality%20Strategy%202012%2020130604%20JB.pdf

new development shall minimise the use of resources and strive for high environmental standards in terms of several factors, including: design and construction, energy and water efficiency, the protection of ground and surface water quality, use of sustainable materials and minimisation of waste. Key policies in this regard include Policy SP3 'Placemaking', Policy GD5 'Demolition and replacement of buildings', Policy GD6 'Design quality', Policy ME3 'BREEAM rating for new larger-scale non-residential buildings', Policy H8 'Housing in the countryside', Policy WER1 'Waste minimisation' and Policy WER6 'Surface water drainage'.

8.20 The minerals themed policies of the bridging Island Plan are concerned with primary aggregates used in construction, including stone, principally in the form of crushed rock, sand and gravel. These are the only minerals which are actively worked in the island. As outlined within the commentary on the spatial strategy (presented above), the steady and adequate supply of minerals over the plan period will be delivered through existing and new sites (in compliance with relevant bridging Island Plan policies). Whilst local sand extraction will likely cease during plan period, to be then be replaced by local secondary aggregates and some importation, this should proactively and positively protect the integrity of the island's mineral resources.

8.21 More broadly, the provision of enhanced green infrastructure is recognised as an important element of the solution to addressing air pollution in built up areas, including through removing different types of air pollution (i.e. particulate matter, sulphur dioxide, nitrogen dioxide and ozone). Biodiversity net gain, where possible, can also deliver air quality benefits at the microscale. For example, the introduction of green walls and roofs trap pollutants which in turn deliver cleaner air. Key policies in this respect include Policy NE1 'Protection and improvement of biodiversity and geodiversity', Policy HE2 'Green infrastructure and networks', Policy ME5 'Carbon sequestration schemes, Policy PL5 'Countryside, coast and marine environment' and Policy SP5 'Protecting and improving the natural environment'. While these policies do not specifically seek to address land, soil and water resources, the policies will indirectly help promote and protect these resources, including the promotion of high-quality green networks and the protection and enhancement of key landscape features. This will help support the capacity of the landscape and townscape to regulate air, soil and water quality.

Table 8.1: Likely significant effects, Land, Soil and Water Resources

Likely significant effect	*Effect dimensions*	*Recommendations*
Loss of greenfield land.	Direct, long-term, permanent and negative.	None proposed.
Efficient use of land through intensification of uses, increased housing densities and a focus on the use of previously developed land where possible.	Direct, long-term, and positive.	None proposed.
Reduced per capita water consumption through improved water efficiency in new developments.	Direct, long-term and positive.	None proposed.
Safeguarding the integrity and preventing the sterilization of mineral resources.	Direct, long-term and positive.	None proposed.
Support for local air quality from encouragement of sustainable transport use, green infrastructure enhancements and diversification of town and local centre uses.	In-combination, direct and indirect, medium and long-term, permanent, and positive.	None proposed.

Biodiversity and Geodiversity

Commentary on proposed bridging Island Plan spatial strategy

8.23 The bridging Island Plan's spatial strategy's focus on the island's built-up areas, particularly within St Helier and Les Quennevais, will help limit the potential effects of delivering development on locations elsewhere in the island. This will help reduce adverse impacts from development on key biodiversity habitats, species and ecological networks outside of these two built up areas. The approach however has the potential to increase pressures on the habitats and species present in St Helier and Les Quennevais, as well as the areas' ecological networks through the loss of habitats, trees and open spaces. This may be particularly relevant in Les Quennevais, which is situated in an area of significant biodiversity sensitivity, with numerous biodiversity designations and Key Habitats. Previously developed sites also provide habitats for key species.

8.24 Jersey's key sites and areas of biodiversity and geodiversity value are identified through a variety of different defined terrestrial and marine areas and designations, each of which has different regulatory or management objectives and requirements. These include, Ramsar Sites, Marine Protected Areas, Ecological SSIs and Geological SSIs.

8.25 With reference to the marine designations, none of the 16 proposed site allocations are within or adjacent to the South East Coast of Jersey Ramsar Site. Most of the sites are over 2.5km from the Ramsar Site. The nearest site 'Field No. G392A, Le Close des Fonds, Grouville' (IP-175859990) is approximately 335m to the west of the Ramsar Site.

8.26 Regarding the terrestrial designations, most of the sites are between 1km and 3km distance from the nearest Ecological SSI or Geological SSI. However, 'Field S729, former Longueville Nurseries' is approximately 100m from Rue des Prés Ecological SSI.

8.27 Additional areas of locally important biodiversity and geodiversity value in the island include Environmentally Sensitive Areas and Key Habitats (as mentioned above). Whilst most of the sites are not within or adjacent to these locally important areas, allocations at the following locations have the potential to directly or indirectly impact such areas:

- 'Field No. S530, Princes Tower Road, St. Saviour' (IP-177734520) partly overlaps with the South East Grasslands Environmentally Sensitive Area and the following Key Habitats: marsh and freshwater; and wet meadow.
- 'Field No. P632, La Route du Manoir, St. Peter' (IP-175190706) is within 50m of areas of marsh and freshwater Key Habitat.
- The following four sites are within 20m of areas of mixed woodland Key Habitat: 'Field No. H1189, N name road off La Grande Route de St. Jean, St. Helier' (IP-175468055); 'Le Rond Collas, Field No. MN390, La Rue de la Haye, St. Martin' (IP-178713047); 'Field No. H1186A, La Grande Route de St. Jean, St. Helier' (IP-175184359); and 'Longueville Garden Centre, New York Lane, St. Saviour, JE2 7SU' (IP-178261467).

8.28 Development at any of these sites should seek to retain and enhance habitats on site and may require mitigation (such as buffer zones) to minimise the potential for negative effects.

8.29 All of the allocations taken forward through the bridging Island Plan have the potential to take place in locations where protected species are present. However, on many sites, there are also significant opportunities for on-site biodiversity improvements to support enhancements to local and sub-regional ecological networks. These issues have been considered through the appraisal of the bridging Island Plan policies, below.

Commentary on the consultation version of the bridging Island Plan as a whole

8.30 Whilst no significant negative effects on biodiversity assets from the spatial strategy can be readily identified, there will be a need for potential effects on biodiversity linked to the allocations associated with the spatial strategy to be avoided and mitigated. In this context, the bridging Island Plan sets out provisions which will 1) help limit potential effects from new development on features and areas of biodiversity interest and 2) support enhancements.

8.31 For example, Policy SP5 'Protecting and improving the natural environment' and Policy NE1 'Protection and improvement of biodiversity and geodiversity' highlights that proposals which are likely to have a significant impact on designated sites for biodiversity or geodiversity will only be permitted in exceptional circumstances. Specifically, the island's natural environment will be material in the determination of planning applications. Ecological networks in the island are further supported by the provisions of Policy SP3 'Placemaking', which outlines that all development proposals will be assessed in relation to enhancing and optimising the provision of green infrastructure within the landscape and delivering high-quality designs which provides biodiversity enhancements. The provisions of these policies should therefore positively contribute to protecting the integrity and quality of the island's ecological and geological assets.

8.32 Jersey's key identified sites and areas of biodiversity and geodiversity value are important 'nodes' in the green network. The bridging Island Plan also highlights that the coverage of existing protected sites alone is, however, unlikely to be sufficient to conserve Jersey's biodiversity. In this respect, enhancing the green network to provide greater connectivity between these protected areas is recognised through Policy SP5, Policy NE2 'Green infrastructure and networks', Policy NE3 'Landscape and seascape character', Policy GD8 'Green backdrop zone' and the proposal to implement a green infrastructure and network strategy for the island.

8.33 There is also a need to ensure that the impact of development on areas of high marine biodiversity and seascape value is given significant weight in the decision-making process. In this respect, development proposals located in the marine and coastal environments will not generally be supported except where it can be demonstrated to be essential and generally accord with other policies within the bridging Island Plan (see Policy NE1 and Policy NE3 'Landscape and seascape character').

8.34 Biodiversity net gain is an approach to development that aims to leave the natural environment in a measurably better state than beforehand[12]. In this respect, Policy NE1 and the biodiversity net gain proposal within the bridging Island Plan aims to ensure that new development areas in Jersey contribute positively to environmental growth, protect irreplaceable habitats and the integrity of ecosystems, restore natural processes and strengthen ecological networks. The bridging Island Plan acknowledges that further work is needed in Jersey to define the biodiversity net gain concept and to consider how it would operate, including its inter-relationship with existing designations. This work is anticipated to inform the next iteration of the Island Plan.

8.35 More broadly, the policy framework is considered to take an active and positive approach to maintaining and enhancing ecological networks in the island. In this respect, Policy ERE1 'Protection of agricultural land' and Policy H8 'Housing in the countryside' aims to minimise development within the more rural areas of the island, indirectly safeguarding natural assets in these locations. Additionally, Policy CI6 'Provision and enhancement of open space' and Policy WER6 'Surface water drainage' is likely to enhance the island's environmental assets through the delivery of new natural features and green spaces.

8.36 Overall, the bridging Island Plan sets out a range of provisions which will support and enhance habitats, species and ecological networks through new development areas. This should ensure that ecological sensitivities are appropriately considered during the planning, construction and

[12] CIEEM (2021): 'Biodiversity Net Gain', [online] available to access via: https://cieem.net/i-am/current-projects/biodiversity-net-gain/

operational phases for new development proposals which come forward during the plan period, whilst also delivering some net gains.

Table 8.2 Likely significant effects, Biodiversity and Geodiversity

Likely significant effect	*Effect dimensions*	*Recommendations*
Protecting the integrity of designated sites and areas of biodiversity and geodiversity value in the island.	Direct and indirect, short, medium and long-term and positive.	None proposed.
Enhancements to ecological networks through green infrastructure enhancements.	Direct and indirect, long-term, permanent and positive.	None proposed.
Improved ecological resilience, including to the effects of climate change.	Direct and indirect, long-term, permanent, and positive.	None proposed.

Landscape, Townscape and Seascape

Commentary on proposed bridging Island Plan spatial strategy

8.37 The bridging Island Plan's spatial strategy has a focus on directing development to the built up areas of the primary centre of St Helier, and the secondary centre of Les Quennevais. The spatial strategy also supports the appropriate development of previously developed land and of under-utilised land and buildings. It also seeks to deliver more limited development within the island's local centres, with the scale of development to be related to the local context, and restricts development elsewhere in the island. Whilst the approach will limit impacts in the most sensitive locations in the island in terms of landscape character, the approach will however have increased impacts on townscape character within St Helier and Les Quennevais.

8.38 In terms of landscape and seascape sensitivity, it is important to acknowledge that none of the proposed site allocations overlap with the boundaries of the Coastal National Park. Whilst it is recognised that a distance-based approach may not effectively determine whether development on a site may or may not affect the setting of the Coastal National Park, the following four proposed site allocations are in close proximity (and potentially visible) from within this protected area:

- 'Field No. O594 and O595, Le Clos de la Fosse au Bois, St. Ouen' (IP-178094584);
- 'Le Rond Collas, Field No. MN389 and MN390, La Rue de la Haye, St. Martin' (IP-178713047);
- 'Field No. MN410, La Rue des Buttes, St. Martin' (IP-178709054); and
- 'Field No. G392A, Le Clos des Fonds, Grouville' (IP-175859990).

8.39 The delivery of 4,150 dwellings over the bridging Island plan period has the potential to have impacts on landscape, townscape and seascape character if not appropriately located and designed. However, the extent to which new development will impact on character depends on the design. layout and type of development taken forward at each location, and the integration of green infrastructure provision. These issues have been considered through the appraisal of the bridging Island Plan policies, below.

Commentary on the consultation version of the bridging Island Plan as a whole

8.40 The bridging Island Plan seeks to protect (keep safe from harm) and improve the quality, character and appearance of the island's landscapes, townscapes and seascapes which contribute to Jersey's natural and built environment (see: Places policies P1-P5; Policy SP3 'Placemaking'; Policy SP5 'Protecting and improving the natural environment'; Policy NE3 'Landscape and seascape character; Policy GD6 'Design quality'; Policy GD8 'Green backdrop zone' and Policy GD9 'Skyline, views and vistas').

8.41 Jersey's Coastal National Park embraces some of the island's most valuable and sensitive terrestrial landscapes, the unique intertidal zone and the offshore reefs and islands, together with the shallow waters that surround them. Jersey's Coastal National Park is primarily a designation that is designed to protect its outstanding landscape and seascape character, along with its special heritage and biodiversity value. In this context, the plan highlights that development within the Coastal National Park should be compatible with the purposes of this area in order to protect its special qualities (see Policy PL5 'Countryside, coast and marine environment' and Policy NE3 'Landscape and seascape character'). It will need to accord with other policies throughout the bridging Island Plan in terms of the forms of development that may be acceptable within it, and applicants will need to justify the need for development to be located within its boundaries. There is also a commitment for the Minister for the Environment to explore the potential for changes to permitted development rights within the Coastal National Park in order to better protect its fragile and sensitive character.

8.42 Much of the countryside outside of the Coastal National Park – referred to as the green zone – comprises the rural heartland of Jersey. The bridging Island Plan acknowledges that the quality of the landscape provides an important and distinctive contribution to the character and appearance of the island's countryside, with its strong rural character important to protect. In this regard, all development proposals around the coast and in the countryside (including in both the green zone and the Coastal National Park) will need to demonstrate that particular care has been taken to ensure that they can be sympathetically integrated into the locality and that they do not harm landscape character or biodiversity (see Policy PL5).

8.43 The bridging Island Plan also stipulates that the design of new development areas should be informed and have regard to the design guidance and assessment of character set out in the St Helier Urban Character Appraisal and the Integrated Landscape and Seascape Character Appraisal, respectively. This is reinforced through several policies with a focus on ensuring that new developments reflect and enhance the unique character and sense of place in their environs (Policy SP4 'Protecting and promoting island identity' and Policy GD6 'Design quality').

8.44 With reference to townscape character, the St Helier Urban Character Appraisal describes parts of the town that have distinct qualities that distinguishes them from their neighbouring areas; this has informed the bridging Island Plan's approach to determine how the town might best respond to the need to accommodate much of the island's development needs. The appraisal also includes a sensitivity analysis to determine where the urban environment is best able to accommodate denser and taller forms of development. Key policies in this regard include Policy H2 'Housing density', Policy GD6, Policy GD7 'Tall buildings', GD8 'Green backdrop zone' and Policy GD9 'Skyline, views and vistas'.

8.45 More broadly, the policies within the bridging Island Plan seek to ensure that new development areas are proportionate to the needs of the community, the scale and setting of the area, and appropriate to its context in scale, character and use. For example, Places policies P1-P5 outline that the scale of development should reflect the character and setting of the settlements, also outlining that new development on the edge of a settlement or within open countryside will only be acceptable where it is designed to respect the sensitivity of the landscape setting. Policies ERE2 – ERE6 stipulate that applications for change of use, extensions, and alterations to buildings should be sensitive to surrounding areas in terms of design and will be carefully controlled and considered. Furthermore, Policy NE2 'Green infrastructure and networks' and stipulates that green infrastructure should be central to the design of schemes to create distinctive places that reference, reflect and enhance the local environment. These policies will support a limitation of effects on the open countryside and safeguard these areas from inappropriate types and scales of development.

Table 8.3: Likely significant effects, Landscape, Townscape and Seascape

Likely significant effect	*Effect dimensions*	*Recommendations*
Protection of landscape / townscape / seascape character and local distinctiveness.	Direct and indirect, long-term, permanent and positive.	None proposed.
Impacts to visual amenity, important viewpoints and landscape perception.	Direct and indirect, short, medium and long-term, permanent and temporary, positive and negative.	None proposed.
Safeguarding rural character and the open countryside.	Direct and indirect, long-term, permanent and positive.	None proposed.

Historic Environment

Commentary on proposed bridging Island Plan spatial strategy

8.46 The bridging Island Plan's spatial strategy has a focus on directing development to the built up areas of the primary centre of St Helier and the secondary centre of Les Quennevais. Given the significant historic environment resource of St Helier in particular, which has the largest concentration of listed buildings and other heritage assets in the island, such an approach has the potential to lead to significant impacts on the historic environment, depending on the policy approaches taken forward through the bridging Island Plan.

8.47 The spatial strategy will however help limit impacts on the historic environment outside of St Helier and Les Quennevais. This includes through seeking to deliver more limited development within the island's local centres, with the scale of development taken forward to be related to the local context, and restricting development elsewhere in the island.

8.48 Regarding on-site heritage constraints, the following seven proposed site allocations either intersect or adjoin listed buildings and/or places:

- 'Field No. H1189, La Grande Route de St. Jean, St. Helier' (IP-175468055) – Listed Building Grade 3 'Chestnut Lea' (Folio No. HE0588);
- 'Field No. O594 and O595, Le Clos de la Fosse au Bois, St. Ouen' (IP-178094584) – Listed Building Grade 4 'St Jacut' (Folio No. OU0205) and Listed Building Grade 2 'La Croix' (Folio No. OU0031);
- 'Field No. MN410, La Rue des Buttes, St. Martin' (IP-178709054) – Listed Building Grade 3 'Our Lady of the Annunciation & the Martyrs of Japan' (Folio No. MN0217);
- 'Field No. G392A, Le Clos des Fonds, Grouville' (IP-175859990) – Listed Building Grade 4 'Les Fonds & Les Fonds Cottage' (Folio No. GR0097);
- 'Field No. P632, La Route du Manoir, St. Peter' (IP-175190706) – Listed Building Grade 3 'Manor Farm' (Folio No. PE0035); Listed Building Grade 4 'Old Post Office' (Folio No. PE0125); Listed Building Grade 4 'Sans Ennui' (Folio No. PE0213) and Listed Building Grade 4 'Manor View' (Folio No. PE0020).
- 'Field No. J525, La Rue des Buttes, St. John' (IP-180309345) – Listed Building Grade 4 'Melbourne House' (Folio No. JN0023); and
- 'Field No. H1219, La Grande Route de Mont a l'Abbe, St. Helier (IP-173550913) – Listed Building Grade 2 'Chestnut Farm' (Folio No. HE1005)' and Listed Building Grade 3 'Abbotsmount' (Folio No. HE1008).

8.49 More widely, the following four proposed site allocations are all within a 50m distance from listed buildings and/or places and have the potential to impact upon the setting of these heritage assets:

- 'Field No. H1186A, La Grande Route de St. Jean, St. Helier' (IP-175184359) – Listed Building Grade 3 'Chestnut Lea' (Folio No. HE0588);

- ‘Field S729, former Longueville Nurseries’ (IP-178261467) – Listed Building Grade 4 ‘Peirson House’ (Folio No. SA0203);
- ‘Field No. S413, Les Cinq Chenes Estate, St. Saviour’ (IP-177076108) – Listed Building Grade 3 ‘Milestone 2’ (Folio No. SA0179) and Listed Building Grade 4 ‘St Michael’s School’ (Folio No. SA0052); and
- ‘Field No. H1219, La Grande Route de Mont a l'Abbe, St. Helier’ (IP-173550913) – Listed Place Grade 2 ‘Chestnut Farm Barrow’ (Folio No. HE1844)’.

8.50 Reflecting these sensitivities, bridging Island Plan policies should seek to ensure that development proposals seek to implement sensitive design techniques which respect and enhance the setting of heritage assets. Such measures could include:

- high quality and (where possible) locally sourced materials and detailing that contribute positively to the setting of nearby heritage assets and reflect local building traditions.
- safeguarding locally important viewpoints which contribute to the setting of heritage designations.
- retention of traditional heritage features through the design of new development areas.
- proposals could reflect the distinctive and historical architectural style and design traditions established in the island, integrating with the historic topography, settlement form, historic street patterns and street lines.

8.51 None of the proposed site allocations overlap within an Area of Archaeological Potential. Development proposals at locations which are identified to have an archaeological interest should be encouraged to undertake archaeological evaluations prior to construction, with any findings appropriately reported and documented on the local historic environment record in line with best practice guidance.

8.52 These issues have been considered further through the appraisal of the bridging Island Plan policies, below.

Commentary on the consultation version of the bridging Island Plan as a whole

8.53 The heritage value of the historic environment in Jersey is identified through the formal designation of the island's buildings and places and their inclusion on a single statutory list. Out of the ~4,000 listed buildings and places in the island, most of them have been designated because they are of special historical or architectural interest, and others may have special archaeological, cultural or artistic interest. In this context, historic buildings and places make an important contribution to character, identity and sense of a place, especially in St Helier, which is home to about 40% of the island’s listed buildings and places. Therefore, planning policies within the bridging Island Plan provide a proactive framework for the protection and conservation of the historic environment and archaeological heritage (see Policy SP4 ‘Protecting and promoting island identity’, Policy HE1 ‘Protected listed buildings and places, and their settings’, Policy HE5 'Conservation of archaeological heritage', Policy GD9 ‘Skyline, views and vistas’, Policy GD6 ‘Design quality’ and Policy SP3 ‘Placemaking’). Key objectives from these policies include:

- Any development that affects a listed building and/or place, and their settings, will need to protect or improve the site or area and its settings in accordance with its significance (Policy SP4);
- Proposals that could affect a listed building and/or place, or its setting, but which do not protect or improve its special interest or setting, will not be supported (Policy HE1);
- The setting of listed buildings, places and key landmark buildings must be protected or enhanced (Policy GD9);
- Development should deliver a high-quality design which contributes positively to the diversity and distinctiveness of the built environment and its setting (Policy GD6); and

- New development should ensure the maintenance and enhancement of heritage features (Policy SP3).
- Development proposals should conserve archaeological heritage and its setting (Policy HE5).

8.54 These policies are likely to provide opportunities for new development to positively contribute to the fabric and setting of heritage assets through incorporating high-quality design which reflects the historic character and special qualities of Jersey.

8.55 St Helier, the local centres and smaller settlements in the island also include areas with a distinct architectural value which have the potential to be designated as conservation areas (once this is enabled by change to legislation). In this respect, the bridging Island Plan supports the proposal to introduce conservation areas in Jersey to enable the designation of areas of historic interest (see Policy HE3 'Protection or improvement of conservation areas, the proposal to review permitted development rights for conservation areas, and Policy HE4 'Demolition in conservation areas).

8.56 Support for the re-use of historic buildings is also encouraged through the bridging Island Plan, including for appropriate flexibility in response to climate change. In this respect, due to the variability in historic materials, plan forms, designs and construction methods utilised in the island, there are few 'one size fits all' energy improvement solutions appropriate for traditional homes. Such improvements require an approach that uses an understanding of a building in its context to find a balanced solution that saves energy, sustains heritage significance and maintains a comfortable, healthy indoor environment – the 'whole building approach'- with applications considered on a case by case basis for listed buildings and places. This principle is supported through Policy HE2 'Protection of historic windows and doors' and should help to ensure that values attributed to heritage assets are understood and reflected in design proposals.

8.57 Areas of potential archaeological interest are also identified in Jersey where it is considered, based on place name or other documentary evidence, that further archaeological heritage interest may exist but where there is currently insufficient justification to warrant formal designation through listing. In this respect, where development may affect areas of archaeological interest, planning applications are expected to be supported by an appropriate archaeological assessment (see Policy HE5 'Conservation of archaeology). The nature of archaeological assessment will vary depending upon the archaeological sensitivity and significance of the resource and the extent of existing information.

8.58 Historic environment sensitivities in Jersey are further reflected by several policies which have a focus on enhancing the quality of the public realm and green infrastructure enhancements (as discussed within the 'Biodiversity and Geodiversity' and 'Landscape, Townscape and Seascape' appraisals presented above). This has the potential to support the setting of the historic environment through promoting the rejuvenation of heritage assets and the public realm for new uses.

Table 8.4: Likely significant effects, Historic Environment

Likely significant effect	*Effect dimensions*	*Recommendations*
Conservation and enhancement of the historic environment (including listed buildings and places) and their settings.	Direct and indirect, short, medium and long-term, permanent and positive.	None proposed.
Reuse and rejuvenation of historic environment features of interest.	Direct and indirect, short, medium and long-term, permanent, and positive.	None proposed.
Implementation of appropriate mechanisms for understanding and preserving the island's archaeological resource.	Indirect, short, medium and long term, permanent and positive.	None proposed.

Climate Change

Commentary on proposed bridging Island Plan spatial strategy

8.59 The bridging Island Plan's spatial strategy has a focus on directing development to the built up areas of the primary centre of St Helier, and the secondary centre of Les Quennevais. It also seeks to deliver more limited development within the island's local centres, and restricts development elsewhere in the island.

8.60 This approach will support climate change mitigation through delivering an increased proportion of growth in the locations in the island with the widest range of services and facilities, employment opportunities, public transport provision and active travel networks. This will help reduce the need to travel to access key amenities and limit the need to travel by private vehicle. This will help support a limitation of emissions from transportation, which is significant given the sector accounts for over half of greenhouse gas emissions in the island.

8.61 The delivery of 4,150 dwellings over the plan period has the potential to significantly increase the built footprint of Jersey, with associated increases in greenhouse gas emissions. In this respect, the sustainability performance of the bridging Island Plan's spatial strategy largely depends on elements such as the integration of energy efficient design within new development, the provision of renewable energy and policies encouraging the use of sustainable modes of transport. These elements have also been considered in the commentary on the bridging Island Plan as a whole, below.

8.62 In terms of climate change adaptation, the following four proposed site allocations are identified as being located partially within or adjacent to surface water flood risk zones and will likely require mitigation to reduce and alleviate the extent of the potential negative effects.

- 'Field No. G392A, Le Clos des Fonds, Grouville' (IP-175859990) – within or adjoining areas of 'low' surface water flood risk.
- 'Field No. S729, former Longueville Nurseries' (IP-178261467) – within or adjoining areas of 'low' and 'medium' surface water flood risk, and approximately 35m from areas of 'high' surface water flood risk.
- 'Field No. P632, La Route du Manoir, St. Peter' (IP-175190706) – within or adjoining areas of 'low' and 'medium' surface water flood risk.
- 'Field No. S530, Princes Tower Road, St. Saviour' (IP-177734520) - within or adjoining areas of 'low' and 'medium' surface water flood risk, and approximately 14m from areas of 'high' surface water flood risk.

8.63 The policy approaches proposed by the bridging Island Plan relating to flood risk have been discussed below.

Commentary on the consultation version of the bridging Island Plan as a whole

8.64 In recognition of the threat posed by climate change, the Government of Jersey declared a climate emergency in May 2019 and committed to bringing forward a plan for how Jersey could aim to become a carbon-neutral jurisdiction by 2030. Alongside the development of this process, the bridging Island Plan takes steps – which are in line with the existing commitments of the adopted Energy Plan[13] and the Carbon Neutral Strategy[14] – to ensure carbon emissions are reduced throughout the life cycle of new development (from design through to construction). In this context, Policy SP1 'Responding to climate change' includes several measures to promote and achieve a meaningful and long-term reduction in carbon emissions and to mitigate against climate change impacts in the island. For example:

[13] States of Jersey (2014): Pathway 2050: An Energy Plan for Jersey', [online] available to access via: https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=1039
[14] Government of Jersey (2019): 'Carbon Neutral Strategy', [online] available to access via: https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=5138

- reducing the carbon impact of new development by requiring development to optimise land use through efficient forms of development, minimising energy demand and energy efficiency; and
- supporting the delivery of renewable and low carbon energy schemes and innovative forms of infrastructure and land use which aid a transition to carbon neutrality.

8.65 At present, a third of the island's emissions arise from energy use in buildings. Recognising the significant role that buildings have in contributing to Jersey's carbon emissions, Policy ME2 seeks to implement Passivhaus standards[15] for affordable homes and major development in the countryside. The bridging Island Plan also sets out a range of provisions for increasing the energy efficiency of design and construction, including through measures to limit energy consumption and supporting renewable energy provision on site. These measures will also support climate change mitigation efforts with the potential for long term and positive effects. Key policies in this respect include: Policy ME1 '20% reduction in target energy rate for large-scale developments' and Policy ME3 'BREEAM rating for new larger scale non-residential buildings'[16].

8.66 Further contributing to climate change mitigation efforts, investment in local sequestration projects will have an important role to play in achieving carbon neutrality. Such schemes are encouraged through Policy ME5 'Carbon sequestration schemes' in locations which would not otherwise lead to the unacceptable loss of agricultural land or have adverse impacts upon biodiversity, landscape or seascape character. The Carbon Neutral Strategy also recognises the importance of increasing the use of centrally generated electricity, including through renewable sources. Such schemes are supported in principle through Policy ME6 'Offshore utility scale renewable energy proposals' and Policy ME7 'Larger-scale terrestrial renewable energy developments' where their environmental impact is determined to be acceptable. Additionally, before the demolition of buildings can be supported, options to retain them (in-whole or in-part) through refurbishment or adaptation must be thoroughly explored in the interests of making best use of their embodied carbon (see Policy HE2 'Protection of historic windows and doors' and Policy GD5 'Demolition and replacement of buildings').

8.67 In the wider context, road transport is an increasingly significant contributor to greenhouse gas emissions across the island, with approximately half of the island's emissions arising from road transport. This is acknowledged through the spatial strategy for the bridging Island Plan (discussed above), which seeks to deliver a large proportion of development in the most accessible locations. In terms of sustainable transport options, Policy SP1 and Policy TT2 'Active Travel' sets out provisions which seek to encourage a modal shift from the reliance on privately owned vehicles towards alternative methods of travel. This will help limit the need to travel to key amenities (and associated greenhouse gas emissions), including to day-to-day services, and is further explored within the 'Transport' appraisal within this chapter.

8.68 In terms of adapting to the risks of climate change, major sources of flooding in the island includes coastal, inland, sewer, groundwater, and infrastructure failure (i.e. reservoirs and burst water mains). As highlighted by the plan, where a development site is identified as being at risk of flooding, even if it is only a low risk, it is necessary for the development proposal to acknowledge this risk and identify suitable mitigation so the impacts of flooding can be managed. In this respect, a flood risk assessment should be prepared for any development within identified flood risk areas in order to assess the level of risk, potential mitigation measures and to ensure its acceptability (see Policy WER2 'Managing flood risk'). Policy WER6 'Surface water drainage' also requires all built development proposals to utilise sustainable urban drainage (SuDS) techniques wherever practicable which mimic natural drainage systems. Planning decisions in flood risk areas will be made using the flood risk categories listed within Jersey's Strategic Flood Risk Assessment[17] to ensure that the Island

[15] Passivhaus buildings provide a high level of occupant comfort while using very little energy for heating and cooling – Passivhaus Trust (2021): https://www.passivhaustrust.org.uk/what_is_passivhaus.php
[16] BREEAM schemes are holistic and drive performance across a range of sustainability aspects including climate resilience, energy performance and the embodies impacts of materials – BREEAM (2018): 'New Construction: Technical Manual', [online] available to access via: https://www.passivhaustrust.org.uk/what_is_passivhaus.php
[17] AECOM on behalf of the Government of Jersey (April 2021) Jersey Strategic Flood Risk Assessment. Available to access via: https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/R%20Jersey%20Strategic%20Flood%20Risk%20Assessment%202021%20AECOM.pdf

Plan can support development that is suitably resilient to the challenges of flood risk, within the context of a changing climate.

8.69 With reference to coastal flooding, Jersey's Shoreline Management Plan (SMP)[18] details that a total of 460 properties in the island are currently at risk of coastal flooding; potentially increasing to 2,822 by 2120 as a result of climate change. In this respect, new development is expected through the plan to consider and responds to its vulnerability to the risks of coastal flooding and erosion, and ensure that it does not adversely impact on the ability for Jersey to reduce these risks in the strategic manner set out within the SMP (Policy WER3 'Flood infrastructure' and Policy WER4 'Land reclamation').

8.70 Further contributing to climate change adaptation efforts, Policy NE1 'Protection and improvement of biodiversity and geodiversity' seeks to deliver where possible 'measurable' biodiversity net gains through habitat creation, restoration and enhancement (amongst other considerations), whilst also preventing the loss of ecological assets from development. More broadly, the protection of open spaces and Key Habitats within Jersey through several policies within the bridging Island Plan (including Policy NE2 'Green infrastructure and networks', Policy NE3 'Landscape and seascape character', Policy GD8 'Green backdrop zone' and Policy SP5 'Protecting and improving the natural environment') will safeguard natural carbon sequesters located within the landscape (e.g. trees and hedgerows). Alongside the policies which aim to protect and enhance areas of open space and local green spaces (see Policy CI6 and CI7), this will support the protection of natural features that will help limit the impacts of the likely effects of climate change (including extreme weather events) through providing summer shading and reducing surface water run-off.

Table 8.5: Likely significant effects, Climate Change

Likely significant effect	*Effect dimensions*	*Recommendations*
Limitation in greenhouse gas emissions resulting from growth through reducing the need to travel and promoting alternative methods of transport.	Direct and indirect, long-term, permanent and positive.	None proposed.
Limitation in greenhouse gas emissions resulting from growth through the development of low carbon and renewable energy installations and the promotion of energy efficient development.	Direct and indirect, long-term, permanent and positive.	None proposed.
Enhancements to improve resilience to the effects of climate change (including flooding).	Direct and indirect, short, medium and long-term, permanent and positive.	None proposed.
Adapting to climate change effects through the application of sustainable design and construction techniques and green infrastructure provision.	Direct and indirect, long-term, permanent and positive.	None proposed.

[18] Government of Jersey, AECOM (2020): 'Jersey Shoreline Management Plan', [online] available to access via: https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=5173

Population and Community

Commentary on proposed bridging Island Plan spatial strategy

8.72 The bridging Island Plan's spatial strategy has a focus on directing development to the built up areas of the primary centre of St Helier, and the secondary centre of Les Quennevais. It also seeks to deliver more limited development within the island's local centres, and restricts development elsewhere in the island. The spatial strategy also seeks to deliver the highest density of developments within the most accessible and sustainable locations.

8.73 This approach will deliver an increased proportion of growth in the locations in the island with the widest range of services and facilities, employment opportunities, public transport provision and active travel networks. This will support islanders' accessibility to key amenities and opportunities, and support social inclusion.

8.74 The bridging Island Plan identifies and allocates 16 sites for the provision of affordable homes to address the community's housing needs and to help maintain sustainable communities during the plan period (see Policy H5). The site allocations proposed through the bridging Island Plan either adjoin the primary, secondary or local centres in the island (aligning to the spatial strategy). The scale of development will reflect the settlement's role and function. This will ensure that new development areas are predominantly located within proximity to services and facilities, whilst also delivering homes to meet an identified local need. This has the potential to benefit the vitality of these centres and support the viability of existing and new community provision.

Commentary on the consultation version of the bridging Island Plan as a whole

8.75 As highlighted by the Objective Assessment of Housing Need (OAHN)[19] for Jersey, more homes are required in the coming years to respond to an increase in the island's population, people live longer and household sizes continue to reduce. Between 2011 and 2020, the Housing Affordability Index, which indicates whether a working household with average (mean) income can purchase a property affordably, declined by 11%[20]. In this respect, the bridging Island Plan seeks to address the provision of and affordability of homes, including making provision for up to 4,150 new homes (up to the end of 2025) that will provide a range of types, sizes and tenures to meet the island's different housing needs. This includes 1,000 new affordable homes, both for rent and purchase. These provisions are set out through Policy H1 'Housing quality and design', Policy H2 'Housing density', Policy H3 'Provision of homes', Policy H4 'Meeting housing needs' and Policy H5 'Provision of affordable homes'.

8.76 Outside of the built-up areas in the island, housing provision in rural areas is supported by Policy H8 'Housing in the countryside' and Policy H9 'Rural workers' accommodation which seeks to ensure any provision in the countryside focuses on housing for specific sectors (i.e. agriculture or tourism), subject to other plan policies. Whilst the policies also provide a framework against which exceptions might be considered, this recognises the significant affordability issues in rural areas for housing in Jersey, and the challenges faced by people engaged in local rural employment in gaining appropriate housing.

8.77 More broadly in relation to housing provision, the bridging Island Plan seeks to deliver homes of a range of types and tenures to meet the general and specialist needs for housing. In terms of older people's housing and housing for those with disabilities, Policy H6 'Specialist housing' and Policy GD6 'Design quality' seek to ensure that dwellings achieve the highest standards of accessibility and inclusivity. This will be supported by policies which focus on delivering high-quality design through development which exceed the space standards set out in the Minister

[19] The States of Jersey (2019): 'OAHN Final Report', [online] available to access via: https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/Objective%20Assessment%20of%20Housing%20Need%20Report.pdf
[20] Statistics Jersey (2021): 'Housing Affordability Index', [online] available to access via: https://opendata.gov.je/dataset/housing-affordability

for the Environment's supplementary planning guidance[21], whilst also providing sufficient comfort, utilities and telecoms infrastructure, natural light, privacy and open spaces. Key policies in this regard include Policy SP7 'Planning for community needs', Policy H1, Policy H2, Policy UI3 'Supply and use of water', Policy UI4 'Telecoms and other masts and equipment' and Policy WER7 'Foul Sewerage'. Policies which seek to enhance the public realm and where possible, improve conditions for active travel, general amenity, safety and security, are further explored within the 'Health and Wellbeing' and 'Transport' appraisals below.

8.78 Accessibility to services and facilities is a key influence on the quality of life of islanders and social inclusion. The influence of the proposed spatial strategy for the bridging Island Plan on accessibility has been discussed above under the commentary on the proposed bridging Island Plan spatial strategy (see Policy PL1 'Development in Town, Policy PL2 'Les Quennevais, Policy PL3 'Local centres' and Policy PL4 'Smaller settlements'). Accessibility in Jersey will be further supported by the bridging Island Plan's focus on supporting community facilities, improving the public realm, delivering community infrastructure (including education, leisure and cultural facilities) and enhancing sustainable transport networks. Key policies in this regard include Policy CI3 'Our hospital and associated sites and infrastructure', Policy CI4 'Community facilities and community support infrastructure', Policy CI5' Sports, leisure and cultural facilities', Policy CI10 'Allotments', Policy SP3 'Placemaking' and Policy TT1 'Integrated safe and inclusive travel'. To make progress in understanding the island's future infrastructure requirements, development which is proven to meet a strategic community need is supported through Policy UI1 'Strategic infrastructure delivery' and Policy UI2 'Utilities infrastructure facilities', subject to other plan policies.

8.79 The findings of the Jersey Opinions and Lifestyle Survey[22] found that only 36% of people living in St Helier are satisfied with their local neighbourhood, compared to 63% living in suburban parishes and 81% of people living in rural parishes. In this respect, the bridging Island Plan proposes a new Sustainable Communities Fund to support community vitality and quality of life for islanders. This fund will be designed to capture a small proportion of the private value uplift arising from the development process and invest it back into the community. Whilst the focus of the fund will be to achieve improvements to the primary centre of St Helier, in developing the framework for its collection and distribution, consideration will be given as to how a proportion of the fund may be re-allocated to other parishes where higher volumes of development has taken place, thus ensuring that local improvements may be made elsewhere in the island (see Proposal 'Sustainable Communities Fund'). Additional to the Sustainable Communities Fund, measures may be required to ensure that the development will meet the needs of the community. The planning process recognises and makes provision for this, requiring developers to enter into planning obligation agreements (POAs). These are legal agreements designed to ensure that development proposals will be acceptable in planning terms, when the impacts can be managed (see Policy GD3).

[21] Government of Jersey (2009): 'SPG Policy Note 6: Specifications for housing developments', [online] available to access via: https://www.gov.je/PlanningBuilding/LawsRegs/SPG/PolicyNotes/Pages/HousingDevelopments.aspx
[22] Statistics Jersey (2018): 'Jersey Opinions and Lifestyle Survey', [online] available to access via: https://www.gov.je/News/2018/Pages/OpinionsLifestyleSurveyReport2018.aspx

Table 8.6: Likely significant effects, Population and Community

Likely significant effect	*Effect dimensions*	*Recommendations*
Provision of housing of a range of types and tenures to meet different needs.	Direct, long-term, permanent and positive.	None proposed.
Increased delivery of affordable housing, including in smaller settlements.	Direct, long-term, permanent and positive.	None proposed.
Improvements in the quality of Jersey's housing stock.	Direct, indirect, long-term, permanent, and positive.	None proposed.
Enhancements to the vitality and viability of smaller settlements.	Direct, indirect, long-term and positive.	None proposed.
Support for rural vitality.	Direct, indirect, long-term and positive.	None proposed.
Enhanced accessibility to services, facilities and amenities.	Direct, long-term and positive.	None proposed.

Younger People

Commentary on proposed bridging Island Plan spatial strategy

8.80 The spatial strategy for the bridging Island Plan will deliver an increased proportion of growth in the locations in the island with the widest range of services and facilities, employment opportunities, public transport provision and active travel networks. This will support younger people's accessibility to key amenities and opportunities, and support social inclusion. The spatial strategy also facilitates some growth within the local centres of the island. This will help deliver affordable housing of a type required for local needs in these locations, including housing for younger families.

8.81 Jersey's schools and colleges and early-years settings are an essential part of the Island's social and economic infrastructure. Where sites have been assessed as necessary and appropriate for future education use, they have been designated as such and are afforded protection from other forms of new development in the bridging Island Plan. In this respect, Policy CI1 'Education Facilities' safeguards the following sites for educational use:

- Grainville School: Field S367, St Saviour;
- Jersey College for Girls and JCP: Field S800 and S801, St Saviour;
- Mont a L'Abbe School: Part of Field H1256, St Helier;
- Haute Vallee: Part of field H1219, St Helier;
- First Tower School: Field H1533, St Helier;
- St John's School: Part of Field J525, St John; and
- Les Landes School: Part of Field 782 St Ouen.

Commentary on the consultation version of the bridging Island Plan as a whole

8.82 The Children and Young People's Plan[23] is a fundamental new plan for the island's children, young people and families, which aims to make sure Jersey is the best place to grow up and also improves everyday lives. The physical environments in which children grow up is identified and recognised as having a profound effect on their physical and emotional wellbeing, often to the same extent as the social and economic factors that are traditionally understood to influence children's life outcomes. In this respect, this is reflected by a key focus of the bridging

[23] Government of Jersey (2019): 'Children and Young People's Plan (2019-2023)', [online] available to access via: https://www.gov.je/Caring/Children/ChildrensServicesImprovementPlan/ChildrensPlan/Pages/ChildrensPlan2019.aspx

Island Plan, which is to ensure that younger people have access to high-quality infrastructure – such as schools, health care facilities and community amenities.

8.83 For example, Jersey's schools and colleges and early-years settings are an essential part of the island's social and economic infrastructure. Skills and education are core to maximising the island's productivity, developing a workforce fit for the island's future employment needs. In this respect, proposals for the development of additional educational facilities or for the extension and/or alteration of existing educational premises will be supported through Policy CI1 provided that the proposal is within the grounds of existing education facilities; on a safeguarded site; or, within the built-up area. The alternative development of these sites will not be supported unless it can be demonstrated that they are no longer required for educational purposes.

8.84 Access to high quality and safe places for children and young people to play is critical to the development of the physical, emotional, social and cognitive skills that they need to thrive. The Inspiring an Active Jersey Strategy[24] highlights that 81% of children and young people in Jersey do not meet the World Health Organisation's recommended guidelines for physical activity, meaning that these children are not physically active enough to have a positive impact on their health and well-being. In the context of the above, Policy CI8 'Space for children and play' states that all new major development should consider how it will contribute towards helping children to be safe, active, social and imaginative. The policy outlines requirements for proposals to provide communal space for play which is appropriate for the scale of the development. This is supported by several policies which focus on protecting and enhancing green infrastructure networks and open spaces (see Policy NE1, NE2 and CI6), policies which focus on encouraging active travel and engagement with sport and leisure activities (see Policy CI5 and TT2, and policies which facilitate and improve accessibility for children (see Policy TT1). This is considered in further detail within the 'Population and Community', 'Health and Wellbeing' and 'Transport' appraisal sections.

Table 8.7: Likely significant effects, Younger People

Likely significant effect	*Effect dimensions*	*Recommendations*
Enhancements to educational provision in the island.	Direct, medium and long-term, and positive.	None proposed.
Enhanced accessibility for younger people to services, facilities and amenities.	Direct and indirect, medium and long-term, and positive.	None proposed.
Improvements in accessible green infrastructure networks and leisure and recreational provision used by younger people.	Direct and indirect, medium and long-term, and positive.	None proposed.

Health and Wellbeing

Commentary on proposed bridging Island Plan spatial strategy

8.85 The spatial strategy for the bridging Island Plan, through focusing on the primary centre of St Helier and the secondary centre of Les Quennevais, will deliver an increased proportion of growth in the locations in the island with the most comprehensive health services. It will also deliver growth in the locations with the widest range of leisure and recreation opportunities. This will support health and wellbeing.

8.86 More broadly, the spatial strategy will also deliver an increased proportion of growth to the locations best served by community provision. Given this will limit the need to travel to services, facilities and amenities, this has the potential to support the use of healthier modes of travel, including walking and cycling.

8.87 Green infrastructure provides space – including natural green space – for recreation and relaxation, and access to nature has been evidenced to improve people's health and wellbeing,

[24] Government of Jersey; Jersey Sport (2020): 'Inspiring an Active Jersey 2020-2030', [online] available to access via: https://statesassembly.gov.je/assemblyreports/2020/r.92-2020.pdf

through encouraging healthy outdoor recreation and relaxation. In this respect, all the proposed site allocations (see Policy H5) are located within 300m of a protected open space, with the following four sites located directly adjacent to a protected open space.

- 'Le Rond Collas, Field No. MN390, La Rue de la Haye, St. Martin' (IP-178713047)
- 'Field No. MN410, La Rue des Buttes, St. Martin' (IP-178709054)
- 'Field No. J525, La Rue des Buttes, St. John' (IP-180309345)
- 'Field No. S413, Les Cinq Chenes Estate, St. Saviour' (IP-177076108)

8.88 However, an allocation at 'Field No. H1219, La Grande Route de Mont a l'Abbe, St. Helier' (IP-173550913) for affordable housing has the potential to result in the permanent loss of a protected open space. It should be noted though that this former designated protected open space has not been accessible to the public and has been in agricultural use.

8.89 To support and enhance the level of and access to open space during the bridging Island Plan period, the following sites have been identified and safeguarded for future open space development (see Policy CI6 'Protection and enhancement of open space). Specifically:

- Part of Jersey Gas site, Tunnell Street (an extension to Millennium Town Park);
- Warwick Farm, La Grande Route de Saint-Jean, St Helier; and
- Grands Vaux Reservoir.

8.90 Further supporting the spatial strategy, Policy CI5 'Sports, leisure and cultural facilities' states that the development of new or extended large-scale sports, leisure and cultural facilities will be only supported within the island's primary or secondary centres or within the following sites which are designated as sports and leisure enhancement areas:

- Les Quennevais sports centre;
- Le Rocquier School;
- Springfield Stadium;
- Existing Jersey Rugby site and associated playing pitches; and
- Key opportunity sites in the Southwest St Helier Planning Framework Area.

Commentary on the consultation version of the bridging Island Plan as a whole

8.91 The Disability Strategy for Jersey[25] sets out the proposed priorities and actions to help deliver the key outcome of the strategy: that people living with disability enjoy a good quality of life. The Island Plan incorporates and supports the priorities and action plans set out with the Disability Strategy by:

- prioritising the development of accessible infrastructure across the island;
- ensuring increased specialist housing is developed; and
- responding to the need for new and extended community, health and social care facilities.

8.92 For example, as the population profile in the island continues to age, the growing need for care and treatment has the potential to adversely impact on the capacity of the existing healthcare infrastructure. In this respect, Policy CI2 'Healthcare facilities' supports proposals for the development of new or extended health and social care facilities subject to other plan policies. The bridging Island Plan also highlights that new housing must meet the diverse, specialised needs of people with disabilities, those requiring some degree of care, and vulnerable people, in order to ensure equal access to housing and equitable social outcomes (Policy H6 'Supported housing').

[25] States of Jersey (2017): 'Disability Strategy for Jersey', [online] available to access via: https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Disability%20Strategy%20For%20Jersey%20Standard%20Version%2020170525%20DS.pdf

8.93 The primary centre of St Helier is home to many key public buildings and services and will see the introduction of new and regenerated public infrastructure over the period of the bridging Island Plan (see Policy SP7 'Planning for community needs' and Policy CI4 'Community facilities and community support infrastructure'). This also includes the delivery of a new hospital for the island, with Policy CI3 'Our Hospital and associated sites and infrastructure' identifying and safeguarding the site at Overdale (within St Helier) as the new location for the island's general hospital. Additionally, proposals for enabling or linked development[26] will only be supported where the development will generate benefits for the island's long-term social, economic and environment sustainable wellbeing (see Policy GD4).

8.94 The Jersey mobility hierarchy recognises that access to travel and transport choices (and priority in the use of road space) is different for people with different needs, including children, the elderly and people with impairments, and for different modes of travel. The pandemic has highlighted the importance of the 'liveability' of places, and the idea that good neighbourhoods are those where most of people's daily needs can be met within a short walk or cycle. The benefits of this approach – known as the '20-minute neighbourhood'[27] – are multiple. For example, people become more active in the way they travel, people improve their mental and physical health, air quality is improved, and people see more of their neighbourhoods. In the context of the above, proposals shall be expected to demonstrate how safe and suitable access to new development areas can be achieved for all users, and all modes of transport, including securing adequate visibility at connections to the road network. Key policies in this regard include Policy TT1 'Integrated safe and inclusive travel', Policy TT2 'Active travel', GD6 'Design quality' and Policy SP3 'Placemaking'. This will positively contribute to one of the key objectives within the Inspiring an Active Jersey strategy[28], which seeks to increase islanders' physical activity by 10% by 2030 and help create more active people for a healthier island.

8.95 The quality of neighbourhoods and housing is a key determinant of islanders' quality of life and health and wellbeing. In this respect, Policy SP4 'Protecting and promoting island identity', Policy SP5 'Protecting and improving the natural environment', Policy SP7 'Planning for community needs', Policy GD6 'Design quality' and Policy H1 'Housing quality and design' set out a range of provisions for delivering high quality development. This includes through:

- promoting design which supports local distinctiveness and a high-quality public realm;
- creating legible and accessible townscapes;
- creating distinctive and varied neighbourhoods which provide for local needs through a mix of uses, unit sizes, tenures and densities;
- ensuring that streets, spaces and buildings can be used by all; and
- creating secure neighbourhoods and safe environments.

8.96 The policies also seek to ensure that public access is secured to open space and green infrastructure, and design and layout promotes inclusive and accessible places, walkable neighbourhoods and social interaction. New development proposals will be also be required to take account of the requirements of Policy GD1 'Managing the health and wellbeing impact of new development', which includes mechanisms for ensuring high quality design which fits within the context of the location.

8.97 The quality of housing will also be supported by the policies which promote the energy efficiency of new development (as discussed within the 'Climate Change' appraisal presented above). This will support the physical and mental health and wellbeing of residents, help reduce energy bills and limit issues relating to fuel poverty.

8.98 Further supporting the safety of neighbourhoods, any proposals for new, extended or redefined hazardous installations must be accompanied by adequate information in order that the risk to

[26] Enabling or linked development is the term given to a development proposal that is in a location outside of a principal development site, but which is demonstrated to be necessary to make the principal development viable or to manage or mitigate a planning impact of the principal development.
[27] Town and Country Planning Association (2021): 'The 20 Minute Neighbourhood', [online] available to access via: https://www.tcpa.org.uk/the-20-minute-neighbourhood
[28] Jersey Sport (ca 2021): 'Inspiring an Active Jersey', [online] available to access via: https://www.jerseysport.je/about-us/strategy/

public safety might be properly assessed; and without which they will not be supported (see Policy WER8 and WER9). Additionally, proposals within aircraft noise zones or public safety zones will only be permitted in the exceptional circumstances as listed within Policy WER10 and Policy WER11.

8.99 There is now robust evidence that access to the natural environment improves people's health and wellbeing through encouraging healthy outdoor recreation and relaxation. In this context the bridging Island Plan seeks to facilitate significant enhancements to green infrastructure networks in the island (see Policy NE1 and NE2). In this respect, the policies recognise that green infrastructure within development proposals should be accessible for all and promote health, wellbeing, community and cohesion and active living. Furthermore, the health and wellbeing of islanders will also be supported by policies which encourage inclusive and accessible open spaces, connectivity to the coast and countryside (see Policies PL5, CI9, GD6 and TT1), and sports and recreation facilities (see Policy CI4, CI5 and CI6).

Table 8.8: Likely significant effects, Health and Wellbeing

Likely significant effect	*Effect dimensions*	*Recommendations*
Support for the provision of new health services and leisure and recreation facilities.	Direct and indirect, short, medium and long-term, and positive.	None proposed.
Support for health and wellbeing through the delivery of high quality, energy efficient housing.	Direct, long-term, permanent and positive.	None proposed.
Enhancements to local green infrastructure networks and associated benefits for health and wellbeing.	Direct, indirect, medium and long-term and positive.	None proposed.
Benefits to health and wellbeing linked to improvements to the island's neighbourhoods as a place to live.	Direct, indirect, long-term, permanent, and positive.	None proposed.
Promotion of active travel modes, including walking and cycling.	Direct and indirect, short, medium and long-term, permanent, and positive.	None proposed.

Transport

Commentary on proposed bridging Island Plan spatial strategy

8.100 The bridging Island Plan's spatial strategy has a focus on directing development to the built up areas of the primary centre of St Helier, and the secondary centre of Les Quennevais. It also seeks to deliver more limited development within the island's local centres, and restricts development elsewhere in the island.

8.101 This approach will deliver an increased proportion of growth in the locations in the island with the widest range of services and facilities and employment opportunities. This will help reduce the need to travel for such amenities. The spatial strategy for the bridging Island Plan will also deliver an increased proportion of growth in the locations in the island with the most comprehensive public transport networks and active travel networks. This will encourage the use of sustainable modes of transport as alternatives to the private car.

8.102 The site allocations proposed through the bridging Island Plan either adjoin the primary, secondary or local centres in the island (aligning to the spatial strategy). This will support accessibility and reduce the need to travel.

Commentary on the consultation version of the bridging Island Plan as a whole

8.103 In 2020, the States Assembly agreed a Sustainable Transport Policy[29] that aims to create an entirely sustainable transport system by 2030. This requires a fundamental re-think of how the transport network (and associated space) is allocated and structured in Jersey and provides a significant opportunity to increase active travel involving walking, cycling and use of public transport in the island. With reference to bridging Island Plan, the impact of the COVID-19 pandemic means that the future baseline of travel demand is likely to be different for all islanders. In the longer term it is hard to predict how behaviours will evolve and whether some of the travel responses observed in lockdown will be maintained in some form.

8.104 In terms of encouraging a shift to sustainable travel around the island, Policy TT1 'Integrated safe and inclusive travel', Policy TT2 'Active travel', Policy SP1 'Responding to climate change' and Policy SP3 'Placemaking' seek to facilitate the development of walkable neighbourhoods, promote active travel and seek to ensure that streets, spaces and buildings can be used by all. The policies also seek to prioritise the needs of pedestrians, cyclists and public transport users. Whilst there is an existing network of paths across public and private land, the bridging Island Plan also recognises that there are opportunities to enhance and expand access to the coast and countryside by better integration of existing networks, Green Lanes, new bridleways, cycle paths, and multi-user paths (see Policy CI9 'Countryside access and awareness' and the active travel network proposal). This will support the ongoing objective of the Countryside Access Strategy[30] which is to facilitate the development of strategically linked routes across the island.

8.105 More recently, some travel patterns are changing, with an increase in online shops and services and more people (especially office workers) now working from home. This is a change which is being accelerated as a result of COVID-19. Combined with improvements to broadband connectivity, this is likely to mean that more people can work or run a business at home but will potentially still need to make frequent journeys for day to day needs. Therefore, measures to encourage travel by public transport and digital connectivity are supported through Policy EO2 'Business run from home', Policy TT3 'Bus service improvement', Policy GD6 'Design quality', Policy PL1 'Development in Town', Policy PL2 'Les Quennevais' and Policy PL3 'Local centres'. This is further discussed within the 'Economy' appraisal section, presented below.

8.106 The dominance of vehicles on streets is a significant barrier to walking and cycling, often reducing the appeal of streets as public places. Reduced parking provision can facilitate higher-density development and support the creation of mixed and vibrant places that are designed for people rather than vehicles. The restriction of parking spaces in accessible locations can also stimulate modal shift away from use the private car towards use of active (walking, cycling) and public (bus) modes of transport. In this regard, Policy TT4 provides an expectation for development proposals to provide an appropriate level of accessible, secure and convenient off-street car parking. The policy highlights that proposals should meet the latest and up-to-date parking standards for the island, with residential car parking accommodated into the design and layout of new development areas. Additionally, the provision of new off-street parking spaces in St Helier (i.e. the most sustainable location in the island for accessing alternative travel options to the private car) is not supported. The bridging Island Plan also encourages interventions that help reduce the dominance of cars in the primary centre of St Helier, and includes a proposal for designating sustainable transport zones in the island.

8.107 The Port of St Helier and Jersey Airport ('the ports') are both strategic assets and their continued operational viability is essential to the island's social and economic well-being. Therefore, it is acknowledged that the bridging Island Plan encourages proposals that allow the ports to change and adapt efficiently to protect their safe operation, and to enable the safe and convenient movement of people and freight to and from the island. In this respect,

[29] Government of Jersey (2020): 'Sustainable Transport Policy', [online] available to access via: https://www.gov.je/Environment/GreenerLifestyles/GreenerTravel/Pages/SustainableTransport.aspx#anchor-0
[30] States of Jersey (2016): 'Countryside Access Strategy for Jersey', [online] available to access via: https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=2217

developments within the operational areas of the ports will be supported through Policy TT5 'Port operations', subject to other plan policies.

Table 8.9: Likely significant effects, Transport

Likely significant effect	*Effect dimensions*	*Recommendations*
Increased use of sustainable transport modes, including public transport and walking and cycling.	Direct and indirect, medium and long-term, permanent and positive.	None proposed.
Limitation of the need to travel to key services, facilities and amenities.	Direct and indirect, medium and long-term, permanent and positive.	None proposed.

Economy

Commentary on proposed bridging Island Plan spatial strategy

8.108 Jersey has a rich economic legacy, based on agriculture and fisheries, tourism and the now-dominant international financial and legal services sectors. Brexit and the Covid-19 pandemic has, however, created considerable uncertainty for the long-term future shape and performance of the island's economy. In this respect, the bridging Island Plan seeks to support the island's economic recovery and boost economic productivity.

8.109 For example, the spatial strategy for the bridging Island Plan focuses growth on the locations with the broadest range of economic and employment opportunities, St Helier and Les Quennevais. This will support the economic vitality of these settlements, including through enhancing local economic offer and employment opportunities and supporting cultural activities. The spatial strategy also facilitates appropriate development in the island's local centres. This will support the economic and community vitality of these settlements and support the viability of local economic activities.

8.110 The delivery of affordable housing through Policy H5 has the potential to reinforce the rural economy through helping to increase the accessibility of local people to employment opportunities available locally. This in particular has the potential to support those engaged in local employment activities, such as associated with agriculture, tourism, community provision or other activities important to rural areas. It should be also noted that the spatial strategy will help limit the loss of productive agricultural land in the island; significant given the importance of Jersey's agricultural sector.

8.111 The bridging Island Plan also seeks to maintain and protect the use of existing light industrial accommodation for light industrial and ancillary related uses on the island's existing protected industrial sites (see Policy EI1). Locations are below, as defined on the proposals map:

- Rue des Prés Trading Estate, St Saviour;
- Jersey Steel, Beaumont, St Lawrence;
- St Peter's Technical Park, St Peter;
- Springside, Trinity;
- La Collette, St Helier;
- L.C. Pallot Properties, Trinity;
- Barrette Commercial Centre, Mont Mado, St John; and
- Thistlegrove, St Lawrence.

Commentary on the consultation version of the bridging Island Plan as a whole

8.112 The bridging Island Plan is in part a response to the challenge of understanding short-term economic trends given the impacts of the COVID-19 pandemic and changes brought about by Brexit. Nevertheless, certain medium-term and long-term trends are likely to continue to impact the shape of Jersey's economy. These include wider global trends, such as the impacts of new technologies and changes in consumer behaviours, and in Jersey's dominant finance sector.

8.113 As highlighted above, the spatial strategy will promote the economic vitality of the two largest settlement areas in the island through supporting the function of St Helier and Les Quennevais as Jersey's key hubs for services and facilities (see PL1 'Development in Town' and Policy PL2 'Les Quennevais'). This is supported by Policy SP6 'Sustainable island economy', which seeks to focus economic development for all sectors where it is appropriate to the scale and role of these centres. More broadly, the bridging Island Plan policies set out a range of provisions for supporting the economic vitality of Jersey and employment opportunities.

8.114 For example, as one of the largest economic sectors on Jersey, the bridging Island Plan aims to prioritise the retail sector through maintaining and improving the core retail areas and encouraging refurbishments or extensions of existing retail premises (see Policy ER1 'Retail and town centre uses', Policy ER2 'Large-scale retail and Policy ER3 'Local retail'). Supporting employment opportunities in the island, the redevelopment, intensification or expansion of existing office accommodation is encouraged through Policy EO1 'Existing and new office accommodation'. Existing businesses in the island will be further supported by policies which seek to safeguard key employment sites in the island (as mentioned within the proposed bridging Island Plan spatial strategy, above) and which seek to encourage flexible working practices (see Policy EO2 'Business run from home').

8.115 The rural economy is an integral part of the economic and community vitality of Jersey. In this context there are a wide range of employment activities in the countryside and around the island's coastline, together with strategic land uses and infrastructure that supply the island with minerals, water and which enable waste management. Recognising this, the Rural Economy Strategy[31] aims to balance the needs of the agricultural sector and other rural-based businesses such as; tourism, equine related concerns, and fishing and aquaculture to grow the rural economy while safeguarding Jersey's countryside, its character and the environment. This is acknowledged by policies which encourage development that is essential for the efficient operation of agriculture, horticulture, equestrian or forestry and which has an essential need to be located in the countryside (see Policy ERE2 'Diversification of the rural economy', Policy ERE7 'Equine development' and Policy ERE8 'Fishing and aquaculture'). Rural vitality will be further supported by policies which define a series of exemptions which will help deliver housing for rural workers in the island (see Policy H7, H8 and H9). This is expected to have a positive effect on the rural economy in terms of providing accommodation for key workers and supporting the vitality of rural settlements.

8.116 The bridging Island Plan also has close support for daytime and evening economy uses, including facilities such as cultural venues, restaurants, cafés, food and drink takeaways, public houses, bars and nightclubs. In this respect, St Helier's role as the island's cultural hub is reinforced by a number of policies and proposals, including Policy ER4 'Daytime and evening economy uses', Policy ER5 'Meanwhile retail and town centre uses' and Policy CI5 'Sports, leisure and cultural facilities'.

8.117 With reference to the visitor economy, Jersey has a range of key tourism and cultural attractions including Mont Orgueil Castle, Elizabeth Castle, La Hougue Bie, Jersey War Tunnels, the Channel Island Military Museum, Jersey Museum and Art Gallery and Jersey Zoo. The provision of new or enhanced cultural facilities to support and strengthen Jersey's local and international identity is encouraged through Policy SP4 'Protecting and promoting island identity', and provisions relating to the availability of high quality visitor accommodation are supported by Policy EV1. The visitor economy will also be supported by the bridging Island

[31] States of Jersey (2017): 'Rural Economy Strategy: 2017 to 2021', [online] available to access via: https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2652

Plan's focus on promoting a high-quality public realm, the conservation and enhancement of the historic environment and the protection and enhancement of landscape, townscape and seascape character and local distinctiveness. The bridging Island Plan policies relevant to these elements have been discussed under the 'Biodiversity and Geodiversity', 'Landscape, Townscape and Seascape' and 'Historic Environment' SA themes above. These provisions will therefore support key local components of the visitor economy.

Table 8.10: Likely significant effects, Economy

Likely significant effect	*Effect dimensions*	*Recommendations*
Facilitation of the growth of the economy and employment opportunities through the protection of existing employment land.	Direct, medium and long-term and positive.	None proposed.
Support for the economic vitality of St Helier and Les Quennevais.	Direct, indirect, medium and long-term, permanent and positive.	None proposed.
Promotion of the vitality and viability of Jersey's Local Centres.	Direct, indirect, medium and long-term, permanent and positive.	None proposed.
Support for traditional sectors of Jersey's economy.	Direct, indirect, short, medium and long-term and positive.	None proposed.
Support for emerging and new sectors of Jersey's economy.	Direct, indirect, short, medium and long-term and positive.	None proposed.
Support for rural economic vitality.	Direct, indirect, medium and long-term and positive.	None proposed.

Cumulative effects

8.118 Cumulative effects occur from the combined impacts of policies and proposals on specific areas or sensitive receptors.

8.119 In the context of SA, cumulative effects can arise as a result of the in-combination and synergistic effects of a plan's policies and proposals. Comprising 'intra-plan' effects, these interactions have been discussed above in sections 8.9 to 8.117, which evaluate the in-combination and synergistic[32] effects of the various policies of the bridging Island Plan.

8.120 Cumulative effects can also result from the combined impacts of a plan with impacts of another plan, or the 'inter-plan' effects. These can affect the same receptor, resulting in in-combination or synergistic effects. The bridging Island Plan therefore has the potential to combine with other planned or on-going activities in the island to result in cumulative effects.

8.121 Furthermore, the combination of bridging Island Plan proposals and other proposals and activities being taken forward in the wider area has the potential to lead to cumulative effects.

8.122 Examples include:

- Ports of Jersey expansion (expansion of the port, increasing overall capacity to 1.2 million tonnes and allowing some land to be able to be released for redevelopment)
- The redevelopment of Jersey Airport (including integrated arrivals and departures terminal, and project to addressing aviation compliance issues)
- Health care enhancements (including, potentially, a new hospital at Overdale to replace the General Hospital)
- Coastal flood defence and land reclamation proposals. This includes those associated with the provisions of the Shoreline Management Plan, which proposes 'Advance the Line'

[32] Synergistic effects arise between two or more factors to produces an effect greater than the sum of their individual effects.

policies in some locations, where new sea defences would be built seaward of existing defences, and 'Adaptive Management' approaches which will deliver tailored management schemes depending on the location

- Active travel enhancements (including the eastern shared cycle and walking network)
- Public transport enhancements (including general bus infrastructure and network upgrades)
- Potential expansion of tourism and visitor provision
- Strategic sports and leisure upgrades across the island (incorporating programme of works set out in the Community Sports Hub and Island Stadium Feasibility Study).

8.123 In this context, potential effects (both positive and negative) which may occur as a result of the in-combination effects of the bridging Island Plan and other plans and proposals in the area include the following:

- Increases in traffic flows and congestion from the in-combination effects of development and infrastructure capacity enhancements, with potential impacts on air and noise quality, landscape character and the historic environment. However, the in-combination effects of proposals on enhancing public transport and pedestrian and cycle infrastructure may help limit potential negative effects and secure positive effects in this regard.
- Cumulative impacts on ecological networks. This is from the in-combination effects of new development and associated infrastructure on habitats and biodiversity corridors. However, enhancements to green infrastructure provision facilitated through bridging Island Plan proposals and other projects in the area, as well as an increased focus on biodiversity net gain have significant potential to support ecological networks.
- Cumulative impacts on coastal habitats. This includes from the in-combination effects of new development in coastal parts of the island with coastal flood risk management measures.
- Improvements to accessibility resulting from the in-combination effects of delivering development in accessible locations combined with enhancements to public transport and walking and cycling networks.

8.124 As highlighted above, for many potential cumulative effects, the policy approaches proposed by the current version of the bridging Island Plan will help reduce the significance of these in-combination impacts. However, monitoring for the bridging Island Plan will be a key means of ensuring that unforeseen adverse environmental effects are highlighted, and remedial action can be taken where adverse environmental effects arise.

8.125 No additional mitigation measures or recommendations have been proposed relating to the potential effects identified. This reflects the carefully designed spatial strategy and robust policy approaches which are put forward through the bridging Island Plan. In particular, the plan will help limit the magnitude and scale of the potential negative environmental effects associated with the delivery of 4,150 homes, new employment uses and associated infrastructure over the plan period to 2025.

8.126 It should be noted, however, that the policies put forward through the current version of the plan do not prevent the likelihood of negative effects taking place, including those highlighted in the SA Report for the proposed site allocations. Instead they reduce the likelihood of *significant* negative effects resulting from new development in the island. It should also be noted that the delivery of housing allocations and employment provision in the island will require inevitable trade-offs between the various environmental, social and economic elements which have been highlighted through the SA process to date.

8.127 In order to understand how these trade-offs take place in practice during the implementation of the bridging Island Plan, **Chapter 9** presents a monitoring programme to evaluate the identified effects of the plan.

9. Monitoring programme for the SA

Monitoring in SA

9.1 The SEA Directive states that "member states shall monitor the significant environmental effects of the implementation of plans and programmes…in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action" (Article 10.1). In addition, the Environmental Report (or, in this case, SA Report) should provide a "description of the measures envisaged concerning monitoring" (Annex I (i)). To limit the potential burdens related to monitoring associated with the SA process, monitoring should be undertaken smartly. For this reason, the proposed monitoring framework should focus on those aspects of the environment that are likely to be negatively impacted upon, where the impact is uncertain or where particular opportunities for improvement might arise.[33]

Proposed monitoring programme

9.2 **Table 9.1** outlines suggestions for a monitoring programme for gauging the bridging Island Plan's implementation in relation to the areas where the SA has identified significant negative effects or significant opportunities for an improvement in sustainability performance. It also seeks to monitor where uncertainties relating to the appraisal findings arose, and suggests where monitoring is required to help ensure that the benefits of the bridging Island Plan are achieved through the planning process.

9.3 The purpose of monitoring is to measure the significant sustainability effects of a plan, as well as to measure success against the plan's objectives. It is therefore beneficial if the monitoring strategy builds on monitoring systems already in place. To this end, the indicators of progress chosen for the SA require data that is already being routinely collected at an island level by the GoJ and its partner organisations, or whose collection is already planned. It should also be noted that monitoring can provide useful information for future plans and programmes, including the forthcoming Island Plan 2025.

Table 9.1: Proposed monitoring programme for the SA of the bridging Island Plan

Area to be monitored	*Indicator*	*Data source*	*Frequency of monitoring*
Use of land	Percentage of development taking place on previously developed land	GoJ	Annual
Loss of the best and most versatile agricultural land	Number of hectares of agricultural land lost to development	GoJ	Annual
Effect of housing, employment and infrastructure provision on greenhouse gas emissions	Carbon footprint of Jersey	GoJ	Annual
Effect on the delivery of renewable energy	Renewable energy installation capacity in MW	GoJ	Annual
Effects on landscape and townscape character	Percentage of new developments which are informed by detailed characterisation studies	GoJ	Annual
Employment in the traditional sectors of Jersey's economy	Number of people employed in agriculture and tourism	GoJ	Annual
Employment in emerging sectors of Jersey's economy	Number of people employed in emerging economic sectors	GoJ	Annual
Car use	Proportion of people travelling to work by public transport or walking and cycling	GoJ	Annual

[33] Whilst not a requirement for the bridging Island Plan, monitoring for the current SA has adopted these principles as good practice.

Part 3: What are the next steps?

10. Next steps

Next steps for the plan making / SA process

10.1 This SA Report accompanies the draft consultation version of the bridging Island Plan for consultation.

10.2 Once the period for representations on the consultation version of the bridging Island Plan document / SA Report concludes, the main issues raised will be identified and summarised and the Minister for the Environment will publish his initial response to them.

10.3 The bridging Island Plan, together with all the representations and the Minister for the Environment's initial response to them, will then be submitted for independent examination. The GoJ will also submit the associated evidence base documents, and the SA Report.

10.4 At independent examination, an Inspector will consider representations (alongside the SA Report), before reporting back on the bridging Island Plan, which may include recommendations for modification of it. These may require further SA and consultation, depending on their nature.

10.5 The Minister for the Environment and States Members will then consider the draft Plan, SA and the Inspector's report before posing their own final amendments to the draft Plan (if deemed necessary), after which the plan and proposed amendments will be debated and approved by the Assembly.

10.6 At the time of adoption, an SA 'Statement' will be published that sets out (amongst other elements) 'the measures decided concerning monitoring'.

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Appendix A Scoping information

The following overview presents the baseline for the SA as gathered during the scoping stage of the SA in 2019/2020. This baseline information comprises information collected prior to the Covid-19 pandemic.

A1: Air, Land, Soil and Water Resources

Summary of Current Baseline

Future Jersey Baseline

Introduction

Several Future Jersey indicators directly relate to the 'Air, Land, Soil and Water Resources;' SA theme, with those of relevance to the SA process including air quality, water quality (both marine and natural waters), water consumption, waste management and soil quality. Key trends relating to these indicators are summarised in the following sections.

Air Quality

Jersey's air quality typically meets international standards for the vast majority of the year, thanks to the Island's prevailing weather and the absence of major industrial activity. Typically, 90% of the 22 monitoring sites have no breaches. In 2016, there were only four breaches.

Breaches can occur where a change in weather pattern over a period of time causes higher pollution than usual in that area, before returning to expected conditions[34].

As stipulated in the Jersey Air Quality Strategy, implemented in 2013, everyone in Jersey should have access to outdoor air without significant risk to their health. There should be minimal impacts from air pollutants on the environment, as evidenced by reporting according to international reporting standards[35].

As shown in **Figure A1.1** below, the long-term ambition is to continue the trend, further improving air quality through tackling traffic congestion (the key contributor to poorer air quality on Jersey).

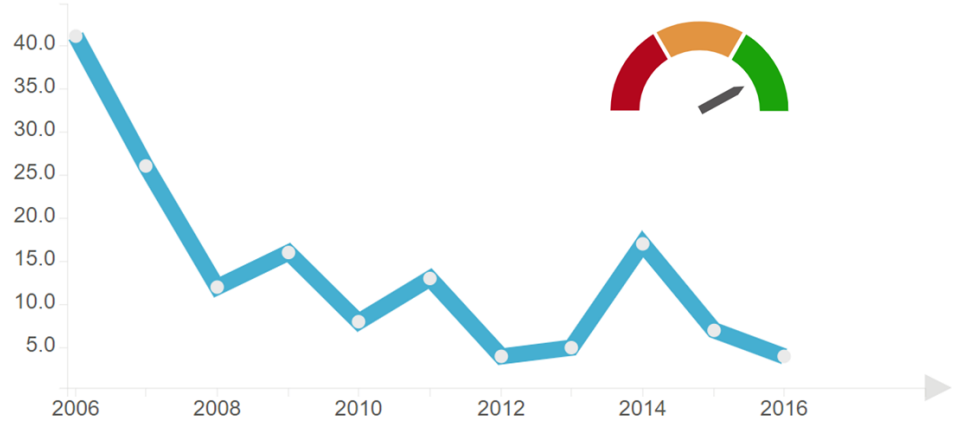


Figure A1.1: The number of times average monthly NO_2 concentrations exceeded European Directive limits at any of Jersey's 22 monitoring sites in a year

[34] Government of Jersey (2019): 'Future Jersey indicator: improve air quality', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/AirQuality.aspx> last accessed [20/11/19]
[35] States of Jersey (2013): 'Jersey Air Quality Strategy and Action Plan', [online] available to access via: <https://statesassembly.gov.je/AssemblyReports/2013/R.049-2013.pdf> last accessed [20/11/19]

Water Consumption

The efficient management of water resources is essential to individual and community wellbeing, and for the protection of biodiversity and ecological systems. The sustainable use of Jersey's water resources is imperative to ensure water security for Islanders and the environment into the future.

Jersey Water is the sole supplier of treated mains water to the Island. In 2017, the company supplied 7.3 billion litres of mains water to approximately 40,000 homes and businesses, via a 580km network of mains.

This supply relies largely on the collection and storage of surface water. The total storage capacity of the Island's six main reservoirs when full is limited to about 120 days' supply, based on current average daily demand. A desalination plant can augment natural water resources when rainfall levels are low by providing up to 50% of daily demand. But the plant cannot meet the entire daily demand.

In the years between 2006 and 2014, the volume of water supplied by Jersey Water had reduced by over 14%, from 81 thousand litres per person to 73 thousand litres. The 2017 reduction to 69.5 was partly due to a relatively wet summer, but mainly as a result of fewer leaks from the mains network[36].

This positive long-term trend has been achieved through water-saving initiatives and reducing leakage from the supply network. Leakage rates on Jersey Water's network are now on a par with the lowest rates in the UK.

Figure A1.2 (below) shows that the ambition is to continue the trend towards using Jersey's water more efficiently and sustainably, which is essential in response to a changing climate with longer drier periods and more unpredictable rainfall.

Figure A1.3 (below) shows the location of the treated water network, the raw water network and the water pollution safeguarded area on the Island.

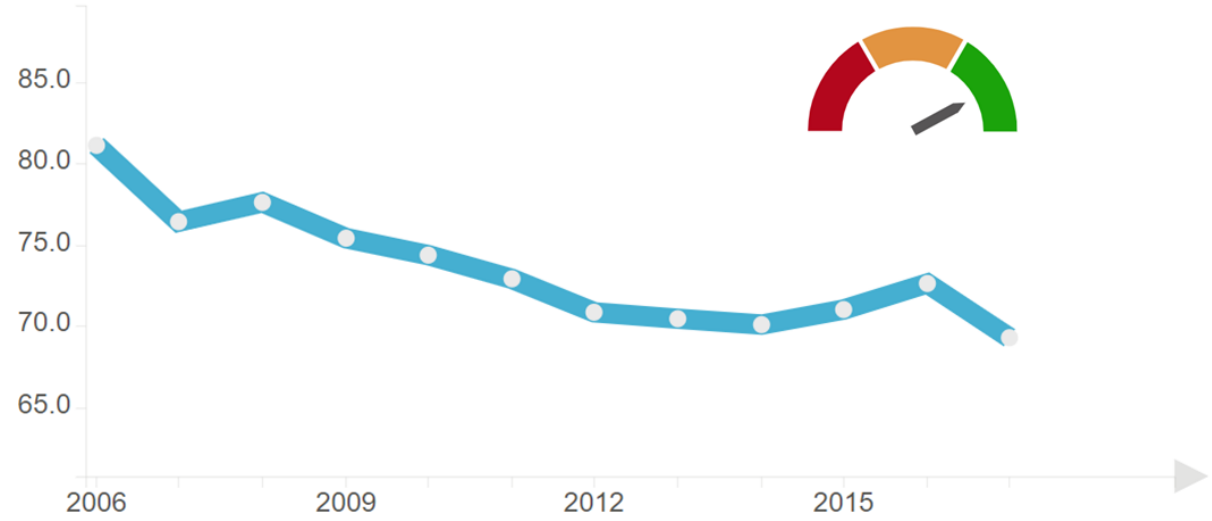


Figure A1.2: Water consumption per person in Jersey, measured in thousands of litres

[36] Government of Jersey (2019): 'Future Jersey indicator: reduce water consumption', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/WaterConsumption.aspx> last accessed [20/11/19]

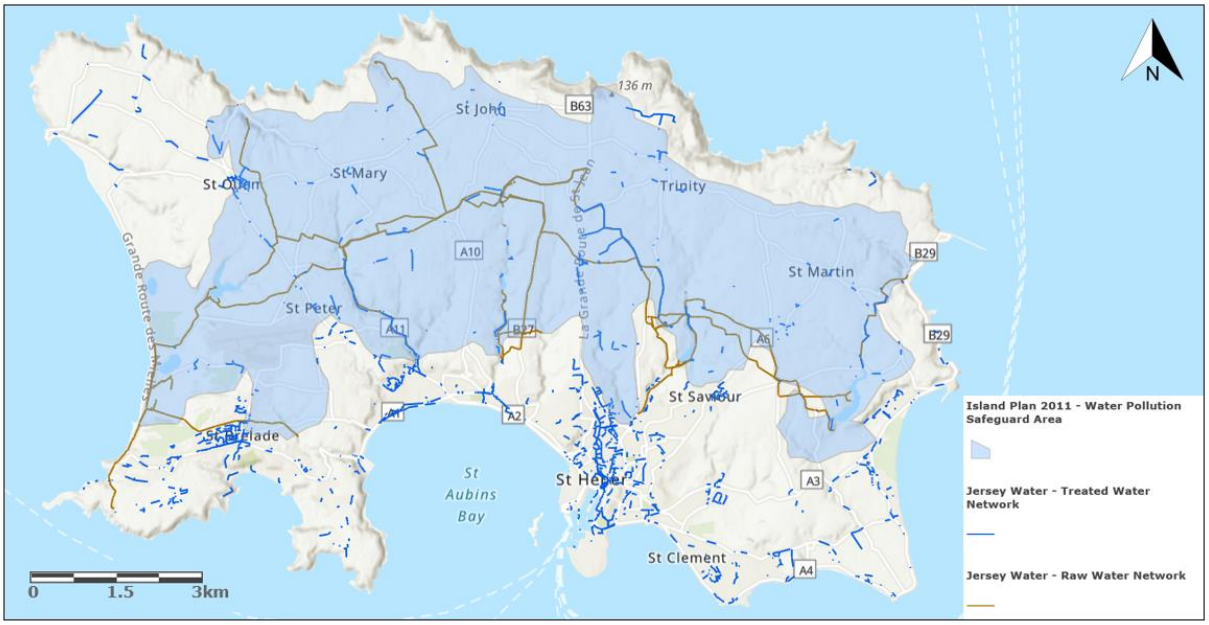


Figure A1.3: Treated water network, raw water network and water pollution safeguard area

Water Quality: Natural and Marine

An adequate supply of good quality water is essential for a healthy and functional natural environment, for recreation and to support Jersey's economy.

Drinking water supplied by Jersey Water meets national compliance standards but achieving these standards requires costly solutions to the quality of the raw water supply. About 10% of the Island's population are not connected to mains water and rely on a private supply.

This headline indicator focuses on the quality of the ground and surface water in Jersey's natural environment. It invites further exploration of the causes and consequences of poor water quality and tracks progress over time in managing and protecting the quality of the Island's natural water resources for the future.

Jersey is divided into eight inland Water Management Areas (WMA). The status of the surface and groundwater in each WMA is scientifically assessed as 'good', 'moderate' or 'poor'. In 2014, all eight WMAs were assessed as 'poor' for groundwater quality. Half were also rated as 'poor' for surface water quality.

The status assessment has confirmed the already-known, and well-documented, issues concerning nitrates in the Island, with more than 80% of stream catchment water bodies failing to achieve 'good' status for nitrates, and six of the eight WMA's classified as 'at risk' for pesticides. The groundwater assessment highlighted pressure from nitrates and pesticides.

The next full status assessment update for this indicator is not until 2021, but regular sampling is undertaken. Although there is a further analysis to be undertaken, current results show that water quality is improving - particularly the concentration of nitrates in Jersey's streams[37].

In terms of marine water quality, since 2008 all of Jersey's bathing waters have based the European Bathing Water Imperative Standard. In 2015, 81% passed the Guide Standard, which is more stringent. Compliance varies as it depends on rainfall and associated run-off from the land. As indicated below in **Figure A1.4**, the long-term ambition is to continue the trend. Good sea water quality supports habitats for economically and ecologically important species and a critical resource for fishing and tourism industries on the Island.

[37] Government of Jersey (2019): 'Future Jersey indicator: improve natural water quality', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/NaturalWater.aspx> last accessed [20/11/19]

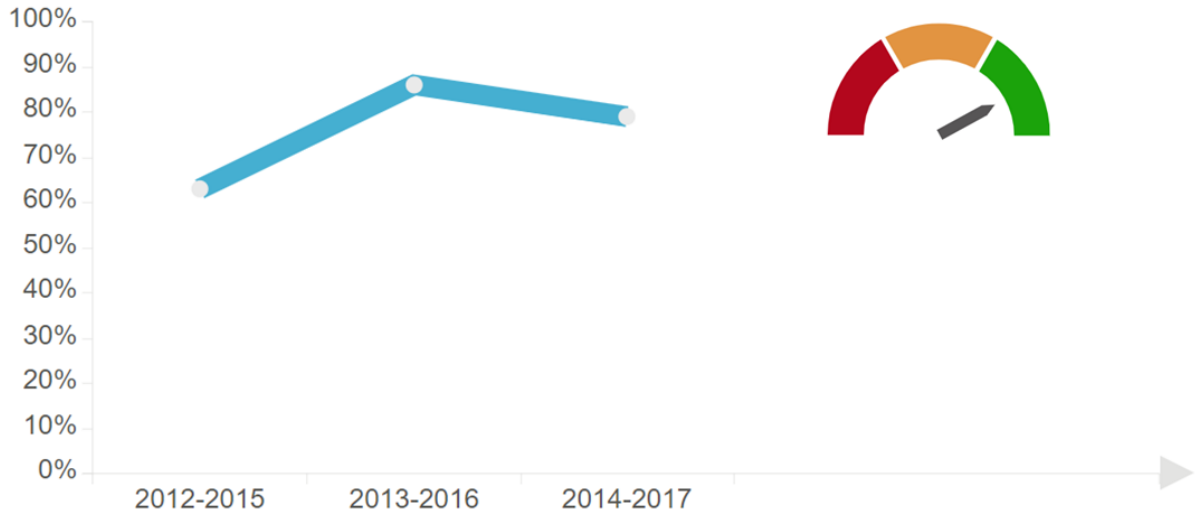


Figure A1.4: Percentage of Jersey's beaches achieving 'excellent' European bathing standards

Waste Management

As stipulated in the State of the Environment (2011-2015) Report, waste management is controlled through the Waste Management (Jersey) Law 2005 (the Waste Law) which came fully into force in 2007 and is administered by the Department of the Environment (following re-organisation of GoJ, this is now 'Growth, Housing and Environment'). Between 2011 and 2015, there has been significant progress in raising awareness of the Waste Law and in helping organisations and individuals to meet its requirements. Ensuring compliance with this important environmental legislation and using enforcement powers including prosecution, is an important part of protecting the Island's environment.

The Waste Law ensures that environmentally sound waste management practices are followed to reduce the potential pollution of air, land and water through poor waste disposal and management. This is achieved through regulatory licensing, including:

- Licensing of sites carrying out waste management activities;
- Enforcement action and advice against unlicensed or harmful activities involving waste;
- Registration of carriers (by road transportation) of hazardous or healthcare wastes; and
- Control procedures for movements of hazardous or healthcare wastes within Jersey and for hazardous and other wastes exported or imported to Jersey.

A reduction in the amount of waste generated in Jersey is an indicator of greater resource efficiency and more sustainable consumption behaviour. The indicator serves as the gateway to exploring environmentally sound waste management practices are followed to reduce the potential pollution of air, land and water through poor waste disposal and management.

In 2017, Jersey produced 108,271 tonnes of non-inert waste - the equivalent of 1.03 tonnes per person. This was a small reduction compared to the previous year, but levels have remained largely static over the past five years[38].

As shown below in **Figure A1.5**, the long-term ambition is to continue and sustain the trend, appropriately balancing the re-use and recycling of waste and energy recovery, prioritising alternative solutions for materials unacceptable for energy recovery.

[38] Government of Jersey (2019): 'Future Jersey indicator: reduce waste', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/Waste.aspx> last accessed [20/11/19]

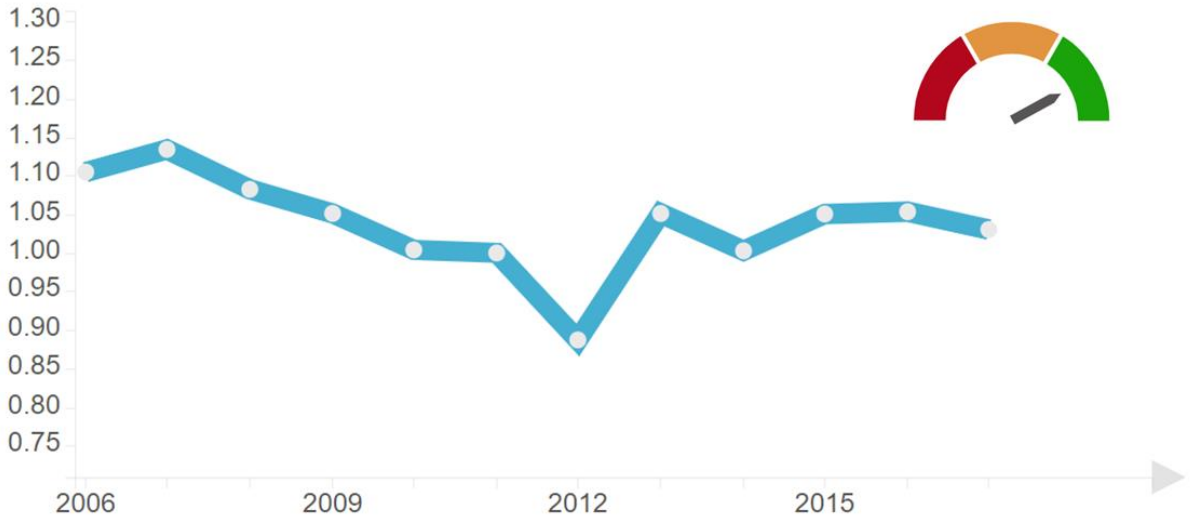


Figure A1.5: Tonnes of non-inert waste produced per person

Soil Quality

Soil quality is important for several reasons. First and foremost, it is a vital link in the ecosystem that supports Jersey's unique natural environment, so treasured by Islanders. A decline in soil organic matter (SOM) could put this ecosystem at risk.

Maintaining and improving SOM is also of key importance to the productivity of agricultural soil, and therefore essential to Jersey's farming industry, including its dairy industry, and the host of crops grown in the fields,, including Jersey Royals. Half of Jersey's surface area is currently farmed commercially.

SOM also has a role to play in counteracting global warming. Increases in SOM can help carbon sequestration by acting as a carbon sink, and therefore helping Jersey meet the demands of international protocols to reduce greenhouse gas emissions.

Maintaining the good health of the Island's soil could have a positive impact on other environmental indicators, such as breeding birds and butterflies, as well as Islanders' overall quality of life, including health and wellbeing measures.

The 2018 data is the first data set for most of the environment types included in the survey of Jersey's SOM. These include broad-leaved and coniferous woodlands, bracken, heathland/ shrubs, wetlands, and permanent and grazed grasslands). The data represents a baseline, against which changes in SOM will be measured and considered. The initial finding is that overall SOM stands at an average of 12%, which is within 'acceptable' levels.

This figure can be broken down into commercial agricultural fields and 'natural' habitats (woodlands, wetlands, grasslands, etc). SOM in the natural areas ranges from an average of 36.8% for wetlands, to 6.8% for bracken. However, these levels are likely to remain unchanged in future years, unless there are drastic changes, such as woodland clearances, which are unlikely.

A total of 50% of Jersey's surface area is farmed commercially, and this is where any changes in SOM are likely to happen. SOM levels for this land is currently at an average of 2.9%. Increasing it to between 4-5% in the future would take it from an 'acceptable' level, up to 'good' or 'excellent'.[39]

Additional SA Baseline

The following information and data trends have been assembled from the State of the Environment Report (2011-2015), and include information on water resources, water quality, pollution incidents and

[39] Government of Jersey (2019): 'Future Jersey indicator: improve soil quality', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/Soil.aspx> last accessed [20/11/19]

land use. Indicators are classified as either red, amber or green depending on their performance, with comparison drawn to the 2005-2010 trends.

Water Resources

Water resources and the range of services they provide are very important to Jersey: they underpin economic growth, support healthy communities and are fundamental to environmental sustainability.

The water resources in Jersey are all interconnected. Rainfall replenishes the groundwater resource. Groundwater provides the water in wells and boreholes and forms springs and streams that keeps streams flowing during the dryer months. This water in streams is captured in reservoirs for drinking water, abstracted for irrigation or other uses and maintains stream habitats as it flows towards beaches and into the sea.

- Indicator FW1a: The volume of drinking water supplied by Jersey Water per annum: Green – between 2011-2015 the volume of water was sufficient for the needs of the Island (same trend observed between 2005-2010);
- Indicator FW1b: The water table depth at measured sites: Green – between 2011-2015 the water table across the island remained stable (same trend observed between 2005-2010); and
- Indicator FW1c: Annual leakage of water mains: Green – between 2011-2015 there was a decrease in volume of mains water lost via leakage (data not available between 2005-2010)

Water Quality

Since 1990, approximately 50 groundwater sites across Jersey have been monitored on a six monthly basis by the Department of the Environment. Nitrate is a longstanding issue in Jersey's Waters; Jersey has some of the highest levels of nitrate in Europe. This situation is improving, as the number of groundwater sites with a nitrate level below the EU standard of 50 mg/l is rising, and the number of sites with very high levels is decreasing. One of the main sources of nitrates in surface and ground waters comes from agricultural activities.

- Indicator FW2a: Nitrate levels in groundwater: Red – between 2011-2015 the levels were classified as being in a poor status (same trend observed between 2005-2010)

As a result of a review and rationalisation process, the number of inland surface water (stream) sites monitored by the Department of the Environment has been reduced from 12 each month to eight sites per quarter. Field data including pH, conductivity, dissolved oxygen and temperature are measured using field meters and test kits. Chemical analysis for parameters such as nitrate, phosphate, potassium and microbiology are undertaken by the States' Official Analyst laboratory. Biological water quality is monitored by the Department of the Environment. It is measured by assessing the types and abundance of the insects that have part of their life cycle in water.

- Indicator FW2b: Nitrate levels in surface waters: Amber – between 2011-2015 the levels were classified as being in a moderate status (same status observed between 2005-2010);
- Indicator FW2c: Pesticide levels in surface waters: Amber – between 2011-2015 the number of samples breaching 0.1ug/l is stable (improved status in comparison to the 2005-2010 trend which was 'red', demonstrating an increasing trend in the number of samples breaching 0.1ug/l); and
- Indicator FW2d: Biological quality of surface waters: Amber – between 2011-2014 the levels were classified as having a moderate or improving status (same status observed between 2005-2010)

The Department of the Environment monitors 16 of the most popular bathing water beaches around Jersey. At each beach, the bathing water quality is sampled weekly from mid-May to the end of September. The water quality at Jersey's local beaches is generally high.

- Indicator MW1b: Radioactivity in the marine environment: Green – between 2011-2014 there was a decreasing trend in radionuclides (same trend observed between 2005-2010);
- Indicator MW1c: Toxic algal testing: Green – between 2011-2015 toxins were not detected / below trigger point (same trend observed between 2005-2010); and

- Indicator MW1d: Heavy metal concentration in shellfish and algae: Green – between 2011-2015, heavy metals were not exceeding levels found in comparable jurisdictions (same trend observed between 2005-2010).

Pollution Incidents

Pollution can be split into two broad types:

- **Point source pollution:** pollution emitted from a single and identifiable source (for example, a leaking heating oil tank in the garden, a leaking septic tank, a drum containing chemicals dumped in the stream); and
- **Diffuse source pollution:** pollution that derives from a wider area (for example; slurry/animal waste spread to land, fertilizer spread onto a field)

Oil incidents continue to be a high proportion of reported incidents, although this proportion is reducing. Conversely the increasing trend in agricultural category incidents from a low starting point is possibly a result of the increased public awareness and a higher reporting rate. Additional categories of pollution incidents include contaminated land, pesticides, construction, chemical / industrial, sewage / domestic and natural.

- Indicator FW3: Number and type of reported pollution incidents: Green – decreasing number of incidents reports between 2011-2015 (same trend observed between 2005-2010).

Waste incidents have been recorded since the introduction of the Waste Law in 2007. This indicator demonstrates how the Waste Law is helping to manage the environmental impact from waste incidents. Waste incidents include dumping waste at unauthorised sites or inappropriate locations, fly tipping, open burning of waste as a means of disposal, poor storage or stockpiling of wastes on site which may increase the risk of pollution of the environment. Waste arises from all sectors of the economy and society.

- Indicator W1: Number of reported waste incidents under the Waste Management (Jersey) Law 2005 (since 2011): Red – increasing number of incidents. The number of waste incidents has increased from 9 to 81 between 2011 and 2015, which was to be expected following the introduction of the legislation and new regulatory framework. The increase shows that there has been improved recording and a greater level of public awareness of the issues resulting in higher reporting levels. The figures do not equate to a larger number of incidents.
- Indicator W2: Total non-inert waste reused/recycled and composted per annum: Green – The target recycling rate of 32% set in the 2005 strategy was achieved in 2009, and between 2011-2015 these levels remained stable.
- Indicator W3: Total municipal solid waste (non-inert) arisings per capita: Amber – waste per capita was static between 2011-2015 (decreasing trend to the trend observed between 2005-2010 where waste was reducing).
- Indicator W4a: Recycling – total percentage of recyclables collected per annum: Green – between 2011-2015, more than 32% of waste was recycled (same trend observed between 2005-2010)
- Indicator W4b: Recycling – number of States of Jersey recycling facilities: Green – between 2011-2015, there was a higher number of States of Jersey recycling facilities (same trend observed between 2005-2010).
- Indicator W5: Total liquid waste (sewage) processed per annum: Amber – between 2011-2015, there was no % change of flow bypassing full treatment (same trend observed between 2005-2010). New treatment facilities will be complete by 2022. The new plant will take almost 40% more flow to full treatment which will protect the island's aquatic environment and give the infrastructure capacity to allow for population growth. There will also be additional storm storage tanks located at the new facilities, which will hold some of this sewage in high flows. When the flows drop off as the rainfall drops, this stored sewage can then be treated.
- Indicator W6: Number of slurry tanks on dairy farms: Green – between 2011-2015, all dairy farms have slurry storage on site (same trend observed between 2005-2010).

Categories of land use in Jersey

Approximately one quarter is 'built environment' which includes man-made surfaces such as buildings, roads, footpaths, domestic gardens, and harbour areas. The largest category, over 50%, is under 'cultivation' and so it is the nature of the working countryside that defines much of Jersey's local identity and sense of place. The 'natural vegetation' category includes all semi-natural habitats i.e. woodlands, dunes, grassland, cliffs and shrub.

Approximately 50% of the total land use in Jersey is for agricultural production (over 6,000 ha). The scale and relatively intensive nature of the current agricultural systems means that farming inevitably creates an environmental pressure. Indeed, evidence suggests that intensive farming is negatively impacting on water resources and soil conservation. However, the agricultural land bank is also a 'habitat' supporting specific assemblages of plants and animals. Given the extent of cultivated land in Jersey, there are opportunities for significant gains if the inherent environmental value of this agricultural land can be maximised.

Surveys play a vitally important role in the protection of the Island's farmed, natural and urban environment and there are international obligations in respect of monitoring and control of regulated organisms. Species covered include the Colorado beetle (*Leptinotarsa decemlineata*) a pest of potatoes, Tobacco whitefly (*Bemisia tabaci*) a pest of tomatoes and fireblight (*Erwinia amylovora*) a disease of the family *Rosacae* which includes apples, pears and hawthorn trees. 39 surveys for pests and diseases regulated under European, UK and local legislation are conducted annually with results reported to the UK and EU. For a proportion of these organisms Jersey is a 'Protected Zone' meaning that the organisms are not present here and the data gathered justifies our continued protected status. Protected Status stipulates that certain plant species that host/carry regulated organisms can only be imported to Jersey if they originate from similar protected zones and are accompanied by a 'Plant Passport' attesting that fact, reducing the risk of transmission of regulated organisms to Jersey and around the European Community.

Summary of Future Baseline

New housing and employment provision on the Island have the potential for adverse effects on air quality through increasing traffic flows and associated levels of pollutants such as NO_2, particularly along the main routes around Jersey. Implementation of the aims, objectives and policies contained in the Jersey Air Quality Strategy and Action Plan, present opportunities to continue to improve air quality.

Future development has the potential to affect water quality through diffuse pollution, waste water discharges, water run-off, and modification. A key challenge for Jersey Water is to ensure an adequate water supply for the future needs of an increasing population, within the challenges being experienced through climate change. Jersey Water predicted that by 2032, if no action is taken, the Island would face a shortfall in water available for use equivalent to approximately 26% of the forecast daily demand. This shortfall is based on a forecast reduction in water available for use (due to global warming) of 11% and an increase in demand of 15% driven by population growth and lifestyle improvements[40].

Sustainable agriculture measures allow for the intensification of farming practices whilst also protecting the environment and natural resources. Reduced nitrogen run off is a key outcome and has benefits for water quality, biodiversity and human health. Sustainable agriculture practices could also provide farmers with economic benefits, for example reduced expenditure of fertiliser and increased efficiency.

Links to cross-cutting issues

The Aether Report outlines key risks of climate change for the Island, including:

- Risks of shortages in the public water supply, and for agriculture, energy generation and industry. Reduced amount of water available for withdrawal and increased demand for irrigation.

[40] Government of Jersey (2019): 'Future Jersey indicator: reduce water consumption', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/WaterConsumption.aspx> last accessed [20/11/19]

- Growing population means added demand. Drought and contamination of fresh water supplies by seawater are risks to Jersey, and the sea is rising.
- New and emerging pests and diseases, and invasive non-native species affecting people, plants and animals. The outbreak of disease could have severe impacts on agricultural production where there is a reliance on single crops.
- Sustainable resources are at risk as a potential increase in surface run-off from storm events results in the leaching of pollutants into water courses. Groundwater supplies may also be impacted by temperature and recharge rate changes.

A2: Biodiversity and Geodiversity

Summary of Current Baseline

Future Jersey Baseline

Ramsar Sites

The Convention on Wetlands of International Importance (the Ramsar Convention) is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. The convention was adopted in 1971 and came into force in 1975. The following four Ramsar sites are within proximity to the Island, shown in **Figure A2.1** (below), along with an overview of their key qualities.

- South East Coast of Jersey;
- Les Écréhous & Les Dirouilles;
- Les Minquiers; and
- Les Pierres de Lecq (the Paternosters).

The four designated Ramsar sites comprise of various habitats: reefs, boulder fields, mud, sandy and shingle shores not covered by water at low tide, combined with shallow tidal lagoons, seagrass beds and outlying reefs. Since 2010, management plans have been implemented for all four of Jersey's Ramsar sites.[41]

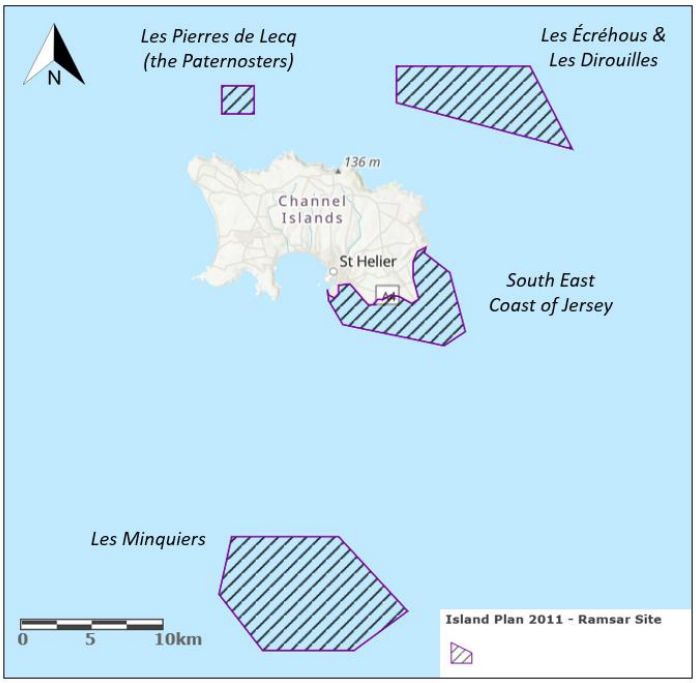


Figure A2.1: Ramsar Sites within proximity to the Island

[41] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: < https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]

Jersey's South East Coast

Jersey's South East Coast Ramsar site comprises various habitats; reefs, boulder fields, mud, sandy and shingle shores not covered by water at low tide, combined with shallow tidal lagoons, seagrass beds and a constellation of outlying reefs. A maximum spring tide range of 12 metres exposes in excess of 17.5 sq km of wave-cut rock platforms, extensive areas of reef at varying elevations, expansive rocky shores and a complex system of soft substrate gullies. The area also features a large, shallow, depositing, soft sediment bay, containing seagrass meadows, which provide important winter habitat for nationally important populations of waders and wildfowl. These factors, combined with Jersey's biogeographical position produce great biodiversity, a rich and diverse range of biotopes and some uncommon species assemblages. [42]

Les Écréhous and Les Dirouilles

The Les Écréhous and Les Dirouilles Ramsar site is situated in the Normano-Breton Gulf and consists of two reefs which form an extensive shoal area approximately 11 km long and 4 km wide. The tidal range can exceed 12 metres. At low tide various habitats are exposed, including reefs, boulder fields, sandy beaches and shingle banks. The area is fed clean, well-oxygenated water and this, together with the range of habitats and the site's biogeographical position supports a wide range of rich and diverse biotopes and some complex species assemblages. The site creates a range of sheltered areas which provide conditions favouring recruitment of planktonic larvae and a wide range of fish species. The site also provides habitat for the entire life cycle of many smaller marine organisms. This wide diversity provides feeding for dolphins, seals and seabirds.[43]

Les Minquiers

The offshore reef of Les Minquiers was declared a Wetland of International Importance in 2005. The site consists of an extensive shoal area approximately 16km long and 11km wide. The tidal range can exceed 12 metres. At high tide only rocky heads and a small supralittoral area, La Maîtresse Île (which supports some small stone dwellings, known as baraques) are exposed. At low tide various habitats are exposed, including reefs, boulder fields, sandy beaches and shingle banks. The area is fed clean, well-oxygenated water and this, together with the range of habitats and the site's biogeographical position supports a wide range of rich and diverse biotopes and some complex species assemblages.[44]

The Paternosters

The offshore reef the Pierres de Lecq, more commonly known as the Paternosters, was declared a Wetland of International Importance in 2005. The site has the one of the largest tidal ranges in the world, which can exceed 12 metres. At high water only four heads remain uncovered. At low tide an extensive reef is uncovered. Great Rock, which is ten metres above chart datum (CD) and Sharp Rock, four metres above CD, are the largest rocks and situated in the middle of the reef plateau. Its waters are relatively warm due to the influence of the Gulf Stream and surrounding oceanographic conditions. Habitat based evaluations using comparisons with the nearby South East coast of Jersey Ramsar site (designated 2000) indicate that due to the diverse range of habitats, communities and species the site has great value which plays a substantial ecological role in the natural functioning of the system.[45]

Threats and Management

The main threats to the four Ramsar sites as outlined in the four management plans are:

[42] States of Jersey (2011) Jersey's South East Coast Ramsar Management Plan [online] available at: <https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/ID%20RamsarSEcoastManagementPlan%20%28size%20806kb%29%20DM%2001022011.pdf> [accessed 05/11/2019]
[43] States of Jersey (2012) Les Écréhous and Les Dirouilles Ramsar Management Plan [online] available at: <https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/R%20RamsarLesEcrehousManagementPlan%20%28size%201Mb%29%20DM%2002022012.pdf> [accessed 05/11/2019]
[44] States of Jersey (2012) Les Minquiers Ramsar Management Plan [online] available at: <https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/R%20-%20Ramsar%20Les%20Minquiers%20Management%20Plan%2024.07.2015.pdf> [accessed 05/11/2019]
[45] States of Jersey (2012) Paternosters Ramsar Management Plan [online] available at: <https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/R%20RamsarPaternostersmanagementplan%20%28size%20899kb%29%20DM%2002022012.pdf> [accessed 05/11/2019]

- Habitat decline due to pollution and climate change;
- Conflict of use from fishing, other commercial and recreational use;
- Alien invasive species; and
- Limited jurisdiction.

In this regard, the Management Plans for each of the four Ramsar sites in Jersey seek to:

- Conserve the environmental and ecological attributes of the reefs for the benefit of future generations;
- Use the natural resources of the reefs in a sustainable manner that is compatible with the maintenance of the ecosystem functions;
- Protect and restore natural habitats;
- Restore viable populations of native species;
- Increase community commitment and awareness; and
- Fulfil Jersey's obligations under the Ramsar Convention and other international agreements.

Ecological and Geological Sites of Special Interest (SSI)

Sites of Special Interest (SSI) are designated due to their special zoological, ecological, botanical or geological interest.[46] Since 1996, a total 19 Sites of Special Ecological Interest and 21 Sites of Special Geological Interest have been designated. The condition of SSIs has seen an increase in the overall favourable condition of protected areas between 2011 and 2015 which indicates that the protected sites have met agreed objectives set for the features of interest. [47] Since 2006, the amount of land designated as ecological or geological SSIs within Jersey has increased from 269.86 hectares in 2006 to 556 hectares in 2018.

Only about 20% of Jersey's key semi-natural habitats are protected by SSI designation so there is a large area of critical natural habitat that is not protected. The Future Jersey ambition is to continue the trend in SSI designation, recognising the international commitments Jersey has made to conserve its special species, habitats and ecosystems. This is visualised in **Figure A2.2**.

Additionally, the State of the Environmental Report contains the following trend for SSIs

- Indicator NE1c: Condition of areas / sites of Special Scientific Interest: Green – between 2011-2015 there was an increase in the overall favourable condition of protected areas

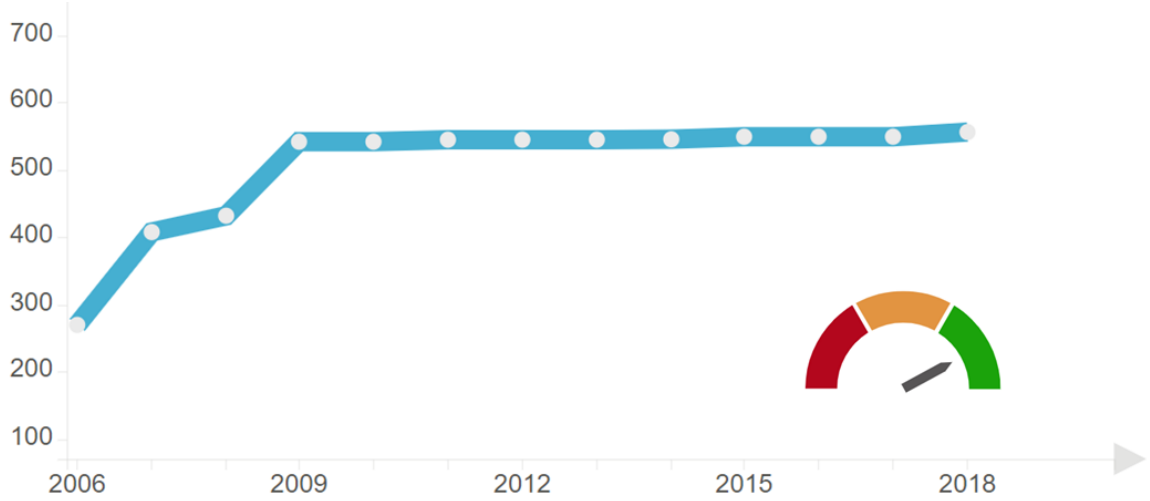


Figure A2.2: The amount of land designated as ecological or geological SSIs

[46] Planning and Environment Committee (no date) Biodiversity: a strategy for Jersey [online] available at: <https://www.gov.je/sitecollectiondocuments/environment%20and%20greener%20living/id%20biodiversitystrategybooklet%20dm.pdf> [accessed 05/11/2019]
[47] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: < https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]

The ecological SSIs are as follows:

- Noirmont (located on the south west of the Island);
- Portelet (located on the south west of the Island);
- Ouaisné (located on the south west of the Island);
- La Landes Du Ouest (located on the south west of the Island);
- Les Blanches Banques (located on the south west of the Island);
- La Partie du Sud des Mielles du Sud (located on the west of the Island);
- La Partie du Nord des Mielles du Sud (located on the west of the Island);
- La Mare au Seigneur (located on the west of the Island);
- St Ouen's Bay Coastal Strip North of La Route des Laveurs, St. Ouen (located on the north west of the Island);
- Les Landes de l'Est (located on the north west of the Island);
- La Crête Fort SSI (located on the north of the Island);
- Le Petit Pré (located towards the centre of the Island);
- Bouley Bay and Les Hurets (located on the north of the Island);
- L'Etaquerel Fort SSI (located on the north of the Island);
- Mont Orgueil (located on the east of the Island);
- Grouville Marsh (located towards the east of the Island);
- Rue des Prés (located towards the south east of the Island);
- South Hill (located towards the south of the Island); and
- St Aubin's Fort (located off the south coast of the Island).

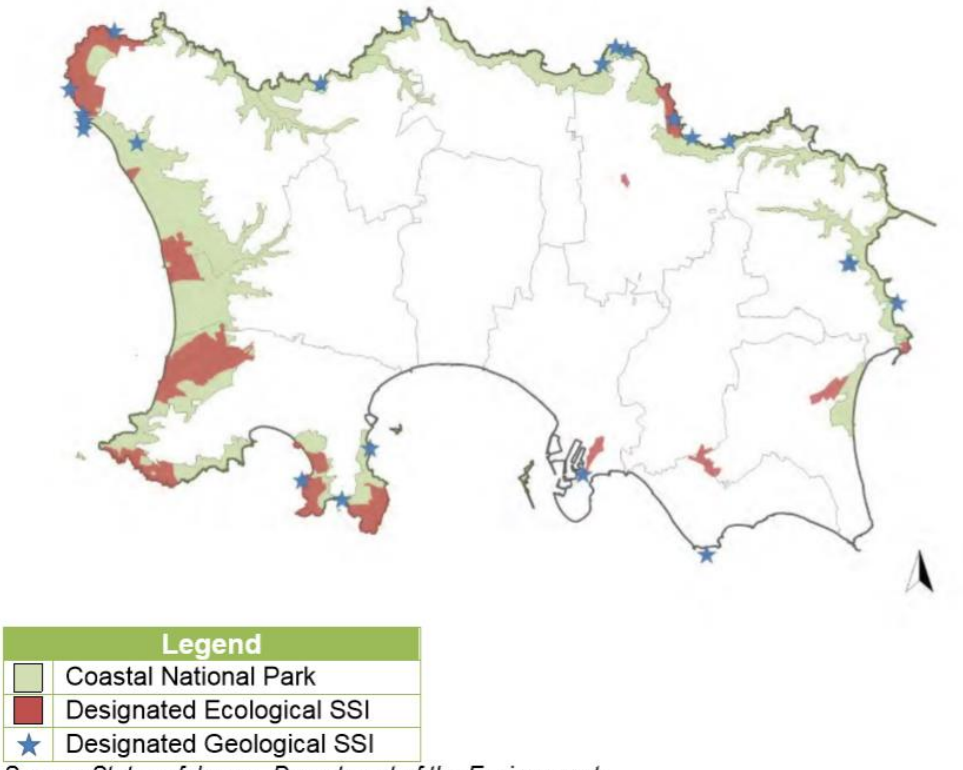
The geological SSIs are as follows:

- La Cotte de St. Brelade (located on the south west of the Island);
- Portelet Bay (located on the south of the Island);
- Belcroute (located on the south of the Island);
- South Hill (located towards the south of the Island);
- Mont Huelin Quarry (located on the north west of the Island);
- Le Petit Étaquerel (located on the north west of the Island);
- Le Grand Étaquerel (located on the north west of the Island);
- Le Pulec (located on the north west of the Island);
- The Pinnacle (Le Pinacle) (located on the north west of the Island);
- La Cotte à la Chèvre (located on the north west of the Island);
- Île Agois (located on the north of the Island);
- Sorel Point (located on the north of the Island);
- Giffard Bay (located on the north of the Island);
- Belle Hougue Caves (located on the north of the Island);
- Les Rouaux (located on the north of the Island);
- Bouley Bay and Les Hurets (located on the north east of the Island);
- L'Islet (located on the north east of the Island);
- La Tête des Hougues (located on the north east of the Island);

- La Solitude East (located towards the east of the Island);
- Anne Port Bay (located towards the east of the Island); and
- La Motte (Green Island) Le Croc and Le Nez (located on the south of the Island).

The location of the SSIs on the Island is visualised below in **Figure A2.3.**

The condition of SSIs has seen an increase in the overall favourable condition of protected areas between 2011 and 2015 which indicates that the protected sites have met agreed objectives set for the features of interest. Five SSIs on the island (Gorselands, Noirmont, Portlet, Ouaisne and Les Landes) have comparable data from two separate surveys on habitat condition. Of these sites where there is comparable data, three have improved in condition and two have declined. However, the perceived decline in condition can be explained by a change in indicators which have been revised during the intervening time. On average, habitat quality has become more favourable by c.14% over the five sites which have been assessed twice. This is thought to be due to the habitat management activities carried out in those areas.[48]



Source: States of Jersey, Department of the Environment

Figure A2.3: Location of designated ecological and geological SSIs on the Island

Key species

Butterfly abundance

Data on the monitoring of the abundance of 24 species of butterflies in Jersey reveals that there has been a decline by 10.6% from 158.7 recorded butterflies in 2006 to 141.9 recorded butterflies in 2017. The Future Jersey trend is to transform the abundance of butterflies on the Island, improving habitat connectivity and reducing fragmentation (which is increasing the risk of colonies being wiped out). This is visualised in **Figure A2.4** (below).

The State of Butterflies in Jersey report also highlights that Jersey's butterflies are in an overall decline with the only increasing populations occurring in a handful of semi-natural sites on the west of the island. The need for housing, amenities and agricultural land has fragmented Jersey's semi-natural areas and there has been a loss of some Jersey's historical butterfly species such as the Bath

[48] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: <https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]

White (*Pontia daplidice*), Glanville Fritillary *(Melitaea cinxia)* and Large Tortoiseshell (*Nymphalis polychloros*).

The predominance of agricultural land in Jersey, especially in the centre and east of the island, is inescapable but management initiatives could be taken which will benefit butterfly and other wildlife species. Such initiatives should be focused on the creation of a wildlife corridor network across the island which, in practical terms, means making efforts to restore hedgerows, managing verges for wildflowers and, where possible, the creation of fallow strips round the edge of fields.[49]

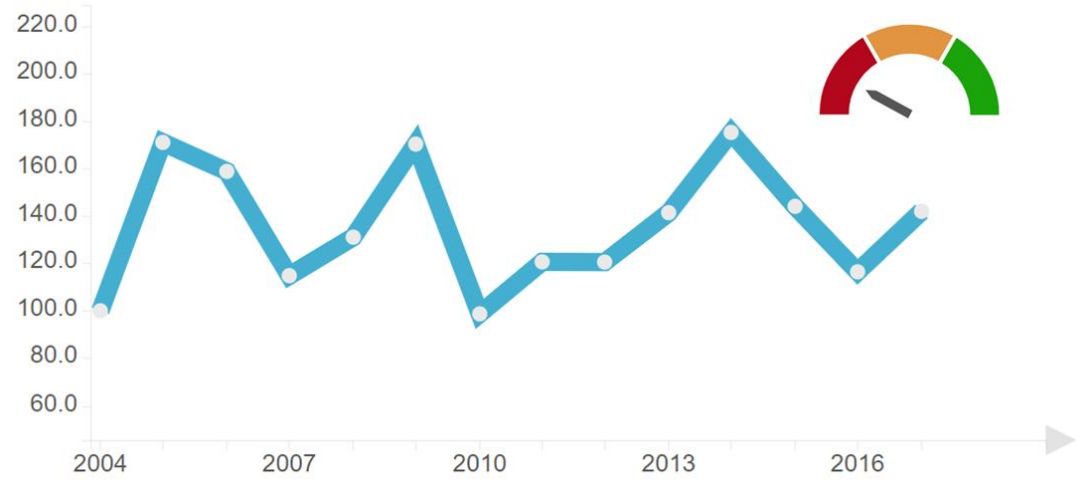


Figure A2.4: The abundance of 24 species of butterflies in Jersey using 2004 as a baseline

Breeding birds

Data on an average count of 44 species of birds per 1,000 metres across different habitat types reveals that there has been a decline from 4.8 in 2006 to 3.9 in 2017. This trend has fluctuated between 2006 and 2017 but overall there has been a steady decline.

This decline is thought to be caused by factors that occur largely outside the island such as climate change and loss of summer breeding sites. However, intensive farming practices and loss of habitat due to development as well as disturbance on Jersey's seashore by humans, dogs and vehicles could play a role. [50] The Future Jersey trend is to transform the populations of bird species on the Island, visualised below in **Figure A2.5.**

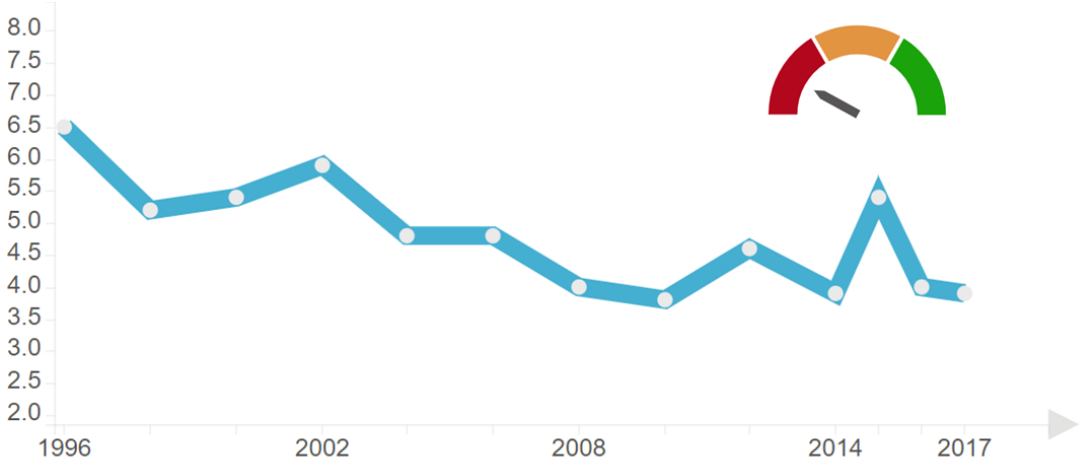


Figure A2.5: Average count of 44 species of birds per 1,000 metres across different habitats

[49] States of Jersey (2015) The State of Butterflies in Jersey [online] available at: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20The%20State%20of%20Butterflies%20in%20Jersey%20DM%2016072015.pdf> [accessed 05/11/2019]
[50] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: <https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]

Additionally, the State of the Environment Report (2011-2015) contains the following trends for the status of garden birds, wading birds and bats:

- Indicator NE5a: Status of 12 species of garden birds: Red – between 2011-2015 there were decreasing numbers of garden birds (same trend observed between 2005-2010);
- Indicator NE5b: Numbers of wading birds: Red – between 2011-2015 there was a decreasing number of wading birds (same trend observed between 2005-2010);
- Indicator NE6: Bat species diversity and abundance: Green – between 2011-2015 there were increasing numbers of bats on the Island, with 9 different species recorded.

Additional SA Baseline

Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESA) represent the main areas of the Island's key habitats. ESAs include the following:

- Les Landes heathland;
- St Ouen's Bay habitats;
- North Coast habitats; especially heathlands, coastal grassland, maritime cliff vegetation and interconnecting habitats;
- Rozel area – predominantly coastal habitats and woodland, including St. Catherine's Valley;
- Grouville habitats;
- South-West Coast heathlands;
- Ouaisné to Noirmont coastal habitats;
- Valley woodlands and wet grasslands; and
- Rue des Près wet grasslands.

Sites of Importance for Nature Conservation (SINC)

Other small semi-natural areas or sites that are important to wildlife and which have a biodiversity value are often protected as a SINC. These are often small sites of biodiversity value and can include networks of lichen-covered ancient roadside and field walls and banques that are home to rich wildlife communities.

Les Mielles Nature Reserve

Les Mielles Nature Reserve is located on Jersey's western coast within part of the Jersey Coastal National Park. Many key habitats of local and international importance for the conservation of biological diversity are located within it.

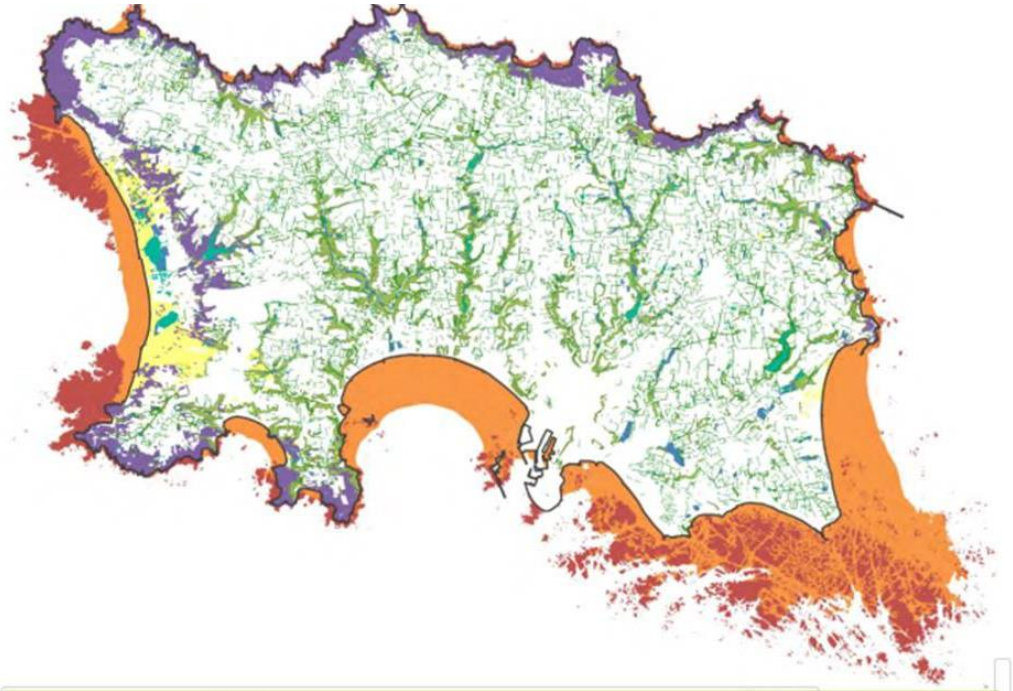
Key Habitats

Despite its relatively small size, the variety of Jersey's landscape, coast and seascape supports a myriad of wildlife forms, the particular mix of which is unique. The Island's geographical position, which is at the convergence of two bio-geographic marine regions; the exceptional tidal range; and favourable climate allows many species normally restricted to either Britain or the European continent to extend their range, resulting in an overlapping mixture of sea life, animals and plants found only in the Channel Islands. Consequently, some of the Island's habitats are of international importance in their own right, in addition to which the Island lies on two migratory flyways and is internationally important for overwintering wildfowl.

Natural vegetation makes up 17% of land use in Jersey which includes all semi-natural habitats i.e. woodlands, dunes, grassland, cliffs and shrub much of which is found on our coastline, many of which

are considered as important habitats which are valued for their unique mix of plants and animals or their biodiversity.[51]

The Biodiversity Strategy for Jersey[52] outlines eight key habitats within Jersey which need to be sustained and if possible extended. These are highlighted below in **Figure A2.6.**



Legend	Size
Boundaries (including hedges)	970 km
Mixed Woodland	943 ha
Coastal Sand Dune	251 ha
Wet Meadows	131 ha
Maritime Heath	860 ha
Marsh and Freshwater	98 ha
Intertidal Rock	1,406 ha
Intertidal Sand	1,836 ha

Figure A2.6: Distribution of key habitats within Jersey[53]

Wildlife corridors

Linear features in the Island's landscape, both natural and man-made, can be important for creating a network of routes or corridors for wildlife which form part of, or link, key habitats and main areas of habitat types in the Island. Pockets of vegetation and open space that, although not necessarily physically linked, are relatively closely spaced can function in a similar way to a continuous corridor. These corridors enable species to move about freely and interchange with other populations, as well as extending their distribution, and are important for maintaining and enhancing the Island's biodiversity.[54]

Trees and woodlands are important elements in the landscape and townscape of Jersey providing essential wildlife habitats which support the Island's biodiversity, helping to reduce air pollution and

[51] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: <https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]
[52] Planning and Environment Committee (no date) Biodiversity: a strategy for Jersey [online] available at: < https://www.gov.je/sitecollectiondocuments/environment%20and%20greener%20living/id%20biodiversitystrategybooklet%20dm.pdf> [accessed 05/11/2019]
[53] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: <https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]
[54] State of Jersey (2011) State of Jersey Island Plan 2011: Natural Environment [online] available at: <https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/IP%202011%20Natural%20Environment%20Pages%2072-108.pdf> [accessed 05/11/2019]

softening and enhancing built development. Similarly, many of the Island's boundary features - walls, fosses, banques and hedgerows - are also of great biodiversity value.

Marine Environment

The exceptional marine environment of Jersey is an area of intense activity where complex interactions between physical, biological, social and economic systems are constantly taking place. This has given rise to several issues and threats for the seas and shores of the Bailiwick including:

- fisheries management, both on and off shore;
- pressures on fish and shell fish and their food supply and impacts on non-target species.
- the abundant and diverse marine life supports shell and wet fishing industries and shell fish farming has also grown to a position of some size and importance;
- increased development pressure for coastal and shoreline construction of facilities such as large-scale land reclamation,
- marinas and the potential for facilities for renewable energy production and offshore aggregate extraction; and
- coastal defence maintenance and construction relative to considerations of climate change and raised sea levels.

Marine Protected Areas and 'No-dredging' zones

As well as the designated Ramsar sites, the Department of the Environment has worked closely with local and French fishermen to have several Marine Protected Areas (MPAs) designated within Ramsar sites as well as two 'no-dredging' zones on the south east coast of Jersey and around Les Minquiers offshore reef. These areas will further protect sensitive marine habitats and species such as Maerl and seagrass, whilst complying with Jersey's international obligations under multilateral environmental agreements such as Ramsar.[55]

Key Marine Species

Additionally, the State of the Environment Report (2011-2015) contains the following trends for key species on the island, including the marine environment:

- Indicator MW2a: Dolphin species abundance: Green – between 2011-2015 observations confirm population maintained at current 'good' levels (the same trend was observed between 2005-2010);
- Indicator MW2b: Marine water indicator species – Whelks: Red – 2011-2015 levels were below reference point (the same trend was observed between 2005-2010);
- Indicator MW2b: Marine water indicator species – Lobsters: Green – 2011-2015 levels were above reference point (same trend observed between 2005-2010);
- Indicator NE3: The development of Biodiversity Action Plan (BAP) for protected species: Amber – between 2011-2015 the target number of BAPs were achieved but not fully implemented (same trend observed between 2005-2010); and
- Indicator NE6: Bat species diversity and abundance: Green – between 2011-2015 there were increasing numbers of bats on the Island, with 9 different species recorded.

Invasive species

In addition to the pests and diseases there are a large number of other non-native species in the Island, some of which displace native species and cause economic problems, such as Japanese knotweed (*Fallopia japonica*), New Zealand pigmy weed (*Crassula helmsii*) and Hottentot fig (*Carpobrotus edulis*).

Likewise, there is an abundance of sea lettuce *(Ulva)* in Jersey, particularly in St Aubin's Bay where conditions are shallow, enclosed and relatively warm. The sea lettuce makes the sea less attractive

[55] States of Jersey (2016) The Environment in Figures: A report on the condition of Jersey's environment 2011- 2015 [online] available at: <https://www.gov.je/Government/Pages/StatesReports.aspx?reportid=2312> [accessed 05/11/2019]

to visitors from its green colour and it is thought to also release small levels of toxic fumes. It is a type of seaweed found along coastlines around the world but its growth is increased by:

- Nutrients from outside the bay;
- Run-off from streams that contain fertiliser; and
- Treated waste water from the water treatment works.

There is a long-term target to limit the growth of the sea lettuce by reducing nitrates from the land and the treatment works. The sea lettuce is moved at regular intervals throughout the summer months. [56]

Summary of Future Baseline

Habitats and species will potentially face increasing pressures from future development on the Island, with the potential for negative impacts on the wider ecological network. This may include a loss of habitats and impacts on biodiversity networks, which may be exacerbated by the effects of climate change, which has the potential to lead to changes in the distribution and abundance of species and changes to the composition of habitats.

The new Island Plan presents an opportunity to maximise benefits for biodiversity by including consideration of important habitats, species and designated sites at an early stage of planning for future growth. To maintain and improve the condition of biodiversity in the future, it will be important to not only protect and enhance important habitats but the connections between them. It will be crucial to effectively coordinate the delivery of housing, employment and infrastructure to ensure that opportunities to improve green infrastructure and ecological corridors are maximised.

Links to cross-cutting issues

The Aether Report outlines six key risks of climate change for the Island's natural environment, including: risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems. The natural environment is a key part of the Jersey identity and marine ecosystems are especially at risk from sea level rise. Habitats and biodiversity are also at risk from flooding, soil erosion and temperature impacts.

Likewise, new and emerging pests and diseases, and invasive non-native species affecting people, plants and animals. Warmer and wetter conditions may allow some pests and diseases to extend their range. Loss of native species due to increased competition.

A3: Landscape, Townscape and Seascape

Summary of Current Baseline

Future Jersey Baseline

A key objective within the Future Jersey framework is to ensure that the beauty of Jersey's countryside and coast is protected. As stated within the 'States of Jersey Island Plan 2011: Natural Environment' chapter, the character and quality of Jersey's countryside is a crucial part of its identity. it provides the community with a living and working environment of great distinction as well as helping to support the economy through agriculture, tourism and recreation. Likewise, the seas, shores and offshore reefs and islands are an integral part of Jersey's character and are also of scientific, cultural, economic, visual and recreational importance.

The Coastal National Park

Covering an area of 1,925 hectares (16% of the island) as well as the offshore reefs and islets, above mean high water, the 2011 Island Plan defined the boundary of the Coastal National Park and provided guidance as to the type and forms of development seen as acceptable in this special area.

The Coastal National Park covers an area of 1,925 hectares (16% of the island) as well as the offshore reefs and islets above mean high water, including: the southwest headlands, St Ouen's Bay, the north coast, St Catherine's Bay, part of Grouville Bay as well as the offshore reefs and islets of

[56] States of Jersey (2019) Reducing sea lettuce growth [online] available at: <https://www.gov.je/Environment/ProtectingEnvironment/SeaCoast/pages/sealettuce.aspx> [accessed 05/11/19]

Les Écréhous (Paternosters and Les Dirouilles) and Le Plateau des Minquiers. Many of these areas share overlapping designations with Ramsar Sites.

The National Park Management Plan and action plan have been published and whilst it is recognised that these documents will need some revision in the short term, they provide a focal point for collaborative stakeholder working to meet the following purposes of the National Park:

- The conservation and enhancement of the natural beauty, wildlife and cultural heritage; and
- To promote opportunities for the understanding and enjoyment of the special qualities.

The areas of the National Park are further described as follows, with the boundary shown below in **Figure A3.1.**

The Coastal Plain of St Ouen's Bay: The coastal plain of Les Quennevais dune system and St Ouen's Bay Coastal Plain with its fresh and saltwater wetland and sand dune habitats supporting exceptional birdlife and wildlife, distinguished landscapes and high recreational value.

La Commune de Gouray: The dunes at La Commune de Gouray, which form part of the Grouville Coastal Plain character area (B1), are a remnant of the historic landscape of this area and provide an important open break in the coastline. They are also valuable in terms of biodiversity, particularly for birds.

Escarpment: The steep topography of the escarpment, forming a backdrop to the flat coastal plain, is a distinctive feature of the Island's landscape. On the exposed scarp slopes of St Ouen's Bay, stone walls are the characteristic field boundary.

Cliffs and Headlands: The cliffs and heathland of the north coast and the south-western headlands with their spectacular coastal scenery and sense of wilderness, geological and geomorphological features, birdlife and exceptional habitats, archaeological sites, common land, modern fortifications and high recreational value. Also, the north-east wooded edge with its lower, gentler coastline, cut by wooded valleys and with numerous sheltered creeks and coves along the north.

Enclosed Valleys: Most of the Island's broad-leaved woodland occurs on the steep valley sides. The narrow winding lanes are a distinctive feature. Lichen-clad pink granite walls are characteristic features of the interior valleys. The freshwater streams and associated wet grassland provide important habitats.

Cliff Edge with Deep Sea: Including the north and south-west cliffs on the Island.

Offshore Reefs and Islands: The whole area of offshore reefs and islets forms one main character type.

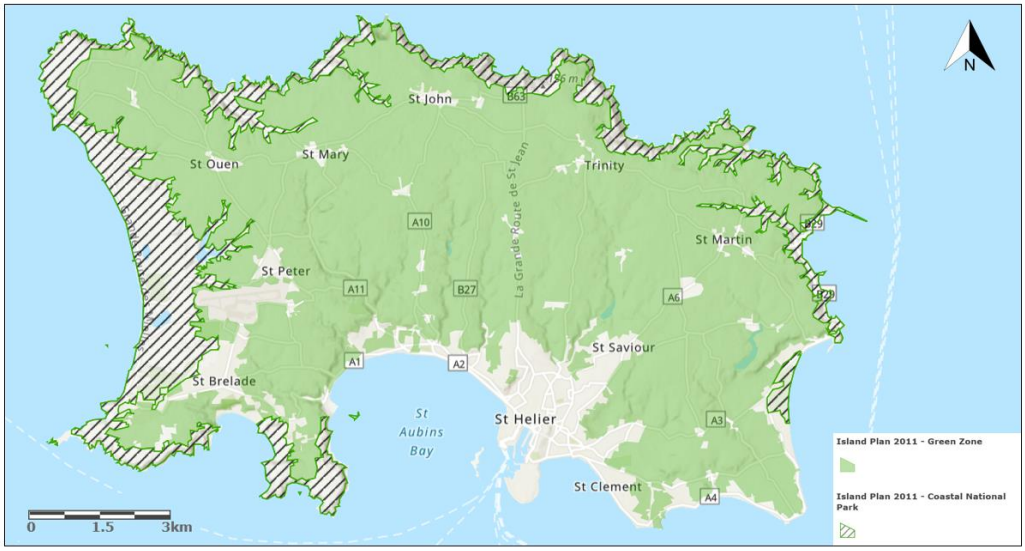


Figure A3.1: Boundaries of the Coastal National Park and the Green Zone on the Island

Green Zone

The areas of the countryside which are outside the Coastal National Park are now defined as 'Green Zone' and includes those areas of the countryside which have an intact character and comprise an important range of environmental features needing a high level of protection (**Figure A3.1**). The Green Zone includes a number of distinct character areas, including:

- The main escarpments of St Clement, Grouville, Ouaisné, and St Brelade's Bay;
- The wooded valleys of St Peter's, Waterworks, Bellozanne, Grands Vaux, Vallée des Vaux, Fern and Queen's Valleys, amongst others; and
- The interior agricultural land, to the north.

Marine Zone

There is also a need for the marine environment of the open seas and sea bed of Jersey's local waters to have a degree of protection. Accordingly, the Marine Zone includes all of the coastal features and the marine environment between Mean High Water and the Island's 12 mile territorial limits.

Additional SA Baseline

Countryside Character: Types and Areas

The Countryside Character Appraisal is a comprehensive and authoritative assessment of the characteristics of the Island's landscape quality. It has been used to inform the definition of the countryside planning zones - including the Coastal National Park; the Green Zone and the Marine Zone. It is currently being reviewed and updated as part of the Island Plan Review process to form part of the evidence base.

The countryside and coast of Jersey can be divided into nine broad character types based on common, uniform, physical and natural features and attributes (**Figure A3.2**). These are further broken down into constituent, discrete character areas, subsequently described.

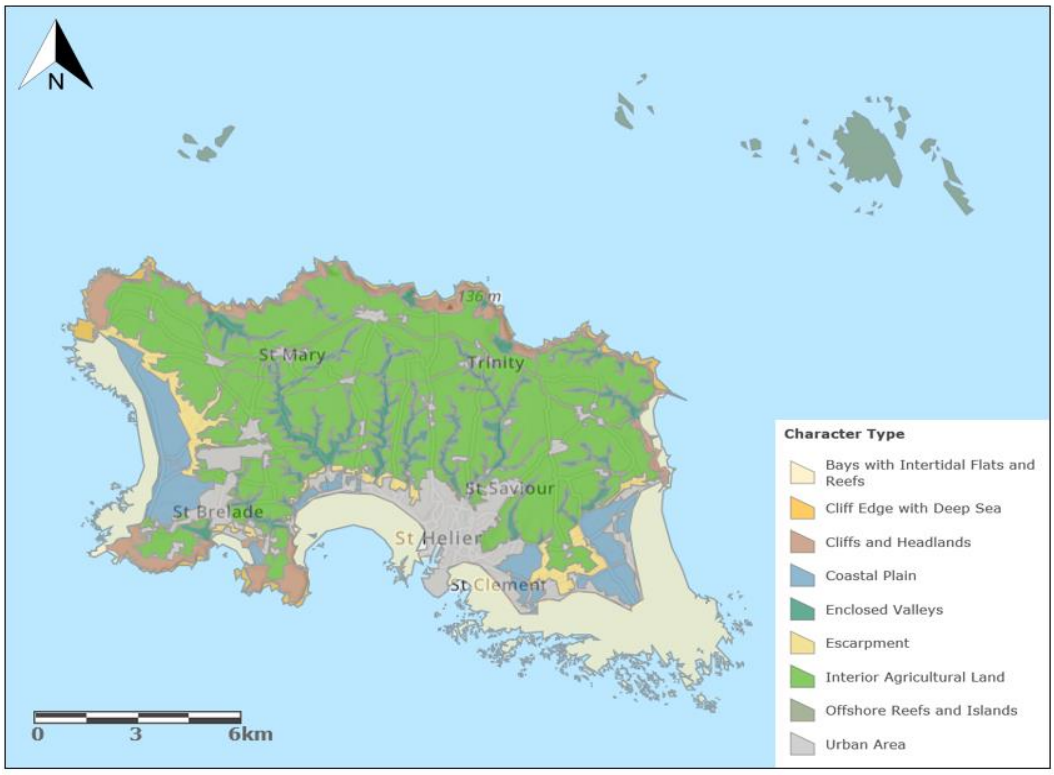


Figure A3.2: Broad Character Types on the Island

- **Character Area A:** Cliffs and Headlands: A1: North Coast Headland; A2: South-west Headlands; and A3: North-east Low Wooded Edge.
- **Character Area B:** Coastal Plain: B1: Grouville; B2: St Clement – St Saviour; B3: South Coast – urban; B4: Quennevais Dunes; and B5: St Ouen's Bay.
- **Character Area C:** Escarpment: C1: Grouville – St Saviour; C2: South Coast; and C3: St Ouen's Bay Escarpment and Valleys.
- **Character Area D:** Enclosed Valleys: D1: Main Interior Valleys; D2: Eastern Plateau Valleys; D3: St Brelade's Valleys; D4: North Coast Valleys; and D5: St Martin's Valleys.
- **Character Area E:** Interior Agricultural Land: E1: North-west Headland (St Ouen); E2: South-west Headland (St Brelade); E3: North-east (St Martin); E4: North Coast; E5: Central Plateau Ridges; E6: Central Plateau Valley Heads; E7: Eastern Plateau; and E8: Western Plateau.
- **Character Type F:** Cliff Edge with Deep Sea: F1: North and South-west Cliffs.
- **Character Type G:** Bays with Inter-tidal Flats and Reefs: G1: St Ouen's Bay; G2: St Brelade's Bay; G3: St Aubin's Bay; G4: South-east Coast; and G5: St Catherine's and Anne Port.
- **Character Type H:** Offshore Reefs and Islands H1: Les Écréhous; and H2: Le Plateau des Minquiers.

Townscape and Urban Character

Completed in 2005, the St Helier Urban Character Appraisal aimed to increase the understanding of the urban form of the town, alongside defining those areas most in need of renewal and protection. The appraisal focused on the following key themes: evolution and character, people and perceptions, urban qualities, conservation, strategic directions, public realm strategy and design guidance, alongside the completion of a character appraisal and categorisation of distinctive character areas. The character areas are defined as follows[57]:

- Character Area 1: West Esplanade and Elizabeth Castle;
- Character Area 2: La Collette;
- Character Area 3: Havre des pas;
- Character Area 4: Fort Regent;
- Character Area 5: Old Harbours;
- Character Area 6: New Waterfront;
- Character Area 7: The Parade and Esplanade;
- Character Area 8: Town Centre Core;
- Character Area 9: Town Centre North;
- Character Area 10: Town Centre Edges and Slopes; and
- Character Area 11: Interstices.

The St Helier Urban Character Appraisal is currently being reviewed and updated to support the preparation of the new Island Plan.

Visual Amenity

The views on the Island are an important consideration in the planning process as the scale, height and mass of development can ultimately impact important views if they are not considered and assessed through the process. Changes, such as development and landscape change can see these views degraded overtime.

[57] Government of Jersey (2005): 'St Helier Urban Character Appraisal', [online] available to access via: <https://www.gov.je/PlanningBuilding/LawsRegs/IslandPlan/IslandPlan2011/Background/pages/urbancharacterappraisal.aspx> last accessed [17/12/19]

Summary of Future Baseline

New development has the potential to lead to incremental but small changes in landscape and townscape character and quality on the Island. This includes from the loss of landscape features and areas with an important visual amenity value. In the absence of the Island Plan, inappropriate levels of development within the open countryside could negatively impact upon the landscape features which contribute to the distinctive character and setting of the Coastal National Park and the Green Zone, along with the special qualities of the countryside character types and areas on the Island.

Links to cross-cutting issues

The Jersey countryside is one of its most prized assets but the scarcity of land in the Island has resulted in it being subject to considerable pressure for development, which is likely to continue as the population continues to grow. To some extent this pressure is related to the over-spill of development from urban areas, but it is also generated to meet the needs and aspirations of those living and working in the countryside.

The Aether Report notes that the maintenance of green and open spaces has physical and mental health benefits for the local community and visitors to the Island. For example, easy access to large areas of green space is associated with lower levels of anxiety and stress. It is also related to increased social cohesion, green space being a social environment, and this has subsequent mental health benefits.

Likewise, green spaces act as a natural defence to storms and flooding, protecting nearby communities. Green spaces are more capable of absorbing flood water than urban landscapes and can retain more water. They can therefore help in reducing the flood risk in urban areas. Therefore, green spaces on the Island positively tackle the impacts of climate change.

A4: Historic Environment

Summary of Current Baseline

Future Jersey Baseline

A key objective within the Future Jersey framework is to ensure that Jersey's historic buildings and heritage sites are valued and protected. In 2013, 96% of Islanders said it was important to protect Jersey's heritage. Continuing the long-term protection of these assets reflects the opinions of the public opinion[58]. A detailed overview of the rich historic environment of Jersey is subsequently provided.

Additional SA Baseline

Historic Character and Evolution of Jersey

In prehistoric times, along with the other Channel Islands, Jersey was connected to France by a low, flat coastal plain. The earliest evidence of human activity in Jersey dates to 250,000 BC when Palaeolithic cave-living hunters were Jersey's earliest residents. It was 6000 BC when Jersey became an island after splitting from the Normandy peninsula and 4000 BC when communities started to settle. In the ninth century, Vikings plundered the island and gave Jersey its name. In 933, Jersey became part of the Duchy of Normandy and was ruled by Normandy until 1204 when islanders pledged allegiance to King John which triggered a relationship with the English crown which continues to this day. [59]

In 1337, the Hundred Years' War between England and France began. Close to the French mainland and serving as a first line of defence, the island was heavily fortified. Mont Orgueil Castle was built to guard the island's east coast. Between 1461 and 1468 during the War of the Roses, the French seized Mont Orgueil Castle and ruled Jersey for seven years. By the 1600s, many islanders were involved with Newfoundland fisheries and set sail for the Newfoundland cod fisheries in February/March then return in the autumn. In 1781 in the Battle of Jersey, a French invading party

[58] Government of Jersey (2019): 'Future Jersey Indicator: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BuiltHistoricEnvironment/Pages/HeritageProtection.aspx> last accessed [16/12/19]
[59] Jersey Heritage (2019) Jersey's Heritage [online] available at: <https://www.jersey.com/heritage> [accessed 18/11/2019]

attempted to take over the Island but they were defeated by an army led by Major Peirson, who lost his life in the attack. A series of Martello towers were built around the island as defences against further attacks. In 1940-1945, the Channel Islands were the only part of Britain to be occupied by German forces. The five-year occupation came to an end on 9th May 1945 (Liberation Day). This is an event still celebrated in Jersey with an annual Bank Holiday. [60]

Jersey has its own anthem called 'Island Home' which was inspired from the Peter Kennedy collection of Jèrriais folk song recordings made in Jersey in the 1950s. The anthem is intended to celebrate the Island as well as encourage a sense of pride and identity in Jersey among all parts of the community[61].

English is the main language spoken in Jersey, but other languages are also spoken which include Portuguese, Polish and Jèrriais (the Jersey language). Jèrriais is the traditional language and is closely related to French. It is considered an important part of Jersey's heritage. In 2001, around 3% of the population spoke Jèrriais but around 15% have some understanding of the language. It is seen as important that it remains a living language and Jèrriais lessons have been offered in all state primary schools since the1960s.[62]

Designated Heritage Assets and Areas

Introduction

A rich variety of heritage assets and archaeological remains survive above and below ground in Jersey, along its shoreline, and within its waters. The heritage assets and archaeological remains vary enormously in their state of preservation and in the extent of their appeal to the public. Upstanding remains are familiar enough; represented by dolmens and coastal forts and castles, but less obvious archaeological remains are also to be found in the Island. e archaeological sites of value include[63]:

- Palaeolithic site at La Cotte de St Brelade;
- Neolithic sites such as the passage graves at La Hougue Bie and La Hougue des Géonnais; and
- Iron age promontory forts at Frèmont and Le Câtel de Rozel.

Sites and structures can be protected for their known or potential archaeological interest as[64]:

- Listed building or place (which are Sites of Special Interest in law)
- Areas of Archaeological Potential (AAP)

An overview of these is presented below.

Listed Buildings

Buildings and places are listed in Jersey because they have a special interest that is of public importance. Most of them will be listed because they are of special historical or architectural interest, and others may have archaeological or cultural significance.[65]

There are six legal reasons for Listing. All Listings will meet one or more of these: historical, architectural, archaeological, traditional, scientific or artistic significance. The term 'building' is defined broadly in the Law and can include, walls, fosse, fontaines, bridges, abreuvoirs, slipways etc. Each Listed Building or Place is allocated a non-statutory Grade (Grade 1-4) and a description of each grade is outlined in **Table A4.1**.

[60] Jersey Heritage (2019) Jersey's Heritage [online] available at: <https://www.jersey.com/heritage> [accessed 18/11/2019]
[61] States of Jersey (2019) Anthem for Jersey [online] available at: <https://www.gov.je/Leisure/Jersey/Pages/AnthemJersey.aspx> [accessed 18/11/2019]
[62] States of Jersey (2019) Jèrriais: Jersey's traditional language [online] available at: <https://www.gov.je/Leisure/Jersey/Pages/Language.aspx> [accessed 18/22/2019]
[63] States of Jersey (2019) Archaeology [online] available at: <https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/Archaeology.aspx> [accessed 18/11/2019]
[64] States of Jersey (2019) Archaeology [online] available at: <https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/Archaeology.aspx> [accessed 18/11/2019]
[65] States of Jersey (2019) Why a building or place is listed [online] available at: <https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/WhyListBuildingPlace.aspx> [accessed 18/11/2019]

The Listing process is set out in law to ensure it is open and transparent, allows consultation with owners and allows occupiers to be notified. Listing of a building or place brings it under closer consideration of the planning system. An impact assessment will be required as part of the planning application if the proposal affects a Listed building, a Listed place, the setting of a Listed building or place or an AAP.[66]

Table A4.1 Listed building or place non-statutory grading system[67]

Listed building or place (Grade)	Description
Listed building or place (Grade 1)	Buildings and places of exceptional public and heritage interest to Jersey and of more than Island wide importance, being outstanding examples of a particular historical period, architectural style, building type or archaeological site.
Listed building or place (Grade 2)	Buildings or places of special public and heritage interest to Jersey, being important, high quality examples of a particular historical period, architectural style, building type or archaeological site, that are either substantially unaltered or whose alterations contribute to the special interest.
Listed building or place (Grade 3)	Buildings ore places of special public and heritage interest to Jersey, being important, good quality examples of a particular historical period, architectural style, building type, or archaeological site; but with alternations that reduce the special interest and/or have particular elements worthy of Listing.
Listed building or place (Grade 4)	Buildings and places of special public and heritage interest to Jersey, being good example of a particular historical period, architectural style or building type; but defined particularly for the exterior characteristics and contribution to townscape, landscape or group value.

Jersey Heritage is a Jersey Charity which cares and promotes access to Jersey's island's major historic sites, museums and archives.[68] Jersey Heritage also act as the Government's principal adviser on the heritage value of buildings and places in the Island. They carry out this work through an agreement with the Department of the Environment.[69]

Heritage counts are an annual audit of the state of Jersey's historic environment, produced by Jersey Heritage on behalf of the forum of Jersey's heritage organisations, including the States of Jersey, Société Jersiaise, National Trust Jersey and Channel Islands Occupation Society.

In this regard, Jersey Heritage has completed heritage assessments of over 5,000 cases. At the end of 2017, the heritage status of nearly 4,500 building and places had been determined. 4,000 cases had been listed then and of those reviewed, 3% were listed as Grade 1, 9% were listed as Grade 2, 55% were listed as Grade 3 and 33% were listed as Grade 4.[70]

The States of Jersey confirm records of 4392 listed buildings or places, as follows[71]:

[66] States of Jersey (2019) Listed buildings and places [online] available at: <https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/Newlistedbuildings.aspx> [accessed 18/11/2019]
[67] States of Jersey (2011) Criteria for the listing and grading of heritage assets [online] available at: <https://www.gov.je/SiteCollectionDocuments/Planning%20and%20building/ID-criteria%20for%20listing%20and%20grading%20(April%202011)%20150323%20mm.pdf> [accessed 18/11/2019]
[68] Jersey Heritage (2019) About our work and who we are [online] available at: < https://www.jerseyheritage.org/about-our-work> [accessed 18/11/2019]
[69] States of Jersey (2019) Why a building or place is listed [online] available at: < https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/WhyListBuildingPlace.aspx> [accessed 18/11/2019]
[70] States of Jersey (2019) Historic environment review [online] available at: < https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/HistoricEnvironResurvey.aspx> [accessed 18/11/2019]
[71] Government of Jersey (2019) Historic Environments [online] available at: < https://www.gov.je/citizen/Planning/Pages/HistoricEnvironments.aspx> [accessed 18/11/2019]

- 110 Grade 1 Listed Buildings;
- 371 Grade 2 Listed Buildings;
- 2,256 Grade 3 Listed Buildings;
- 1,387 Grade 4 Listed Buildings;
- 40 Grade 1 Listed Places;
- 58 Grade 2 Listed Places;
- 16 Grade 3 Listed Places;
- 52 Potential Listed Buildings;
- 5 Potential Listed Places; and

There were also 64 protected tree designations which serve to protect individual specimens and groups of trees

The location of the listed buildings and places is shown in **Figure A4.1** (below).

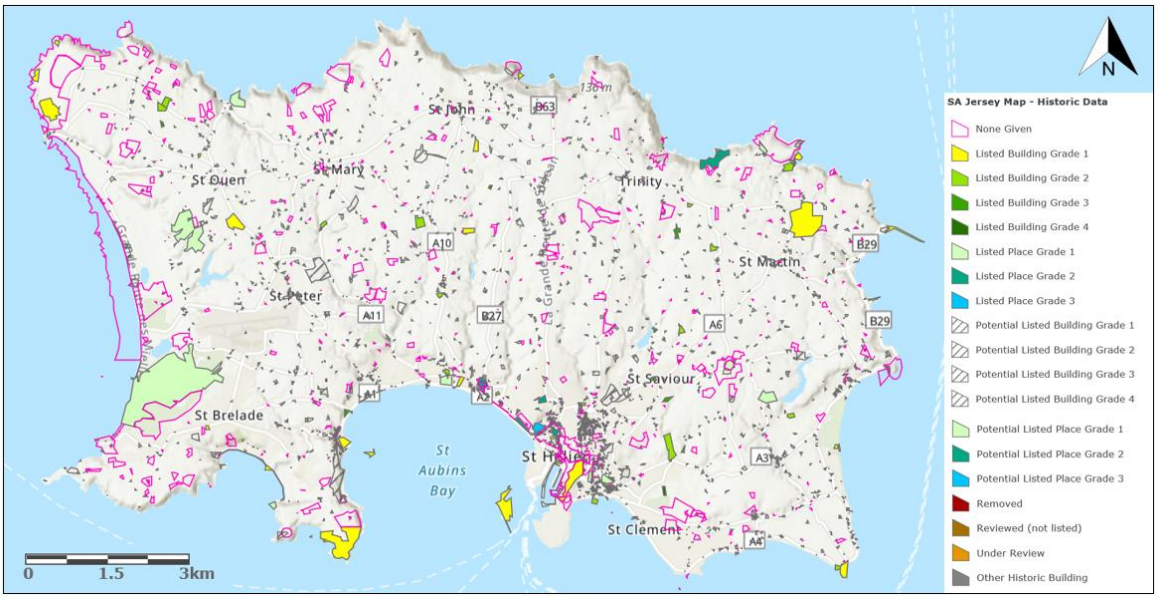


Figure A4.1: Designated Listed Buildings and Places on Jersey

Roadside walls, fosses and banques

Many historic structures are among the all too few surviving monuments to Jersey's medieval period. 'Fosses' and 'banques' are earth banks, sometimes dating back to the 14th century. They often have hedges or trees growing on top of them. 'Fosse' is the generic name for all banks, whereas a 'banque' was built to retain earth, so the land will be higher on one side than on the other.

Many of these walls, fosses and banques are in private ownership. Problems with these include: bulging and leaning, dry stone fallout, loose rock, mortar joint erosion, mudslides, plant damage, subsidence, tree root bulges, tree root overhangs and vehicle scouring.[72]

Conservation Areas

There are currently no Conservation Areas in Jersey, although the Minister for the Environment is seeking to establish a legislative framework to enable them to be identified and designated in the future.[73]

[72] States of Jersey (2019) Roadside walls, fosses and banques [online] available at: < https://www.gov.je/PlanningBuilding/ListedBuildingPlaces/Pages/RoadsideWallsFossesBanques.aspx> [accessed 18/11/2019]
[73] Jersey Heritage (2017) Heritage Counts 2017 [online] available at: < https://www.jerseyheritage.org/media/Corporate%20Information/Heritage%20Counts%202017.pdf> [accessed 18/11/2019]

Summary of Future Baseline

New development areas on the Island have the potential to impact on the fabric and setting of heritage assets; for example, through inappropriate design and layout. It should be noted, however, that existing historic environment designations offer a degree of protection to heritage assets and their settings.

Alongside, new development need not be harmful to the significance of a heritage asset, and in the context of the Island Plan there may be opportunity for new development to enhance the historic setting of settlements and better reveal assets' heritage significance.

Links to cross-cutting issues

The Aether Report notes that there are many sites of historic, cultural and archaeological importance along the Jersey coastline, such as: La Cotte de St Brelade (a key Palaeolithic site in the British Isles); the remains of a Neolithic forest and peat beds held beneath the intertidal sands; and a number of fortifications ranging in age from Tudor to Second World War. As relocation is not an option, sea defences and adaptation to sea level rise will help to protect these sites and ensure that they remain part of the Jersey culture.

The Aether Report also states that the protection of St Helier, for many, could contribute to the protection of a person's sense of place and place attachments. The natural, built and social environment that a person resides in contribute to the individual sense of identity. This can positively contribute to population and younger people, with heritage features representing a key element of the public realm, both for residents and visitors to the island.

A5: Climate Change

Summary of Current Baseline

Future Jersey Baseline

Greenhouse Gas Emissions

Jersey aims to reduce emissions in 2050 by 80% compared with 1990 levels and will achieve this by using secure, affordable and sustainable energy. Data on Jersey's emission level of greenhouse gases indicates that emissions have decreased by 15.5% from 465 kilo tonnes in 2006 to 393 kilo tonnes in 2015. Total emissions in Jersey have reduced by 40% since 1990. In 2017, Jersey emitted 365,581 tonnes of greenhouse gases into the atmosphere which is equivalent to 3.5 tonnes per person. This is comparatively lower than Guernsey (5.7 tonnes person), and the UK (7.0 tonnes per person).[74]

The transport sector is currently the biggest contributor to Jersey's greenhouse gas emissions and the kilotons of carbon dioxide equivalent from transport has only decreased gradually between 1991 and 2017 (**Figure A5.1** below). Energy supply used to be a key contributor to Jersey's greenhouse gas emissions, however, this has decreased significantly since 1990.

55% of vehicles on Jersey's registration system are over ten years old. Whilst it is not possible to calculate the exact number still actually on the road since the abolition of road tax, this still means that a significant proportion of Jersey's road fleet produces a higher level of pollution compared to younger and better maintained vehicles.

Brought in as Jersey's first environmental tax in 2010, Vehicle Emissions Duty (VED) is based on a charge at the first registration of a vehicle that is associated with the carbon dioxide emissions of that vehicle as defined by the manufacturer. Since the introduction of VED, manufacturers have been driven by global targets to reduce the emissions of their vehicles. Therefore, in general, it has become easier to purchase a lower emissions vehicle – a trend that is reflected in the purchasing patterns.

Reductions in emissions from the energy sector significantly reduced after 2000 when the 90MW Normandie 2 supply cable was installed to allow imported electricity from France which reduced the

[74] Aether (2019) Jersey Greenhouse Gas Emissions 1990-2017 [online] available at: <https://www.aether-uk.com/Resources/Jersey-Infographic> [accessed 06/11/2019]

need for the diesel engine power plant. The spike in emissions between 2012 and 2014 was due to the temporarily failure of the cable meaning electricity had to be generated on-island using gas turbines and diesel engines.[75]

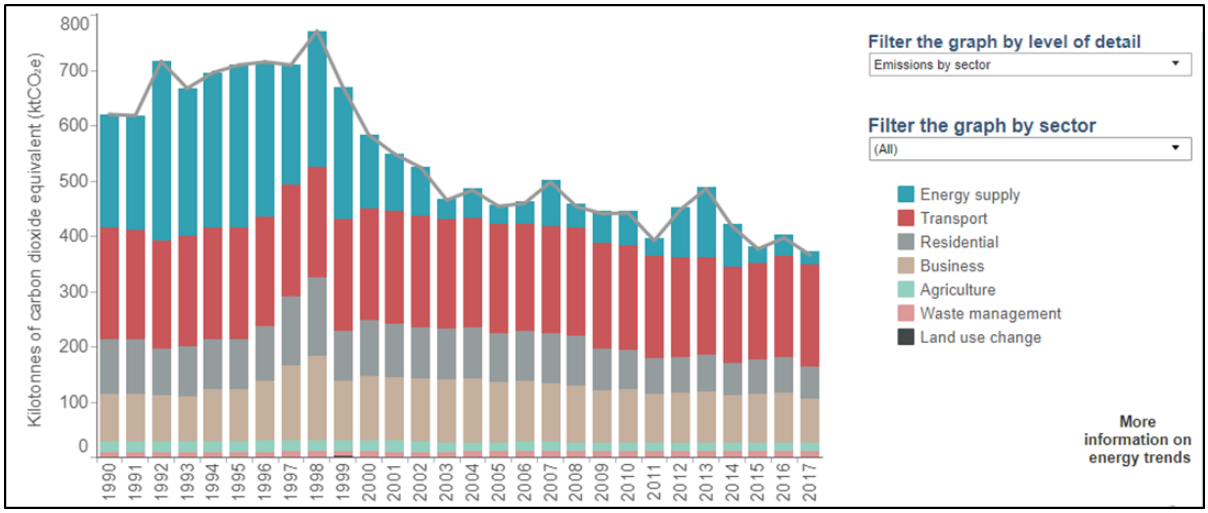


Figure A5.1: Kilotons of carbon dioxide equivalent in Jersey by sector 1990-2017[76]

As shown below in **Figure A5.2**, a key ambition of Future Jersey is to improve the trend and make future savings, achieved through reducing energy use and improving the uptake of more sustainable fuel choices.

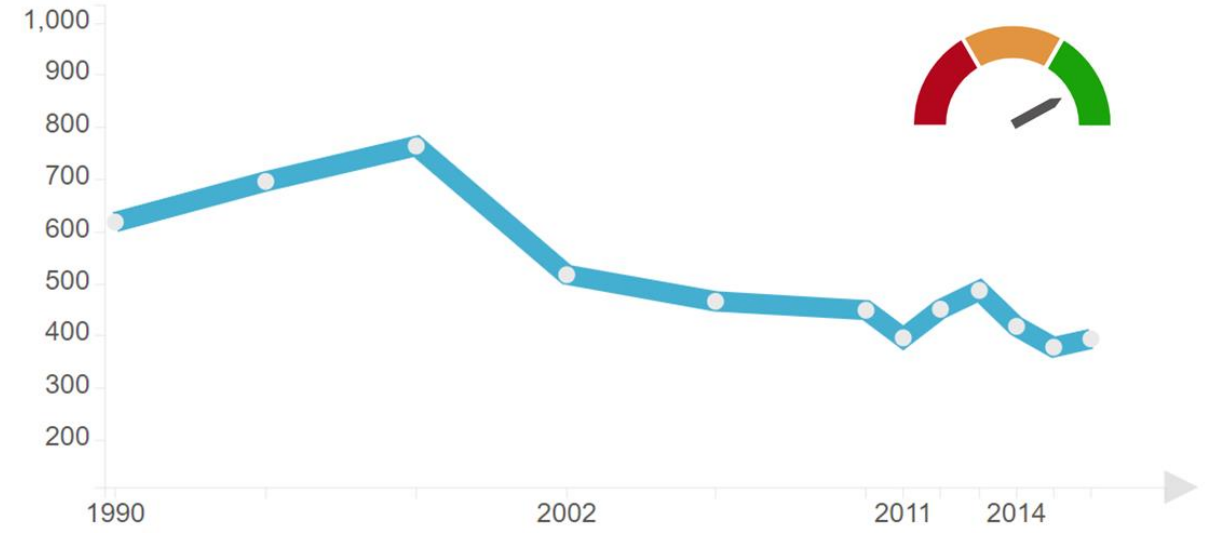


Figure A5.2: Jersey's emissions of greenhouse gases (measures in kilotons of CO2 equivalent)

Energy Use

The 2017 Jersey Energy Trends report[77] highlights that almost all of Jersey's energy supply was imported in 2017 with about 2% produced on-island as electricity generated by the Energy from Waste Facility. Petroleum products account for almost two-thirds of Jersey's energy supply.

Energy consumption in Jersey in 2017 was 3% lower than in 2016 and per head of resident population was 1.4 tonne of oil equivalent (toe) and was below that of the UK (2.1 toe). This is visualised below in **Figure A5.3**.

[75] Aether (2019) Jersey Greenhouse Gas Emissions 1990-2017 [online] available at: <https://www.aether-uk.com/Resources/Jersey-Infographic> [accessed 06/11/2019]
[76] Aether (2019) Jersey Greenhouse Gas Emissions 1990-2017 [online] available at: <https://www.aether-uk.com/Resources/Jersey-Infographic> [accessed 06/11/2019]
[77] Statistics Jersey (2017) Jersey Energy Trends 2017 [online] available at: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Jersey%20Energy%20trends%202017%20190529%20SJ.pdf> [accessed 06/11/2019]

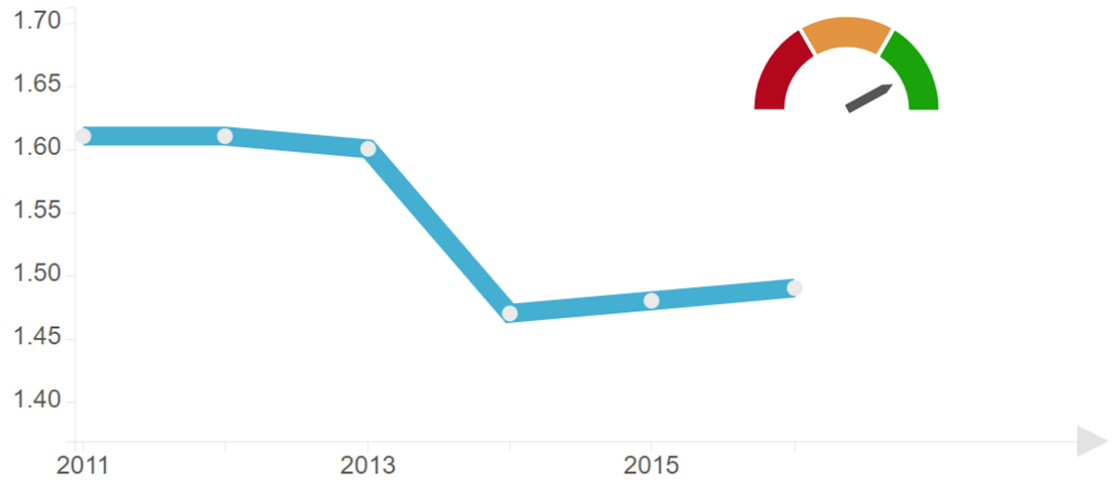


Figure A5.3: Energy consumption in (toe) per person in Jersey

Energy consumption per person in Jersey decreased by 11.8% between 2011 and 2017. In 2017, 38% of energy used was consumed by households, 34% was used for transportation (predominantly road transport) and 28% was used by industry and government.

More efficient energy use will help to protect households and businesses from the impact of increasing international energy prices, as well as reducing Jersey's greenhouse gas emissions[78].

Pathway 2050: An Energy Plan for Jersey

An Energy Plan for Jersey[79] sets out a clear policy direction for a reduction in energy use and emissions. The overarching target of this plan is 'by 2050, reduce emissions by 80% compared to 1990 levels, by using secure, affordable and sustainable energy'.

The plan states that this is likely to be achieved by:

- Reducing energy use i.e. demand management;
- Using lower-carbon sources of energy;
- Moving towards renewable sources of energy where it can be justified on grounds of economics, security and sustainability; and
- Encouraging synergies where energy solutions bring additional benefits, for example the deployment of anaerobic digestion which solves a waste management issue as well as generating renewable energy.

Additional SA Baseline

Climate emergency

The States Assembly have agreed that a climate emergency exists which is likely to have profound effects in Jersey. In response to this, the Minister for the Environment is assessing how Jersey might become carbon neutral by 2030. In July 2019 the Council of Ministers published an initial report on tackling the climate emergency in Jersey[80]. Key messages are:

- Jersey should aim to be carbon neutral by 2030, and the Council of Ministers is accordingly requested to draw up a plan to achieve this, for presentation to the States by the end of 2019;

[78] Government of Jersey (2019): 'Future Jersey Indicator: Reduce Energy Use', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SustainableResources/Pages/EnergyUse.aspx> last accessed [19/11/19]
[79] States of Jersey (2014) Pathway 2050: An Energy Plan for Jersey [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Pathway%202050%20An%20Energy%20Plan%20reduced%20(size%201.3mb)%20DM%2020140325.pdf> [accessed 06/11/2019]
[80] Government of Jersey (2019) Tackling the Climate Emergency Initial report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Environment%20and%20greener%20living/R%20Tackling%20the%20Climate%20Emergency%20Your%20Island%20Your%20Say%20HL.pdf> [accessed 06/11/2019]

- The Minister for the Environment is requested to carry out, as part of the process for drawing up the forthcoming Government Plan for 2020, an examination and assessment of more ambitious policies to accelerate carbon reduction; and
- The Chief Minister is requested to ensure that consideration of action to tackle climate change in Jersey is included as a standing item on the agenda of the Council of Ministers." There is considerable overlap between an ambitious carbon reduction journey, the existing Energy Plan, Pathway 2050, and the decision of this Council of Ministers, for the first time, to agree a strategic, cross government priority to protect the environment.

Climate trends

The State of the Environment (2011-2015) report for Jersey confirms that local climate trends are deviating from the 30 year norm and are in line with global climate change predictions: air and sea temperatures are rising; the growing season is lengthening; both summers and winters are wetter; cold spells are shorter and warm spells are longer.

In 2004 the World Meteorological Organisation established a set of 27 climate indices based on the measurements of the daily extremes of air temperature and daily precipitation amount. Within the State of the Environment Report (2011-2015), eight indicators have been chosen that reflect climate change impacts of direct relevance to the Island. Red, Amber and Green statuses have been applied to show how the period 2011-2015 compares against the 1961-1990 norm and whether the trend is in line with climate change predictions:

- C1: Increasing average air temperature (warmer): Yes – increasing average air temperature between 2011-2015 in comparison to 30-year norm (same trend observed between 2005-2010);
- C2: Extended growing season: Yes – length of growing season between 2011-2015 longer than the 30-year norm (different trend observed between 2005-2010 – which recorded no change in the length of the growing season in comparison to the 30-year norm);
- C3a: Increasing volumes of winter rainfall: Yes – increase in volume of winter rainfall between 2011-2015 when compared to 30-year norm (different trend observed between 2005-2010 – which recorded no change of the volume of winter rainfall in comparison to the 30-year norm);
- C3b: Increasing volumes of summer rainfall: Yes – increase in volume of summer rainfall between 2011-2015 when compared to 30-year norm (same trend observed between 2005-2010);
- C4: Increasing number of heavy rainfall days (over 25mm): No – number of heavy rainfall days between 2011-2015 in line with 30-year norm (same trend observed between 2005-2010);
- C5a: Decreasing number of cold spells: Yes – fewer cold spells between 2011-2015 when compared to the 30-year norm (same trend observed between 2005-2010);
- C5b: Increasing number of warm spells: Yes – number of warm spell days between 2011-2015 above 30-year norm (same trend observed between 2005-2010); and
- C6: Increasing sea temperature: Yes – increase in sea temperature between 2011-2015 when compared with the 30-year norm (same trend observed between 2005-2010)

Extreme Weather Events

Jersey has suffered extreme events (surge combined with high tide) in the past, in particular in 2008 and 2014.[81] In 2008 a 1 in 10-year extreme event led to sea wall damage totalling up to £500,000. Warning and preparations had been made to improve the ability of the sea defences to resist the storm surge and waves in Jersey.

In 2014, between January and October, a cluster of extreme events resulted in large amounts of damage, requiring emergency repairs in excess of £1.1 million. During this period various defences were breached at high tide such as the sea walls and piers at Gorey, Beaumont, St Aubin, St Aubin's

[81] National Oceanography Centre (2018) Jersey Sea Level and Coastal Conditions Climate Review [online] available at: < https://www.gov.je/sitecollectiondocuments/government%20and%20administration/r%20jersey%20sea%20level%20and%20coastal%20report%20final%20dm%2020170803.pdf> [accessed 14/11/2019]

pier and St Catherine's, causing flooding and road closures. Record high tides in March 2014 caused the collapse of the sea wall at Le Bourg, and residential gardens on the seafront at St Clements collapsed into the seawall and on to the beach.

Coastal flooding

Climate change will increase the risks of coastal flooding and erosion in Jersey. The seawalls and coastal defences around Jersey will provide less protection from flooding as sea levels rise and will require adaptation.[82] It is likely further increase in mean sea level relative to the land in Jersey between now and the 2080s can therefore be predicted to be in the range of 100mm to 500mm. [83]

In June 2018, the Government started work on a Shoreline Management Plan for Jersey. The Plan aims to ensure that coastal defences continue to protect the Island over the next 100 years. The Plan highlights that the existing defences and drains protect Jersey from flooding during storms, high tides and heavy rainfall. However, rising sea levels and more rainfall resulting from the effects of climate change will increase the risk of flooding in some areas[84].

The consultation draft version of the Shoreline Management Plan identifies six coastal management areas (CMA), the boundaries of which were determined by physical coastal processes. Each CMA represents sections of the coast to be considered in impact assessments of policies, new works and existing infrastructure, and include[85]:

- **CMA1: South Coast** – Eastern end of Portelet Beach to La Rocque;
- **CMA2: Grouville Bay** – La Rocque to the northern end of Mont Orgueil Castle land;
- **CMA3: St Catherine's** – Northern end of Mont Orgueil Castle land to La Coupe;
- **CMA4: North Coast** – La Coupe to Le Pulec;
- **CMA5: St Ouen's Bay** – Le Pulec to Gorselands; and
- **CMA6: St Brelade** – Gorselands to the eastern end of Portelet Beach.

To ensure that management policies within the Shoreline Management Plan are robust and sustainable, the CMAs are split further into smaller coastal management units (CMUs). This helps to accommodate the local scale variations in present day land use, future land use and redevelopment, land ownership, coastal defence asset types and coastal flood and erosion risk management that exists within each CMA. The use of the CMUs enables flexibility to refine strategic decisions based on the CMAs such that they are appropriate on a local scale. In total 36 CMUs were created along the Jersey coastline (**Figure A5.4**), with the Shoreline Management Plan going on to provide a detailed policy appraisal for each CMU within the relevant CMA.

Tidal flooding

It is likely that high and low tidal levels will change in the future. There is likely to be an increase in high tide levels around Jersey of 500mm by the 2080s. This increase would have a further significant effect on the performance of the existing coastal defences in Jersey. [86]

Grands Vaux Flood Plan

Surface water flooding is an issue on some parts of the island. Grands Vaux catchment area represents about 10% of the Island's land mass. The reservoir basin is small and can fill very rapidly

[82] States of Jersey (2015) Periodic Update to Sea Defence Strategy [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Periodic%20update%20to%20Sea%20Defence%20Strategy%2020150923%20JM.pdf> [accessed 06/11/2019]
[83] HR Wallingford (2007) Climate change, Jersey: Effects on coastal defences [online] available at: < https://www.gov.je/sitecollectiondocuments/government%20and%20administration/r%20climatechangejsyeffectsoncoastaldefences%20%2020071031%20hrw.pdf> [accessed 06/11/2019]
[84] Government of Jersey (2018): 'Shoreline Management Plan Overview', [online] available to access via: <https://www.gov.je/Environment/GenerateEnergy/pages/shorelinemanagementplan.aspx> last accessed [17/12/19]
[85] Government of Jersey (2019): 'Draft Shoreline Management Plan', [online] available to access via: <https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=4704> last accessed [17/12/19]
[86] HR Wallingford (2007) Climate change, Jersey: Effects on coastal defences [online] available at: < https://www.gov.je/sitecollectiondocuments/government%20and%20administration/r%20climatechangejsyeffectsoncoastaldefences%20%2020071031%20hrw.pdf> [accessed 06/11/2019]

during inclement weather. Therefore, the flood volume in severe weather can be greater than the capacity of the basin. [87]

Climate change also has the potential to alter the nearshore seabed around Jersey, for example affecting sandbanks and submerging rocky shore-platforms and reefs to a greater depth as sea levels rise. [88] The anticipated effects of climate change over the next few decades on Jersey's coastal cliffs are only likely to be noticeable where they are of 'soft rock'. [89]

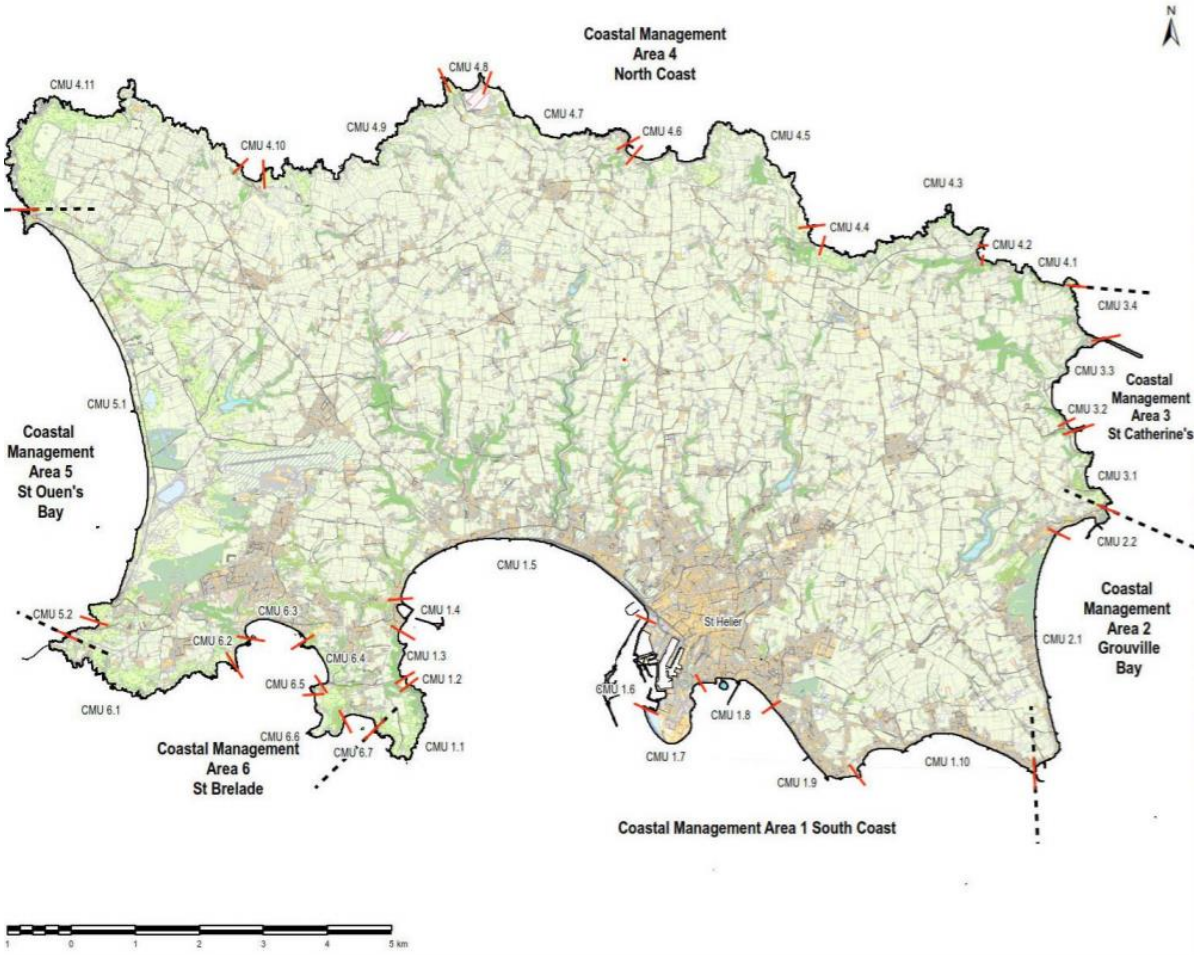


Figure A5.4: CMAs and CMUs around the coast, identified in the Shoreline Management Plan

Summary of Future Baseline

Climate change has the potential to increase the occurrence of extreme weather events on the Island. This is likely to increase the risks associated with climate change, with an increased need for resilience and adaptation. Jersey has already recognised climate change as a factor for consideration in terms of spatial planning and has started to enhance some aspects of its sea defences. Likewise, future proofing surface water drainage and management will play an important part in terms of ensuring the Island's resilience to the challenges of climate change.

In terms of climate change contribution, per capita greenhouse gas emissions generated on the Island may continue to decrease with wider adoption of energy efficiency measures, renewable energy production and new technologies, including electric cars and busses. However, increases in the built footprint of the Island would contribute to increases in the absolute levels of greenhouse gas

[87] States of Jersey (2018) Grands Vaux Flood Plan [online] available at: < https://www.gov.je/SiteCollectionDocuments/Home%20and%20community/SoJ%20Grand%20Vaux%20Flood%20Plan%20v2.1%20(Redacted).pdf> [accessed 06/11/2019]
[88] HR Wallingford (2007) Climate change, Jersey: Effects on coastal defences [online] available at: < https://www.gov.je/sitecollectiondocuments/government%20and%20administration/r%20climatechangejsyeffectsoncoastaldefences%20%2020071031%20hrw.pdf> [accessed 06/11/2019]
[89] HR Wallingford (2007) Climate change, Jersey: Effects on coastal defences [online] available at: < https://www.gov.je/sitecollectiondocuments/government%20and%20administration/r%20climatechangejsyeffectsoncoastaldefences%20%2020071031%20hrw.pdf> [accessed 06/11/2019]

emissions. It will be important to continually reduce energy demand and emissions through mitigation, as shown in the infographic below (**Figure A5.5**)

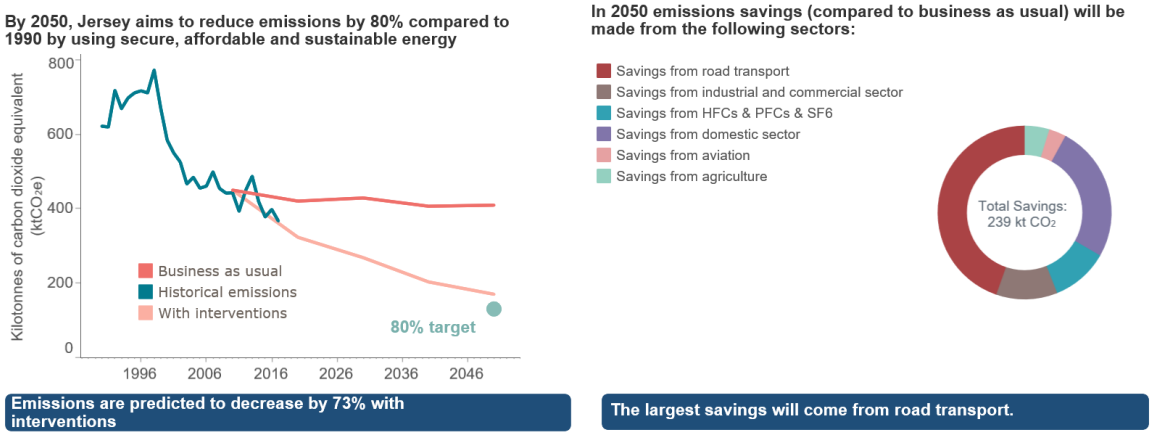


Figure A5.5: Emissions savings by 2050 (compared to business as usual scenario) per sector[90]

Links to cross-cutting issues

The Aether Report highlights that adapting to sea level rise and extreme weather events will be essential for Jersey. Protection against extreme weather events has safety, health and economic benefits. By adapting to extreme weather, the resilience of essential service and infrastructure, property and natural assets is increased. Beyond the clear economic benefits of reductions in damage costs and forced migration, this also has mental health benefits as people are less concerned about the potential impacts of increased extreme weather events. This is particularly applicable to St Helier which is low lying and coastal but is also home to a large proportion of Jersey's population, business and heritage sites.

A6: Population and Community

Summary of Current Baseline

Future Jersey Baseline

Introduction

Several Future Jersey indicators directly relate to the 'Population and Community' SA theme, with those of relevance to the SA process including the levels of recorded crime, neighbourhood safety, perceptions of culture and volunteering, discrimination, housing quality, neighbourhood satisfaction, and migration. Key trends on these indicators are summarised in the following sections. Details regarding the population demographics, age structure and community assets on the Island are discussed in the 'Additional SA Baseline' section below.

Housing Quality

In 2014, 13% of households reported having difficulty keeping their home adequately warm due to financial reasons and an additional 18% said they sometimes found it difficult to do so.[91] In this context, objective 3 of the 2016 Housing Strategy for Jersey[92] is to improve the condition, security, energy efficiency and suitability of homes. This will be achieved by:

- Developing a regulatory framework for affordable housing providers which promotes the rights and well-being of tenants; supports the supply of new affordable accommodation for rental and purchase; and meets the social needs of the community;

[90] Aether (2017): 'Jersey's greenhouse gas emissions: what does the future look like?', [online] available to access via: <https://www.aether-uk.com/Resources/Jersey-Infographic> last accessed [19/11/19]
[91] States of Jersey (2015) Relative Low Income [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Relative%20Low%20Income%20150127%20SU.pdf> [accessed 08/11/2019]
[92] States of Jersey (2016) Strategic Housing Unit Housing Strategy [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Housing%20Strategy%20160324%20VP.pdf> [accessed 12/11/2019]

- Supporting professional management standards and secure occupancy by introducing a tenancy deposit scheme; developing the Rent Safe landlord accreditation scheme and ensuring that the legal rights and responsibilities afforded to landlords and tenants promote appropriate levels of security, transparency and accountability;
- Introducing minimum standards for the physical condition, repair and maintenance of all categories of rental accommodation to secure the health and wellbeing of tenants;
- Encourage residents to make homes more energy efficient and therefore cheaper to run; and
- Improving the design of new homes through the introduction of new space and density standards and exploring innovative approaches to design, including modern methods of construction.

The 2018 Jersey Opinions and Lifestyle Survey report[93] indicates that 64% of respondents are very satisfied with their current housing and a further 32% are fairly satisfied. However, just under 50% of those that were qualified renting or socially renting were very satisfied with their current house. In comparison, households that were owner occupied had 75% very satisfied respondents.

Housing Supply, Affordability, Rental Stress

Jersey's Future Housing Needs 2019-2021 report[94] identifies that before the supply of new dwellings, there is an overall anticipated shortfall of 2,750 dwelling units. This is made up of 1830 units in the owner-occupied sector and the remaining 600 units of registered accommodation based on current migration trends.

As shown below in **Figure A6.1**, the long-term ambition is to transform the trend, increasing the supply of new homes and making better use of vacant and under-occupied units in order to meet current and future housing requirements[95]. This will help to support economic growth, healthier lives and improved life satisfaction for Islanders.

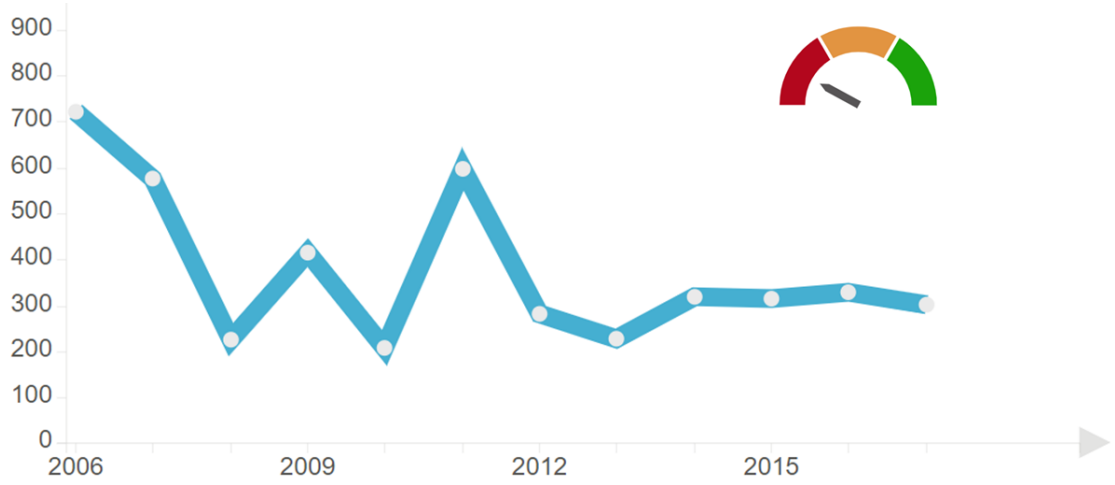


Figure A6.1: Total additions to the supply of housing

[93] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 07/11/2019]
[94] States of Jersey (2019) Jersey's Future Housing Needs 2019-2021 [online] available at: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20HousingNeedsSurvey2018%20201 90328%20SJ.pdf > last accessed [07/11/2019]
[95] Government of Jersey (2019): 'Future Jersey Indicator: Improve Housing Supply', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BuiltHistoricEnvironment/Pages/HousingSupply.aspx> last accessed [16/12/19]

The proportion of individuals living in relative low income in Jersey in 2009/10 was similar to the UK, although differences were noted in which particular demographic groups were affected most, with pensioners living alone and single parent households being particularly affected.[96]

Since 2006, a working household in Jersey with an average net income has not been able to afford to service a mortgage on a median-priced house of any size but could do so on a median-prices one or two-bedroom flat.

Based on the 2011 census, it is recognised that one third of households are privately rented. [97]

The Jersey Private Sector Rental Index was published from 2007 until 2012 using rental consent data from the States of Jersey Population Office. The index was derived from the mean rent of properties for which rental consents were granted by the Population Office during each quarter, not from all private sector rents in the Island.

The Private Sector Rental Index was not produced from December 2012 to June 2015 due to the rental data no longer being collected. More recently a revised index has been produced using advertised rental prices from both internet and classified adverts.[98]

Figure A6.2 outlines that rental prices in Jersey are increasing each year. In the most recent quarter, advertised rental prices were 15% higher than in the corresponding quarter of 2018.

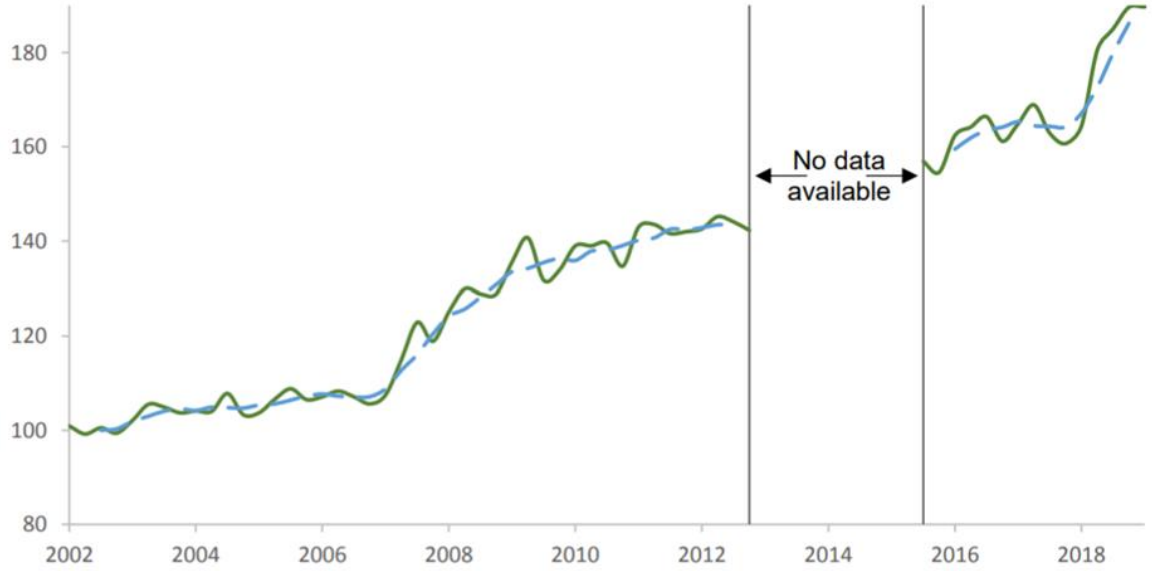


Figure A6.2: Jersey Private Sector Rental Index[99]

Recorded Crime

In 2017, there were 3,028 crimes recorded in Jersey. This is 4% greater than in 2016 and represents 29.1 crimes per 1,000 of the population. Over 60% of crime in 2017 occurred in St. Helier. [100] The prison population in Jersey increased between 2003 and 2011, with 2011 seeing an average of 185 prisoners. However, the average prison population has since decreased and the average population in 2017 was 136.

[96] States of Jersey (2015) Relative Low Income [online] available at: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Relative%20Low%20Income%202020150127%20SU.pdf> [accessed 08/11/2019]
[97] States of Jersey (2019) Households and dwelling statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/HousingLiving/Pages/Households.aspx> [accessed 08/11/2019]
[98] States of Jersey (2019) House price statistics [online] available at: <https://www.gov.je/Government/JerseyInFigures/HousingLiving/pages/houseprice.aspx> [accessed 08/11/2019]
[99] States of Jersey (2019) Jersey House Price Index First Quarter 2019 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20House%20Price%20Index%20Q1%202019%2020190523%20SJ.pdf> [accessed 08/11/2019]
[100] States of Jersey (2019) Crime and policing statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/EmergencyServices/pages/crimepolicing.aspx> [accessed 12/11/2019]

As shown below in **Figure A6.3**, the long-term trend is to continue to sustain a downward trend in the number of crimes which are being reported[101].

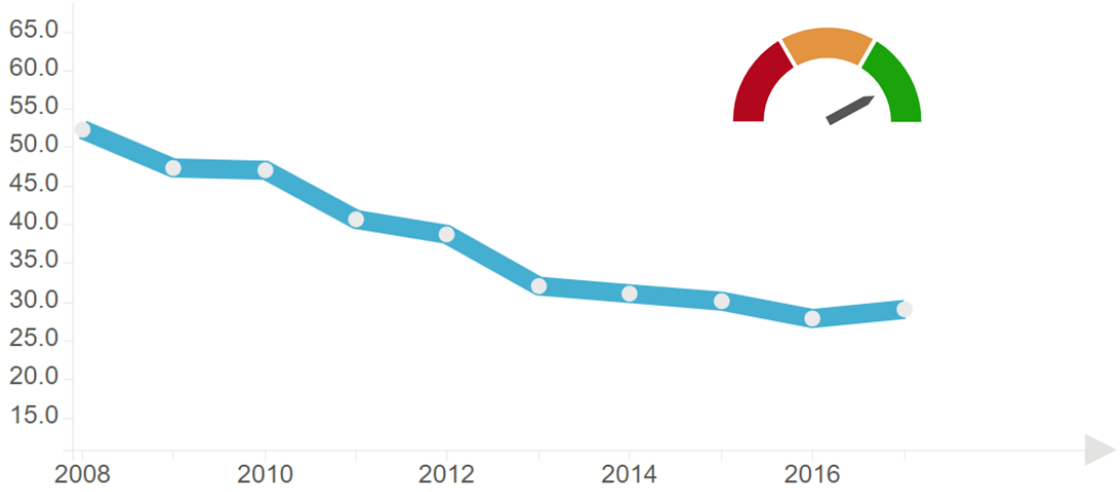


Figure A6.3: Number of crimes recorded by police (per 1000 people in Jersey)

Neighbourhood Safety

Jersey is very safe place to live and has lower rates of crime compared to the UK. States of Jersey Police have published a 'Helping our Communities Stay Safe' booklet[102] which provides some precautions which can be taken to help reduce crime levels even further. Furthermore, States of Jersey Police website also provides a lot of information on different ways that individuals can stay safe.[103]

As shown below in **Figure A6.4**, the long-term trend is to continue increase the percentage of residents who describe their neighbourhoods as 'very safe', improving quality of life and helping to promote social wellbeing, social cohesion and a vibrant culture[104].

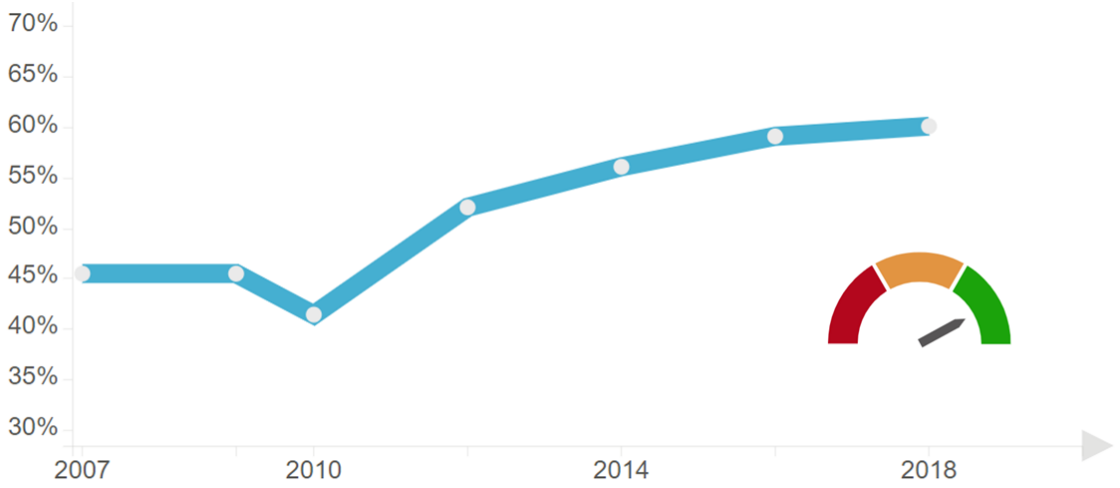


Figure A6.4: Percentage of Islanders who say their neighbourhood is 'very safe'

[101] Government of Jersey (2019): 'Future Jersey Indicator: reduce the level of crime', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SafetySecurity/Pages/CrimeLevels.aspx> last accessed [16/12/19]
[102] States of Jersey Police (2019) Helping our communities stay safe [online] available at: <http://online.flipbuilder.com/vuoc/asis/mobile/index.html#p=1> [accessed 12/11/2019]
[103] States of Jersey Police (2019) Be Safe [online] available at: <https://jersey.police.uk/be-safe/home-and-belongings/mobile-phones/> [accessed 12/11/2019]
[104] Government of Jersey (2019): 'Future Jersey Indicator: improve perceptions of safety', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SafetySecurity/Pages/SaferNeighbourhoods.aspx> last accessed [16/12/19]

Perceptions of Culture and Volunteering

For a small island, Jersey has a range, and quality, of its culture and heritage. Improving this offer, and increasing participation, not only supports individual quality of life and community wellbeing; it also enhances Jersey's appeal as a vibrant place to work, live and visit.

Overall, 75% of adults rated Jersey's cultural events, attractions and activities as 'good' (57%) or 'very good' (18%). This is unchanged, compared to 2013. It is significantly lower than the proportion of Islanders rating either social/recreational (91%) or sporting events, attractions and activities (90%) as 'good' or 'very good'.[105]

In the 2017 Jersey Opinions and Lifestyle Survey, respondents were asked about any volunteering they had undertaken over the last 12 months.[106] 55% of adults had not completed any volunteering. This was slightly lower than in 2013, when 61% had not undertaken any volunteering over the last 12 months. Among volunteers, 54% volunteered at least monthly. Older age groups said they volunteered more often than younger age groups.

The long-term trend is to transform the levels of volunteering, increasing participation to support a range of community and environmental outcomes.

Discrimination

The Discrimination (Jersey) Law 2013 seeks to provide protection against race discrimination as well as other protected characteristics including sex, sexual orientation, gender reassignment, pregnancy, age and disability.

In 2017, 23% of adults in Jersey felt they had been discriminated against in the last 12 months and a third of adults who felt they had experienced discrimination said it happened at work. 7% of individuals felt they had been discriminated based on race or nationality, 8% based on age, 6% based on gender and another 5% based on pregnancy or maternity[107].

Neighbourhood Satisfaction

Individuals were generally more satisfied with St Helier as a place to work but as a place to visit and live, greater numbers of respondents were not very satisfied or not at all satisfied (**Figure A6.5**). 31% of adults living in St Helier were very satisfied with St Helier as a place to visit, compared to 16% of those living in rural parishes.

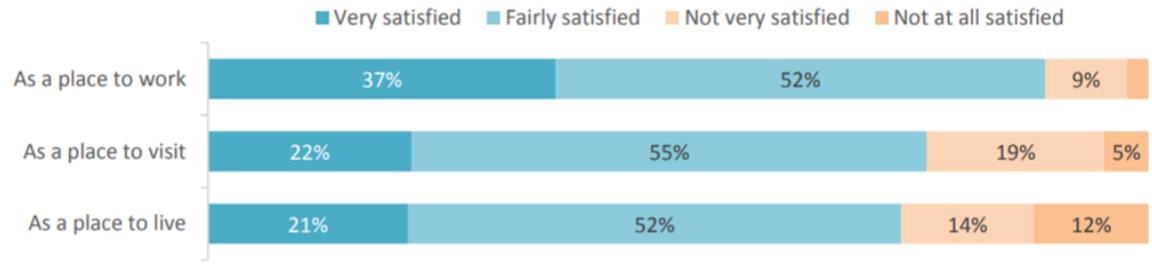


Figure A6.5: Satisfaction with St Helier as a place to live, work and visit[108]

The 2018 Jersey Opinions and Lifestyle Survey report[109] highlights that 9 out of 10 adults were very or fairly satisfied with Jersey as a place to live. 96% of adults were very or fairly satisfied with their local neighbourhood as a place to live.

[105] Government of Jersey (2019): 'Future Jersey Indicator: Improve perceptions of culture', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/VibrantInclusive/Pages/Culture.aspx> last accessed [19/11/19]
[106] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[107] Government of Jersey (2019): 'Future Jersey Indicator: Reduce discrimination', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/VibrantInclusive/Pages/Discrimination.aspx> last accessed [19/11/19]
[108] [108] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 07/11/2019]

81% of adults living in rural parishes were very satisfied with their local neighbourhood, whereas 36% of adults living in St Helier were very satisfied. In general, younger age groups were less satisfied with their local neighbourhood and those that were 65+ years were most satisfied with their local neighbourhood as outlined in **Figure A6.6** below.

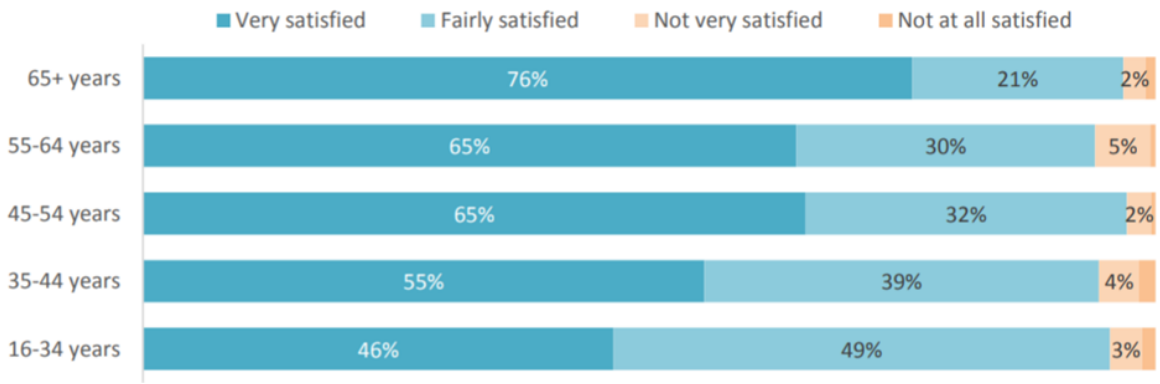


Figure A6.6: Satisfaction with local neighbourhood (within 5 min walk of home) by age group[110]

Migration

Jersey is a Crown Dependency, which is a territory under the sovereignty of the British Crown. The island is part of the Channel Islands but is not part of the UK.

Jersey is part of the Common Travel Area which is an open borders area comprising the United Kingdom, Ireland, the Isle of Man, and the Channel Islands. This means there are no queued immigration controls when arriving in Jersey's airport and ports for those travelling from these locations. British citizens and nationals of a member state of the European Economic Area (EAA) do not need a work permit to work in Jersey.[111]

During 2018, the resident population was estimated to have increased by 1,200 people, including a net inward migration of 1,100 (400 'licensed' employees and their dependents along with 700 'registered' employees) and natural growth of 100. Therefore, migration is a significant contributor to growth on the Island. The rate of natural growth has declined since 2011 (when it reached 390) and, in 2019, the rate was the lowest it has been since 2002.

Moving forward, employers are likely to continue to need staff with skills and experience that are not available locally. The focus, therefore, is on limiting migration while being honest and open about the fact that Jersey does need some level of net migration[112].

Additional SA Baseline

Population Demographics

The resident population of Jersey at year-end 2018 was 106,800, a growth of 11,400 residents since year end 2008 (over the last 10 years)[113]. Based on 2011 census data, **Figure A6.7** indicates that the parishes of St Helier, St Saviour and St Brelade are the most populated on the Island.

[109] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 07/11/2019]
[110] [110] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 07/11/2019]
[111] States of Jersey (2019) Moving to Jersey: Customs and immigration [online] available at: < https://www.gov.je/LifeEvents/MovingToJersey/LivingInJersey/pages/customsimmigration.aspx> [accessed 14/11/2019]
[112] Government of Jersey (2019): Future Jersey indicator: reduce migration', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BusinessEnvironment/Page s/Migration.aspx> last accessed [20/11/19]
[113] Statistics Jersey (2018): 'Jersey Resident Population 2018 Estimate', [online] available to access via: <https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20PopulationReport2018%20201906 21.pdf> last accessed [20/11/19]

	2011 population	% of total	2011 density (person/km²)	2001 population	% change population
Grouville	4,866	5	594	4,702	+3
St Brelade	10,568	11	803	10,134	+4
St Clement	9,221	9	2,142	8,196	+13
St Helier	33,522	34	3,541	28,310	+18
St John	2,911	3	320	2,618	+11
St Lawrence	5,418	6	552	4,702	+15
St Martin	3,763	4	368	3,628	+4
St Mary	1,752	2	267	1,591	+10
St Ouen	4,097	4	270	3,803	+8
St Peter	5,003	5	425	4,293	+17
St Saviour	13,580	14	1,471	12,491	+9
Trinity	3,156	3	253	2,718	+16
Total	**97,857**	**100**	**819**	**87,186**	

Figure A6.7: Population and population density by parish[114]

The 2018 Jersey Opinions and Lifestyle Survey report[115] indicates that 48% of respondents were married or in a civil partnership, 22% were single, 15% were cohabiting and 15% were separated, divorced or widowed.

47% of adults regard themselves as having a religion. 96% of adults who had a religion stated their religion as Christianity. 22% of adults aged 16-34 and 72% of adults aged 65+ regard themselves as having a religion.

In 2017, 46.4% of residents were from Jersey, 32.7% were British, 8.2% were Portuguese/Madeiran, 7.1% were Irish, French and other white, 3.3% were Polish and 2.4% were of an 'other' ethnic group.[116]

Age Structure

The following infographic in **Figure A6.8** is taken from the Jersey Demographics Profile 2018 and provides an estimation on the number of people in each age and gender group. The infographic indicates a trend of an ageing population on the Island.

Life expectancy for both males and females has increased slightly since 2010. Newborn males in Jersey could expect to live, on average, for 80.8 years if the current age-specific mortality rates applied to them throughout their life.

Newborn females could expect to live, on average, for nearly four years longer (84.6 years). Life expectancy for both males and females is generally higher in Jersey than in England[117].

[114] Census (2011) Total population [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Chapter1TotalPopulation%20201208%20SU.pdf> [accessed 06/11/2019]
[115] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 08/11/19]
[116] Index Mundi (2018) Jersey Demographics Profile 2018 [online] available at: < https://www.indexmundi.com/jersey/demographics_profile.html> [accessed 08/11/2019]
[117] Statistics Jersey (2018) Life expectancy and healthy life expectancy 2016-2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Healthy%20Life%20Expectancy%202018%2020191024%20SJ.pdf [accessed 11/11/2019]

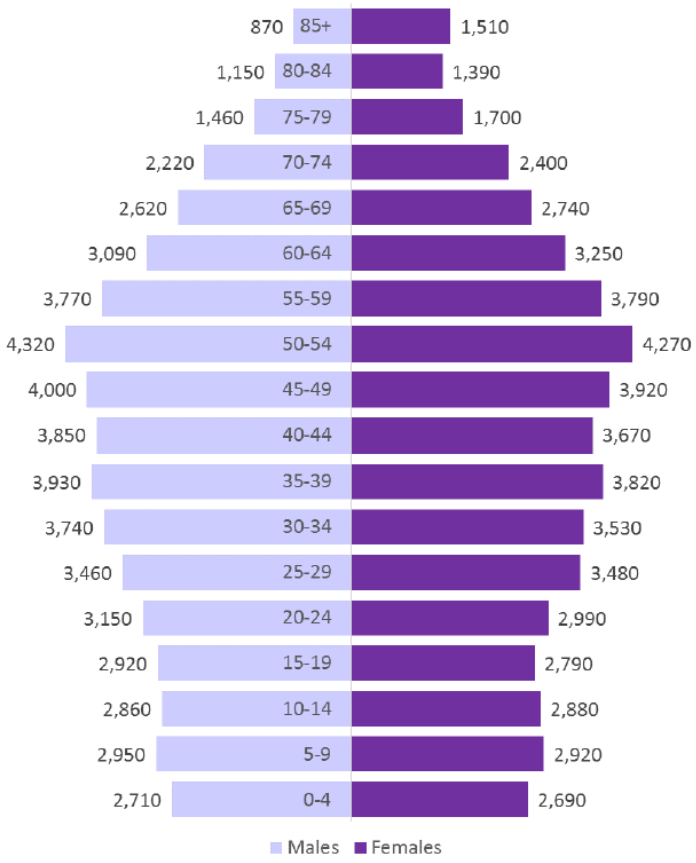


Figure A6.8: Age Structure of Jersey

Community assets, services and facilities

Within Jersey, there are 31 primary schools which includes 22 non-fee-paying schools as well as nine secondary schools. Seven of the secondary schools are States schools which includes five non-fee-paying schools and two fee paying schools. There are two hospitals in Jersey: Jersey General Hospital in St Helier and St Saviour's Hospital in St Saviour.

The 2018 Jersey Opinions and Lifestyle Survey report[118] indicates that in the last 12 months, 74% of adults attended the cinema and 54% attended live music events. 76% of adults agreed that the arts make a difference to Jersey. In 2016, 222 performances were held in the Jersey Opera House main theatre and 47 in the Studio, attended by 62,438 people. Also, in 2016, the Jersey Arts Centre held 217 ticketed performances, attended by 24,082 people as well as 34 theatre-in-education performances in schools with audiences totalling 2,145.[119]

Summary of Future Baseline

As indicated in the Future Jersey Report (2017-2037), there will be an estimated 11,000 people aged 65+ in Jersey by 2035. This is likely to increase the cost of health and social care. As the population of the Island continues to age, this could potentially negatively impact upon the future vitality of the local community and economy of Jersey, whilst also placing additional pressures to existing services and facilities.

Without some migration, the homegrown workforce will shrink as more people retire than leave school. The population projection for 2035 is 128,000, with an expected increase to 166,000 by 2065 (almost 50% increase on current levels at the end of 2018).

[118] States of Jersey (2018) Jersey Opinions & Lifestyle Survey Report [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202018%20Report%2020181205%20SU.pdf> [accessed 08/11/19]
[119] States of Jersey (2019) Culture statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/StatisticsCommunityPeople/Pages/CultureHeritage.aspx> [accessed 08/11/2019]

The suitability (e.g. size and design) and affordability of housing for local requirements depends on the implementation of appropriate housing policies through the new Island Plan. Unplanned development may have wider implications in terms of transport and access to infrastructure, or the natural environment.

Links to cross-cutting issues

The Aether Report suggests that climate change is a complex, global issue that can be hard to understand. Individuals can struggle to comprehend the impact that they can have and are reluctant to change their beliefs which are rooted in experiences, knowledge and tradition. This barrier can be overcome through social science research into beliefs and an appreciation of the individual hooks to facilitate change. For some, the health of their children is a priority whilst for others this may be house prices or noise reduction. Therefore, an appreciation of wider impacts can help to encourage a willingness to change among the public.

The potential impacts of climate change can be exacerbated with a vulnerable population; elderly, children, those living with illness or disabilities.

A7: Younger People

Summary of Current Baseline

Future Jersey Baseline

Introduction

It is important to note that several indicators indirectly impact upon younger people, with baseline information from several SA scoping chapters of direct relevance in this regard. To avoid duplication of information, the focus on this theme relates to 'starting well in life' and educational attainment / progress. Key trends on these indicators are summarised in the following sections.

Healthy Birth Weight

In 2017, 954 births took place in Jersey (the smallest annual number of births since 2002). 30% of births were by caesarean section and older mothers were more likely to opt to have a caesarean section.[120]

In 2017, 93% of Jersey babies were a healthy birth weight and has been maintained since 2012. Only 2% of babies born in Jersey in 2017 had a low birthweight for their gestational age and 5% were born overweight for their gestational age. [121]

The long-term ambition is to continue the trend, shown below in **Figure A7.1**. This is proposed because birth weight that is not within normal ranges has a strong association with poor health outcomes in infancy, childhood and across the whole life course. It also provides a robust proxy measure for maternal health behaviours and progress in reducing the health impact of socio-economic inequalities[122].

[120] Statistics Jersey (2018) Jersey Births and Breastfeeding Profile 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Breastfeeding%20Profile%202018%2020180329%20SJ.pdf> [accessed 11/11/2019]
[121] Statistics Jersey (2019) Healthier birth weights [online] available at: < https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/LearnGrow/Pages/BirthWeights.aspx> [accessed 11/11/2019]
[122] Government of Jersey (2019): 'Future Jersey Indicator: healthy birth weights', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/LearnGrow/Pages/BirthWeights.aspx> last accessed [16/12/19]

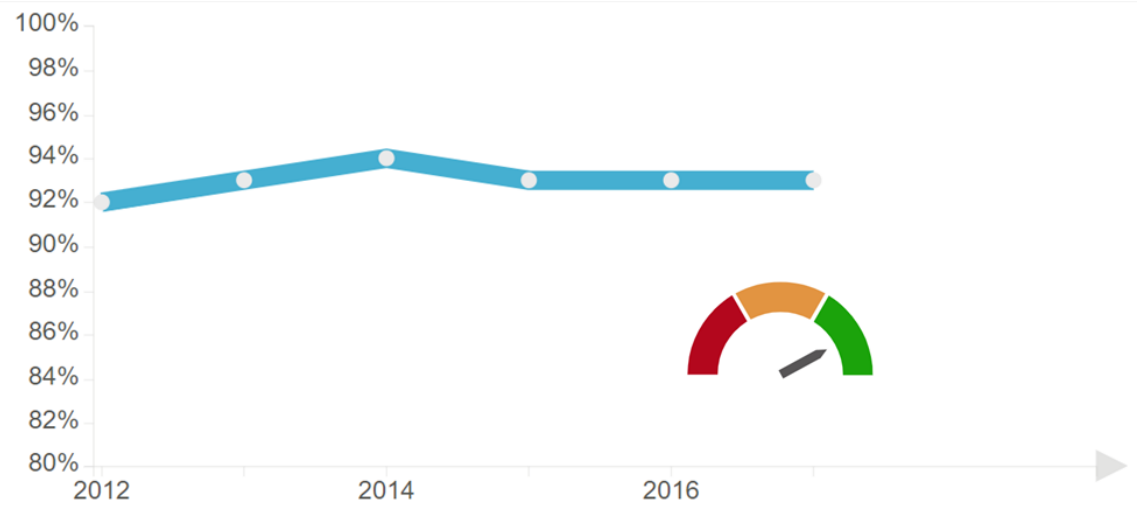


Figure A7.1: Percentage of new born babies with a weight appropriate for their gestational age (usually based on an ultrasound scan)

Education Progress and Achievement

The percentage of pupils achieving a GCSE equivalent at A* to C grade is increasing and is higher in Jersey than in England. Specifically, in 2015/2016, there were a greater proportion of pupils in Jersey achieving an equivalent qualification at grade A* to C in English and Mathematics (65.7%) compared to England (59.3%)[123].

In 2016, 60.4% of Key Stage 4 leavers in Jersey went on to study at least one substantial Level 3 qualification. Participation was higher for girls (68%) than for boys (53%). The long-term ambition is to improve progress for younger people gaining an upper secondary qualification[124].

Table A7.1 below highlights that 34% of individuals attain a higher education qualification in 2011, greater than 13% in 2001. Additionally, less people (20%) reported that they had no formal qualification in 2011 (20%) than 2001 (34%).

Table A7.1: Highest level of education[125]

Highest qualification (or equivalent)	2001	2011
Higher education	13%	34%
Secondary level	48%	45%
Other	6%	2%
No formal qualifications	34%	20%

In 2016/17, the average point score in Jersey was higher than in England for each of the A-Level, applied general and tech level cohorts, where the average point scores were 32.4 (C+), 35.7 (Distinction) and 32.3 (Distinction-) respectively[126]. Overall performance has remained steady. As shown in **Figure A7.2** below the long-term ambition is to transform this trend, enabling Jersey's children to achieve their full potential.

[123] States of Jersey (2019) Education statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/Education/Pages/Education.aspx> [accessed 08/11/2019]
[124] Government of Jersey (2019): 'Future Jersey Indicator: improve educational progress', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/LearnGrow/Pages/EducationalProgress.aspx> last accessed [16/12/19]
[125] States of Jersey (2019) Education statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/Education/Pages/Education.aspx> [accessed 08/11/2019]
[126] Government of Jersey (2019): 'Future Jersey Indicator: improve educational achievement', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/LearnGrow/Pages/EducationalAchievement.aspx> last accessed [16/12/19]

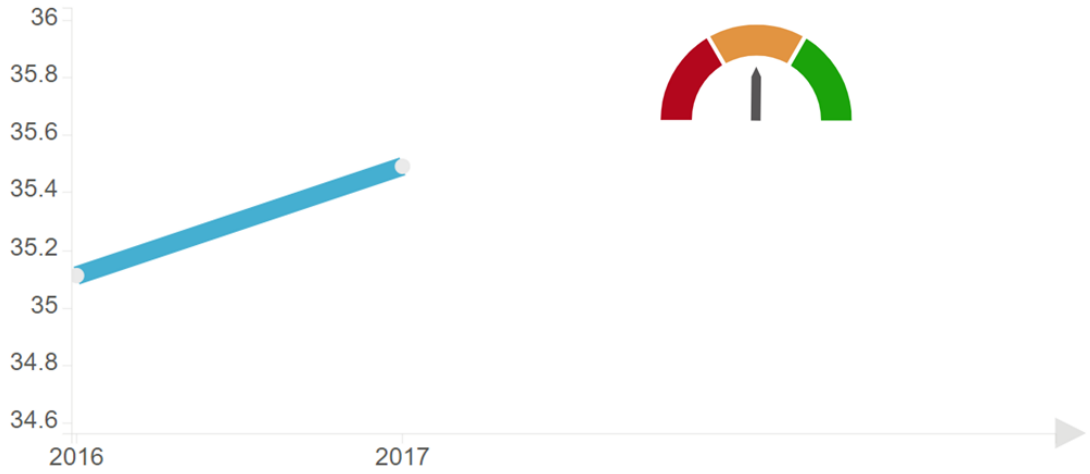


Figure A7.2: The average point score of Jersey pupils in Level 3 examinations

Quality of Life

Young people were less likely to rate the existing cultural offer as highly as older people - only 62% of people aged 16-34 rated it as 'good' / 'very good', compared to 93% of 65+ year-olds[127].

Additional SA Baseline

Improve educational progress

In 2018, the percentage of pupils who were considered as 'secure' in reading, writing and maths at the end of Key Stage 1 was 43.8% compared to 41.2% at the end of Key Stage 2.

Improve opportunities for school leavers

The number of children under 18 who are victims of crime in Jersey has fluctuated since 2012 when the number was reported at 243. In 2018, the number was at its lowest since 2012 at 225.

Improve children's early years' development

In 2018, 79.6% of children aged 4-5 years had a healthy BMI, compared to 67.3% of 10-11-year olds with a healthy BMI.

The percentage of children reaching developmental milestones at age two has increased since 2013 (0.8%) to 0.95% in 2018.

The 2018 Jersey School Survey Report[128] identified that 26% of children in years 6, 8 and 10 reporting having been bullied in the last 12 months. This number has increased since 20.2% in 2010.

Summary of Future Baseline

The prospects for younger people on the Island will continue to be a key determinant for the vitality and wellbeing of the population over the plan period. For example, better qualifications can lead to more satisfying and rewarding work and drive social mobility. Higher skilled workers positively influence productivity, earn higher wages, pay more taxes and need less support. For individuals, it improves the prospect of more rewarding employment and helps improve the skills base of Jersey's home-grown workforce.

Ensuring that younger people on Jersey have equal access to contributors of health and wellbeing (i.e. services and facilities, good quality housing and open spaces) will therefore be essential for the creation of mixed, balanced and inclusive communities.

[127] Government of Jersey (2019): 'Improve perceptions of culture', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/VibrantInclusive/Pages/Culture.aspx> last accessed [20/11/19]
[128] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%202020180912.pdf> [accessed 11/11/2019]

Links to cross-cutting themes

The Aether Report affirms that areas of the Island such as St Helier where there are higher proportions of children under five years old indicates an increased vulnerability because young children are more sensitive to the impacts of both flood and heat-related hazards. Young children can be affected wherever floods and high temperatures occur. However, there is a case for the particular targeting of areas where: there are more children exposed; the characteristics of the areas increase exposure; there are poor transport links, or children have other characteristics affecting sensitivity or exposure, such as ill-health or disabilities.

A8: Health and Wellbeing

Summary of Current Baseline

Future Jersey Baseline

Introduction

Several Future Jersey indicators directly relate to the 'Health and Wellbeing' SA theme, with those of relevance to the SA process including social isolation, physical activity (participation in sport and cultural activities), living with disabilities, mental wellbeing, and lifestyle statistics (i.e. obesity, alcohol consumption and smoking). Key trends on these indicators are summarised in the following sections.

Social Isolation

Research has shown that the health and wellbeing of people who have frequent social contact with family and friends is greater than those of people who do not. Social isolation is also proven to be a predictor of loneliness and premature mortality.

This indicator serves as a headline measure to promote discussion and debate about the story behind the trend in social contact, its causes and consequences. In 2018, 6% of adults in Jersey said they 'rarely or never' socialised face-to-face with people outside their own household. By comparison, 84% reported doing so at least weekly.

The Jersey Opinions and Lifestyle Survey 2018 asked questions about loneliness alongside those on social isolation. 21% of respondents reported feeling lonely some of the time (14%) or often (7%). The latter was similar to that in the UK. Adults aged 16-34 were most likely to report feeling lonely often or some of the time (30%). Around one in five (17%) adults who socialised outside their household daily said they felt lonely often or some of the time, compared to around a third of adults who rarely or never socialised outside their household[129].

Physical Activity

The recommended level of physical activity for adults is to engage in at least five sessions of moderate intensity activity of at least 30 minutes per week. In 2017, 52% of adults reported an activity level which met or exceeded the recommended level and 8% of adults reported doing no moderate intensity physical activity for at least 30 minutes during a typical week. 70% of adults reported that they wanted to do more exercise of physical activity. [130]

90% of adults rated Jersey's sporting activities and events as good or very good. 31% of adults walk into work and a further 7% cycle and are therefore keeping active during their commute.

[129] Government of Jersey (2019): 'Future Jersey indicator: reduce social isolation', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/VibrantInclusive/Pages/SocialContact.aspx> last accessed [20/11/19]
[130] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]

Living with Disabilities

Data from the 2017 Jersey Opinions and Lifestyle Survey reveals that 27% of adults said they had a longstanding illness, disability or infirmity. 66% of these adults said that it limited their day-to-day activities either a little or a lot.[131]

The Jersey Employment Trust (JET) is a local charity that assists people with disabilities to prepare for, find and maintain employment in Jersey. JET has a mission statement "To empower and facilitate people with a disability in Jersey. To maximise their potential to gain and maintain open employment through individual training, education and support".[132]

In 2017, 45% of working-age adults had heard of JET and 63% of working-age adults with a longstanding health issue that limits their day-to-day life had heard of it.

About one in seven islanders living in private households are disabled. Of these, just 31% recorded high levels of life satisfaction in 2015 compared to 51% of other islanders. Removing barriers to disabled people achieving the life that many take for granted is key for improvement. Future Jersey indicators suggest that in 2015, 60% of disabled residents found it difficult to take part in community activities, with 41% experiencing difficulties travelling around Jersey.

Obesity

The percentage of children in Years 6,8 and 10 who eat crisps on most days has increased since 2010 and less than 30% in all year groups (year 6, 8, 19 and 12) eat their five portions of fruit and vegetables a day.[133] Additionally, 80% of all children surveyed in the Jersey School Survey Report do not meet the recommended level of physical activity (one hour each day). In contrast, 70% of young people from Years 10 and 12 spent at least three hours a day watching TV, playing computer games and surfing the internet.

In 2017, 32% of adults were classified as overweight based on calculated BMI values whilst an additional 15% were classified as obese, very obese or morbidly obese. 65% of 16-34-year olds were considered a normal weight compared to just 42% of 55-year olds. Additionally, 48% of adults in 2017 did less than five sessions of moderate intensity activity of at least 30 minutes per week and 8% of adults did no physical activity each week.

When taking part in the Jersey Opinions and Lifestyle Survey, 69% of adults in Jersey had eaten less than the recommended five portions of fruit and vegetables in the last 24 hours.[134]

As shown below in **Figure A8.1** below, the long-term ambition is to transform the trend to reducing levels of obesity. This is proposed because obesity is a known risk factor for several chronic illnesses, and a worsening trend will drive increasing health care costs[135].

[131] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[132] Jersey Employment Trust (2019) About Us [online] available at: https://www.jet.co.je/about-us.aspx [accessed 11/11/2019]
[133] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%20180912.pdf> [accessed 11/11/2019]
[134] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[135] Government of Jersey (2019): 'Future Jersey Indicator: reduce obesity', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/HealthWellbeing/Pages/Obesity.aspx> last accessed [16/12/19]

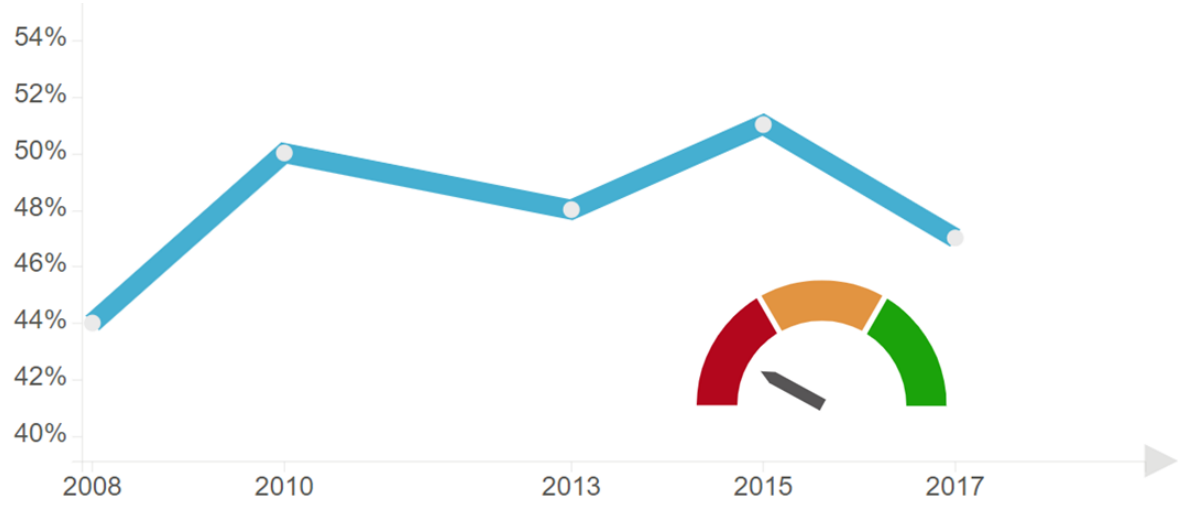


Figure A8.1: Percentage of adults in Jersey who are overweight or obese

Alcohol Consumption

The 2018 Jersey School Survey Report[136] also reveals that 25% of children in Year 10 and 40% of children in Year 12 had drank alcohol in the last seven days. 6% of year 8, 33% of Year 10 and 61% of Year 12 respondents reported having been really drunk at least once. Spirits are the most popular type of alcohol consumed by both Year 10 and Year 12 children.

The average alcohol consumption per Jersey adult (aged 15 years or older) in 2018 was 11.8 litres of pure alcohol per year. Although this figure dropped from 16.2 litres per year in 2000 to 11.5 litres per year in 2015, it has remained fairly constant since. 11.8 litres of pure alcohol per year is equivalent to approximately 8 pints of beer or 2.5 bottles of wine per week.[137]

11% of Jersey adults are teetotal compared to 20% of adults in England. In 2017 the average alcohol consumption per adult was 20% higher in Jersey (11.6 litres per year) than in the UK (9.7 litres per year). [138]

As shown in **Figure A8.2** (below), the long-term ambition is to continue reducing the levels of alcohol consumption on the Island. Overall, alcohol consumption has reduced by 21% since 2006 levels. Nonetheless, at 11.5 litres per adult (average levels), Jersey's consumption is about 15% higher than the European average[139].

[136] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%2020180912.pdf> [accessed 11/11/2019]
[137] States of Jersey (2018) Jersey Alcohol Profile 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20AlcoholProfile2018%2020190227.pdf> [accessed 12/11/2019]
[138] States of Jersey (2018) Jersey Alcohol Profile 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20AlcoholProfile2018%2020190227.pdf> [accessed 12/11/2019]
[139] Government of Jersey (2019): 'Future Jersey Indicator: reduce alcohol consumption', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/HealthWellbeing/Pages/Alcohol.aspx> last accessed [16/12/19]

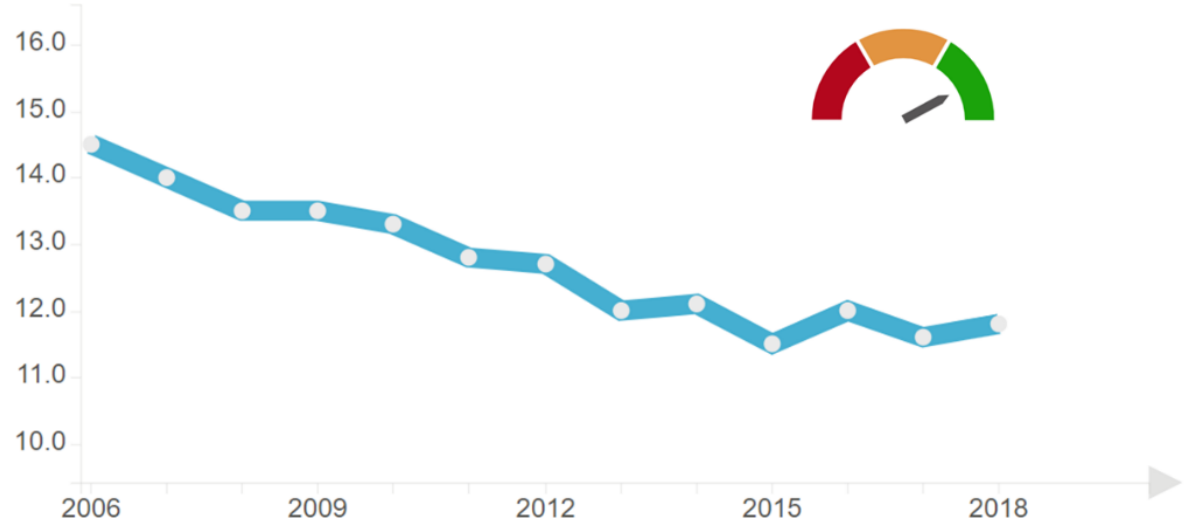


Figure A8.2: The consumption in litres of pure alcohol per adult in Jersey

Smoking

The 2018 Jersey School Survey Report[140] indicates that 26% of children's parents smoked. In 2015, nearly one in five Islanders aged 16 and over were smokers, with 12% smoking daily. About a quarter of 16-34-year-olds smoke and they remain the heaviest smoking age group. About 20% of deaths locally are attributed to smoking-related conditions.

As shown in **Figure A8.3** below, the long-term ambition is to reduce the percentage of smokers on the Island. Improving the current rate of progress would benefit numerous social, economic and environmental indicators, whilst also reducing avoidable health spending[141].

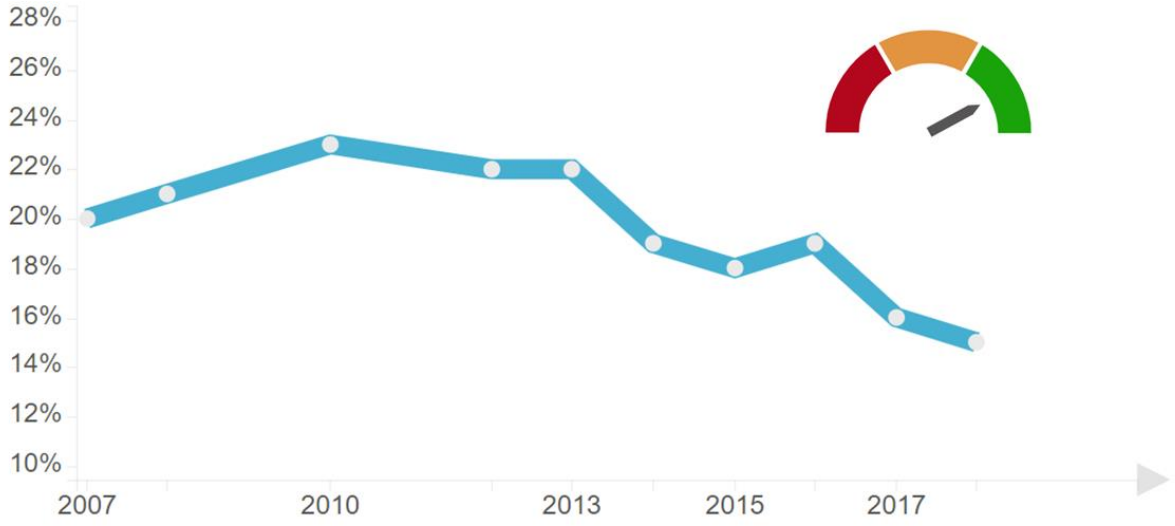


Figure A8.3: Percentage of adults who smoke daily or occasionally in Jersey

Mental Wellbeing

The 2018 Jersey School Survey Report[142] presents the results of a school survey which school Years 6,8,10 and 12 were given the opportunity to take part. A total of 3,058 children took part (over 80% of children in years 6,8 and 10 and 58% for year 12).

[140] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%202020180912.pdf> [accessed 11/11/2019]
[141] Government of Jersey (2019): 'Future Jersey Indicator: reduce smoking', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/HealthWellbeing/Pages/Smoking.aspx> last accessed [16/12/19]

When children in Years 8,10 and 12 were asked about their wellbeing, 66% of respondents rated their happiness as high or very high and 79% had medium-high or high self-esteem but 54% of respondents also rated themselves as having low or very low anxiety.

The top three worries in Years 8, 10 and 12 were study/ schoolwork, school tests/ exams and the way you look. Additionally, a higher proportion of females were worried than their male counterparts.

95% of adults in Jersey in 2017 agreed that anyone can have mental health problems but only 64% of adults felt they would feel comfortable talking with a friend or family member about a mental health problem.[143]

The long-term ambition is to transform the trend and improve community wellbeing levels. Notably, mental wellbeing is central to life satisfaction, productivity and participation.

Life Satisfaction

75% of adults scored seven out of ten or more for overall life satisfaction in the Jersey Opinions and Lifestyle Survey, feeling worthwhile, and happiness. 26% of adults scored their anxiety levels as high. Jersey's average (mean) scores were slightly lower than the UK average scores for satisfaction, feeling worthwhile and happiness, and higher than the UK for anxiety.

90% of adults are very satisfied or fairly satisfied with Jersey as a place to live. 75% of adults living in rural parishes were very satisfied with their local neighbourhood while 35% of adults living in St Helier were very satisfied with their local neighbourhood.[144]

Additional SA Baseline

Open Spaces

Jersey has an array of open spaces ranging from formal sporting facilities, natural green space, beaches and parks which serve the whole Island as well as informal spaces that form parts of the Island's built environment and which are more important on a neighbourhood level.[145]

Although now slightly outdated, an Outdoor Open Space, Sport & Recreation Study was carried out in 2008 which provides details of the open space provision in Jersey.[146]

Table A8.1 below outlines the sizes of different areas of green space showing that natural green space this the biggest contributor of green space on the island.

Table A8.1: Overall provision of open space in Jersey in 2008[147]

Type of open space	Current 'average' provision in Jersey Hectares (vergees)/1000
Parks and Recreation Grounds (Parks)	0.39 (2.20)
Sports and Recreation Grounds (Outdoor Sports Facilities)	0.81 (4.51)

[142] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%20180912.pdf> [accessed 11/11/2019]
[143] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[144] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[145] States of Jersey (2019) Planning for open space [online] available at: < https://consult.gov.je/portal/policy/pd/ip2011?pointId=1405696217926> [accessed 12/11/2019]
[146] States of Jersey (2008) Outdoor Open Space, Sport & Recreation Study [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20OpenSpaceStudyJPC%2020080701.pdf> [accessed 12/11/2019]
[147] States of Jersey (2008) Outdoor Open Space, Sport & Recreation Study [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20OpenSpaceStudyJPC%2020080701.pdf> [accessed 12/11/2019]

Children & Young people's Space (Play Space)	0.03 (0.18)
Informal Open Space (Amenity Greenspace)	0.26 (1.45)
Natural Greenspace 10.48 (58.28)	10.48 (58.28)

The Future Jersey 2017-2037 Report[148] indicates that the percentage of natural green space in Jersey has reduced by 1.8% in the last ten years but over 70% of the island still comprises green spaces.

In setting the future direction, the long-term ambition is to continue the trend of improving open space provision, particularly for the Island's capacity to absorb it future development needs within the existing built environment. The progress shown in **Figure A8.4** below will positively contribute to important goals for water quality, biodiversity ad overall quality of life[149]. **Figure A8.5** shows the location of protected open spaces on the Island.

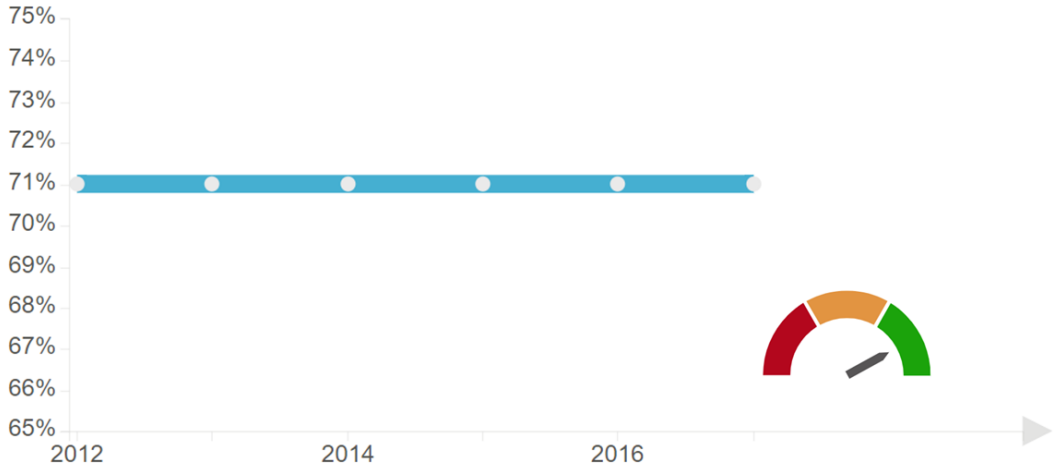


Figure A8.4: Percentage of Jersey's surface area that consists of land classified as 'green space' (natural environment or land under cultivation)

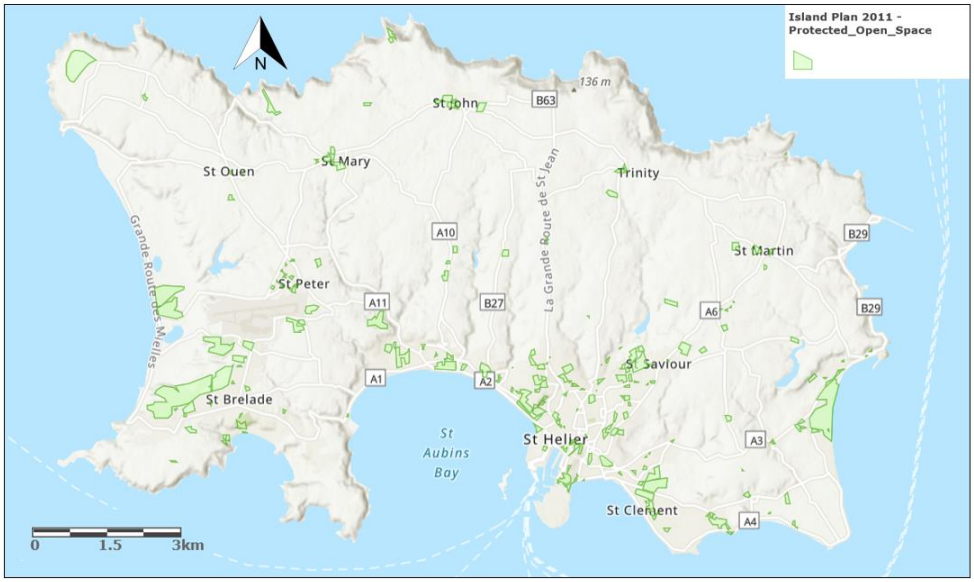


Figure A8.5: Protected open spaces on the Island

[148] States of Jersey (2017) Future Jersey 2017-2037 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/FUTURE%20JERSEY_SPREADS%2012072017.pdf> [accessed 12/11/2019]
[149] Government of Jersey (2019): 'Future Jersey Indicator: protect the coast / countryside', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/NaturalEnvironment/Pages/GreenSpaces.aspx> last accessed [16/12/19]

Summary of Future Baseline

As indicated in the Future Jersey Report (2017-2037), health, social care and social security account for nearly 60% of spending on Jersey's public services. Jersey is heading towards an unhealthy and costly future if more Islanders develop chronic but preventable diseases linked to unhealthy lifestyles. An increase in chronic health conditions and 70% increase in older people will significantly increase this expenditure over the next 20 years. At the same time, a shrinking working age population would mean fewer workers to fund this spending.

Links to cross-cutting issues

Public transport and infrastructure improvements can offer health and wellbeing benefits. For example, through improved access to social networks and services such as health care (especially for vulnerable groups such as the elderly) and a potential increase in physical activity (if travel to public transport is by walking or cycling). Likewise, alternatively fuelled vehicles could provide health and wellbeing benefits through reduced air pollution and reduced noise.

Energy efficiency improvements in residential, public and private buildings can have significant health and wellbeing, energy security and affordable living benefits. Benefits are especially felt by those who are living in fuel poverty and include; reduced energy bills, reduced fuel poverty and access of to a decent standard of living for a greater number of people. The health benefits are especially important as there is a reduced exposure to cold living environments and increased income that can be spent on other commodities such as food. There are also mental health benefits as living conditions and general quality of life improve. With a decreased reliance on imported energy, Jersey is less vulnerable to disruptions in supply.

The Aether Report highlights several key risks of climate change for the Island, including:

- Risks to health, well-being and productivity from high temperatures, with the number of premature deaths from heat potentially tripling by 2050;
- New and emerging pests and diseases, and invasive non-native species affecting people, plants and animals. There are also potential human health risks in the future from invasive species such as the malaria mosquito; and
- The potential impacts of climate change can be exacerbated with a vulnerable population; elderly, children, those living with illness or disabilities.

A9: Transport

Summary of Current Baseline

Future Jersey Baseline

Introduction

Several Future Jersey indicators directly relate to the 'Transport' SA theme, with those of relevance to the SA process including road safety, traffic congestion and active travel. Key trends on these indicators are summarised in the following sections.

Road Safety

Many of Jersey's roads are narrow and intersected by junctions meaning that driving requires additional care and attention. Carelessness is one of the biggest causes of road traffic collisions in the Island. Behaviours known as the 'fatal four' are speeding, drink driving, not wearing a seatbelt and using a mobile phone while driving. The States of Jersey Police play an important role in maintaining a safe driving environment by[150]:

- Working with the honorary police to monitor and enforce compliance with the Island's road traffic legislation;

[150] States of Jersey Police (2019) Road safety [online] available at: <https://jersey.police.uk/be-safe/road-safety/> [accessed 13/11/2019]

- Supporting roadside checks on the roadworthiness of vehicles and making sure that drivers are properly qualified and insured;
- Providing road traffic engineers with details of the road traffic collisions we record to help improve road and junction layouts and facilities; and
- Working with partners such as the Road Safety Panel and Prison Me No Way to deliver road safety education programmes.

Jersey also has a cycle helmet law whereby children aged 13 years and under must wear a protective helmet if they are cycling or on a trailer of a bike.[151] Furthermore, the top speed limit in Jersey is 40mph.

Figure A9.1 below indicates that the underlying trend of road traffic collisions resulting in deaths or serious injuries per 1,000 people is steadily increasing[152]. In 2016, 71 road traffic collisions resulted in fatal or serious injuries, with the number of crashes varying by up to 45% between years. On average, two people have been killed on Jersey's roads annually since 2008 and another 57 seriously injured, of whom about ten suffer life-threatening / changing injuries.

The long-term ambition is to transform the trend, improving road safety to reduce the risks of death or injury. Progress could encourage more active, healthier forms of travel, which will help to reduce traffic congestion, improve air quality and reduce demand on health services.

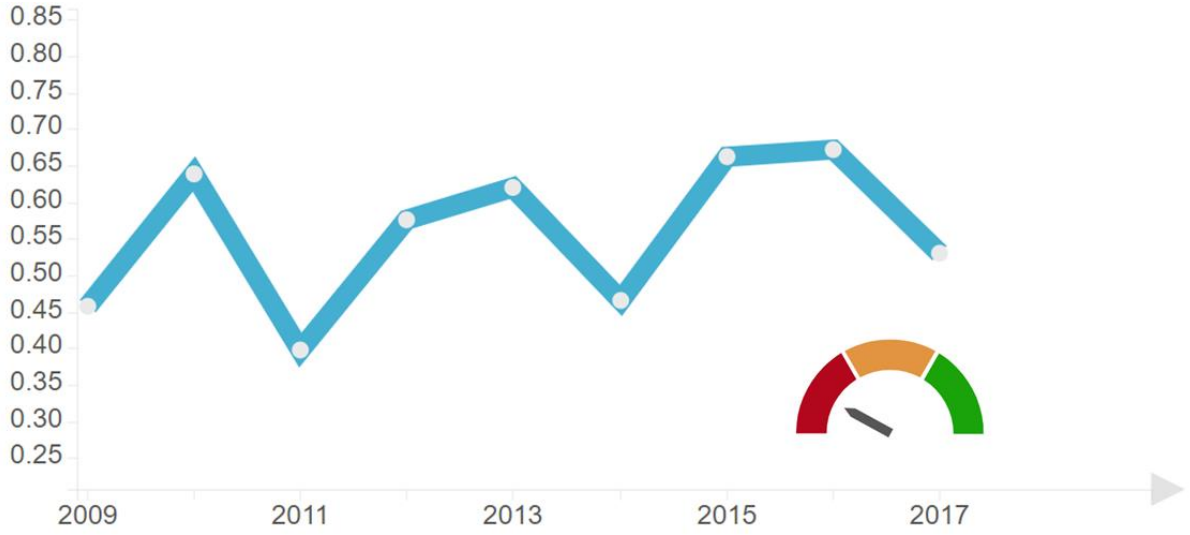


Figure A9.1: The number of road traffic collisions that resulted in deaths or serious injury (per 1000 people in Jersey)

Traffic Congestion

Jersey's interactive road information map highlights the roads on the island that have had road closures or diversions are one-way streets of single line traffic.[153] Prior to 2017, there were only a handful of roads marked on the map which had traffic issues. However, there has been an increase in roads which are now single line traffic, diversions or road closures since 2018 as outlined in **Figure A9.2** below.

The number of vehicles on nine main routes towards St Helier has been monitored during morning peak traffic since 2010. In 2010, there were 10,700 vehicles on the road, and this has gradually decreased every year to 10,166 in 2018. The long-term ambition shown in **Figure A9.3** is to improve

[151] States of Jersey (2019) Jersey cycle helmet law [online] available at: <https://www.gov.je/Environment/GreenerLifestyles/GreenerTravel/CyclingWalking/Pages/CycleHelmets.aspx> [accessed 13/11/2019]
[152] Government of Jersey (2019): 'Future Jersey Indicator: improve road safety', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SafetySecurity/Pages/RoadSafety.aspx> last accessed [16/12/19]
[153] Government of Jersey (2019) Road information map [online] available at: <https://roadworks.gov.je/JSW/roadworks.htm?_ga=2.93214168.439064417.1573643847-1878068898.1572947244#> [accessed 13/11/2019]

the trend, encouraging a cultural shift to more active and sustainable forms of travel, away from private car-use.

This will help to improve Jersey's performance on air quality, energy use and greenhouse gas emissions. It will also help to mitigate the effects of population growth.

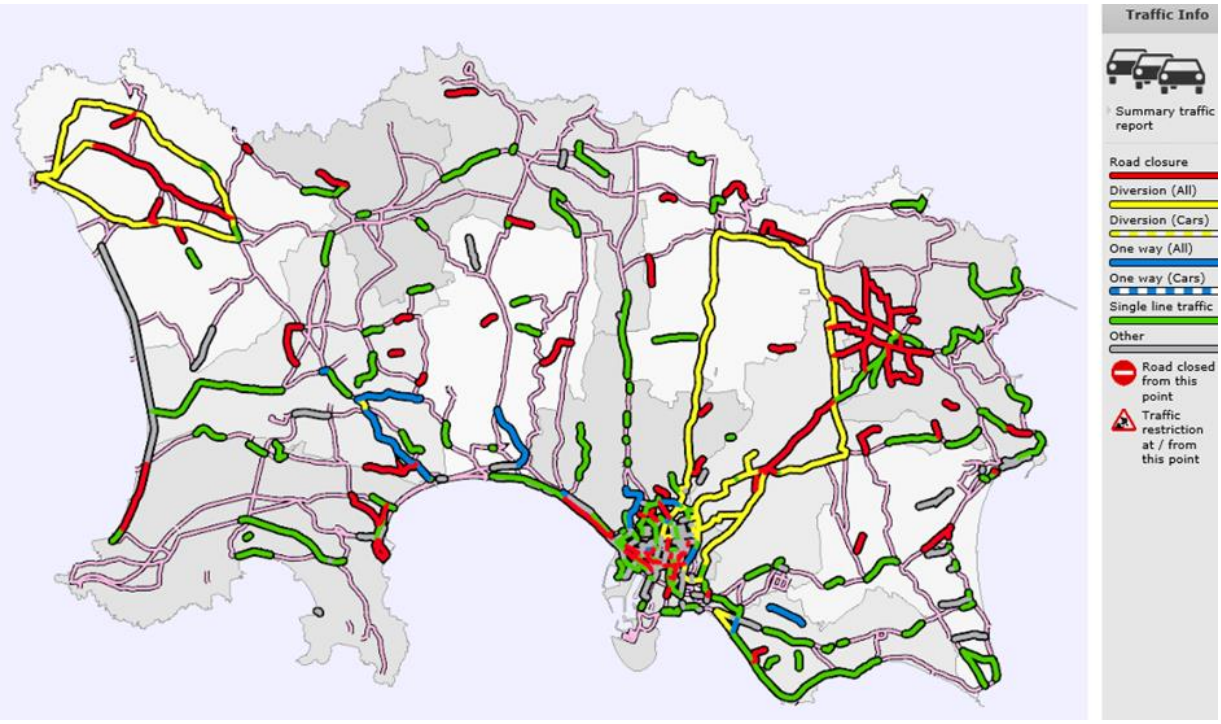


Figure A9.2: Traffic information in Jersey up to November 2019[154]

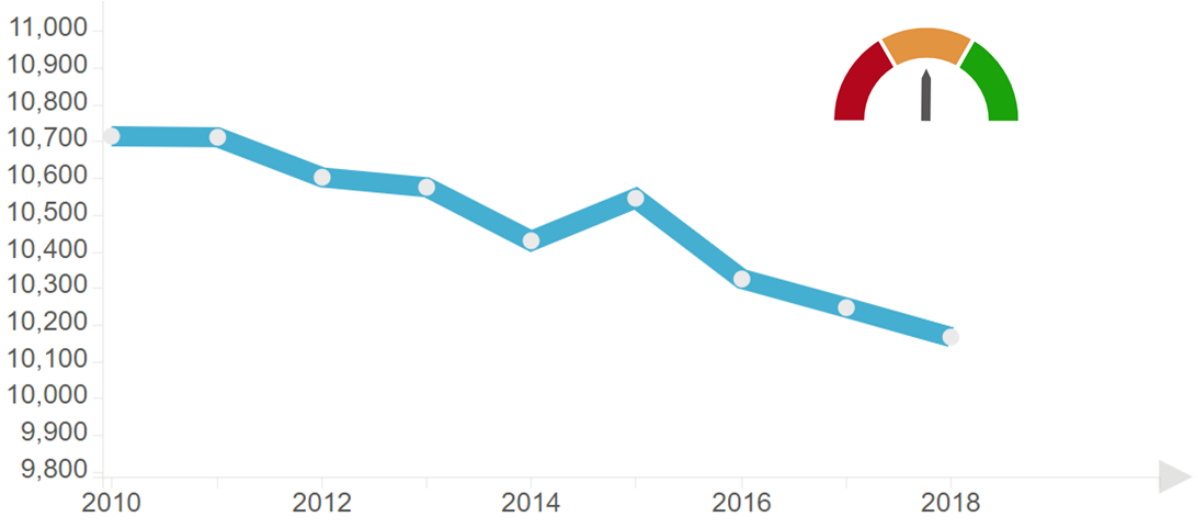


Figure A9.3: The traffic flow towards St Helier recorded during the morning peak period on nine main routes[155]

[154] Government of Jersey (2019) Road information map [online] available at: < https://roadworks.gov.je/JSW/roadworks.htm?_ga=2.93214168.439064417.1573643847-1878068898.1572947244#> [accessed 13/11/2019]
[155] Government of Jersey (2019): 'Future Jersey Indicator: reduce traffic congestion', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BuiltHistoricEnvironment/Pages/TrafficCongestion.aspx> last accessed [16/12/19]

Sustainable Transport Policy and Active Travel

As discussed in the climate change chapter of this SA Scoping Report, the transport sector is currently the biggest contributor to Jersey's greenhouse gas emissions.

In July 2019 it was agreed that a new Sustainable Transport Policy was needed by the end of the year. Work is currently underway on this. This strategy will look at the following areas of transport in the Island, including[156]:

- Active travel (walking and cycling);
- Public transport;
- Road safety;
- Parking;
- Network management (controlling the movement of traffic on the roads);
- Asset management (maintaining and repairing the roads); and
- Future technologies (autonomous vehicles).

Data from the 2017 Jersey Opinions and Lifestyle Survey reveals that 57% of adults drive to work, 31% walk to work, 2% catch a bus to work and 7% cycle to work.[157] Similarly, in 2018 43% of journeys to work have been made by walking, cycling or public transport. In 2006, just 29% of journeys to work were made by walking, cycling or public transport indicating that there has been an improvement.

In the 2018 Jersey School Survey Report[158] it was identified that 52% of young people travelled to school by car, can or taxi, 18% travelled by bus, 32% walked to school and 2% cycled. The percentage of young people who travel to school by bus has increased since 2006.

In summary, levels of active travel have increased compared to 2006 levels, but momentum has slowed in recent years. **Figure A9.4** below indicates that the long-term ambition is to improve levels of active travel[159].

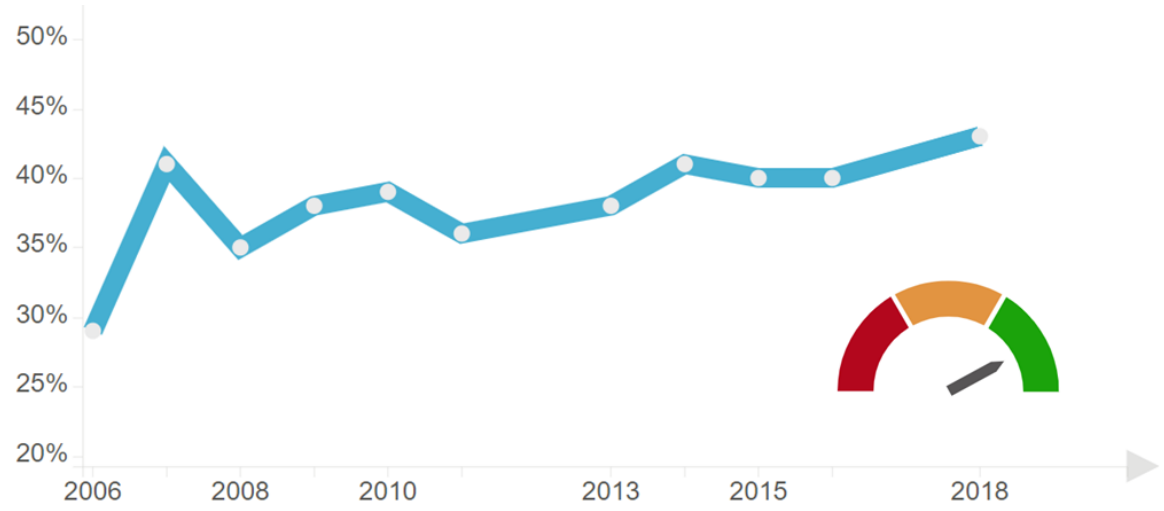


Figure A9.4: Percentage of journeys to work made by walking, cycling or public transport

[156] States of Jersey (2019) Sustainable transport [online] available at: < https://www.gov.je/Environment/GreenerLifestyles/GreenerTravel/Pages/SustainableTransport.aspx> [accessed 13/11/2019]
[157] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 13/11/2019]
[158] Statistics Jersey (2019) Jersey School Survey Report 2018 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/r%20Jersey%20School%20Survey%20180912.pdf> [accessed 13/11/2019]
[159] Government of Jersey (2019): 'Future Jersey Indicator: increase active travel', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BuiltHistoricEnvironment/Pages/Travel.aspx> last accessed [16/12/19]

Additional SA Baseline

Island Transportation Networks

Jersey has about 750 kilometres of roads connecting all parts of the island and as previously discussed driving is a popular mode of travel on the island. There is currently no railway network on the Island.

Jersey has a large network of walking and cycle routes running across the island. Additionally, in 1993 Jersey created a sustainable initiative known as 'Green Lanes' where there is now a network of lanes which allows pedestrians, cyclists and horse riders take precedence over the motorist. There is a speed limit of 15mph on Green Lanes to discourage cars from using the lanes other than for access.[160]

Jersey has a proficient bus network which includes 25 services linking the island's main locations and attractions. The central bus station at Liberation Station, with the location of bus stops is shown below in **Figure A9.5**. Most buses have access for wheelchair users.[161]

Figure A9.5: Location of bus stops on the Island

Accessing Jersey from the UK

Ferries and air travel are the main ways of accessing the island from the UK. In 2006, there were around 1,126,400 air and sea passenger arrivals. Sea passenger arrivals have decreased by 16% since 2015 and air arrivals have increased by 4% since 2015.[162]

[160] Robson and Anderson (1996) Jersey's Green Lanes [online] available at: <http://www.jersey.co.uk/jsyinfo/grenlane.html> [accessed 13/11/2019]
[161] Liberty bus (2019) Winter Timetable [online] available at: <https://www.libertybus.je/> [accessed 13/11/2019]
[162] States of Jersey (2019) Sea and air transport statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/TravelTransport/Pages/SeaAirTransport.aspx> [accessed 13/11/2019]

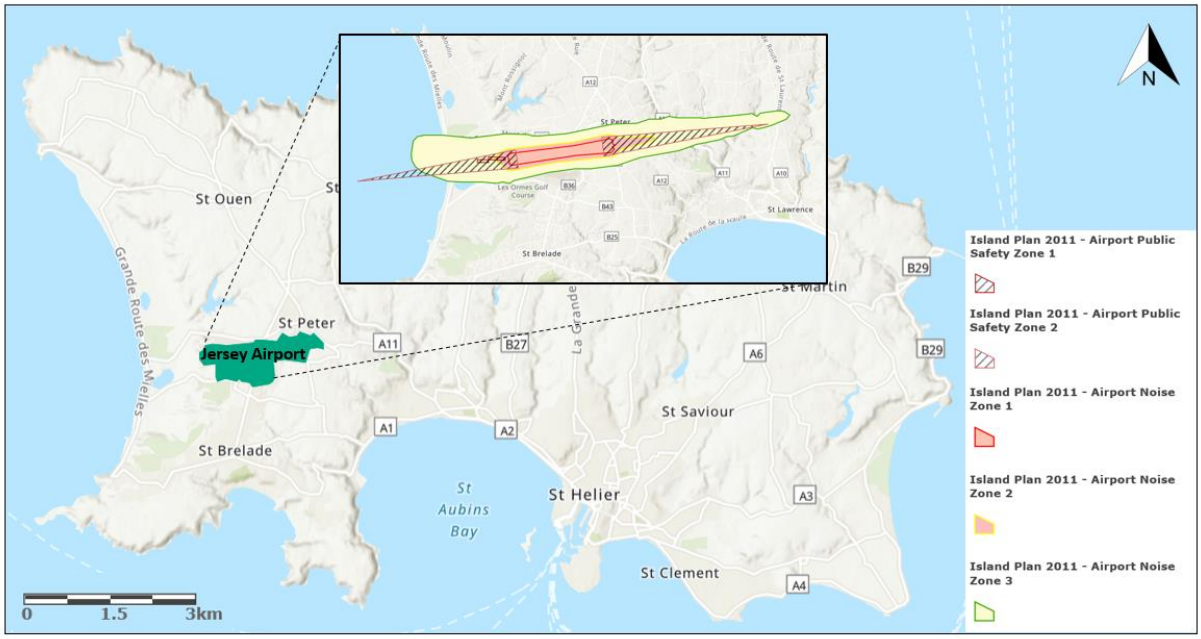


Figure A9.6: Jersey Airport and its associated public safety and noise zones

Summary of Future Baseline

New development has the potential to increase traffic and cause congestion on the Island, principally at junctions on key routes. This is likely to continue to be more pronounced at weekends and during peak times (e.g. rush hours) and holiday periods.

The 'Common Strategic Policy' (formerly known as the States Strategic Plan) sets out the priorities of the current Government, which includes improving St Helier and sustainable transport. It seeks to regenerate the town area to ensure it continues to provide space to live and work for a growing population as well as remaining as Jersey's economic centre. Successful travel and transport play an important role in ensuring St Helier's future; as such it will identify specific projects to make St. Helier a more accessible and walkable town with an improved public realm.

Links to cross-cutting issues

The Aether Report highlights that active travel can provide significant health benefits through increased physical activity and decreased air pollution (when active travel replaces private car travel). The lowered disease burden has associated economic benefits through a reduction in health care costs and an increase in the size of the workforce as more working-age people could be in good health. If private car travel is replaced there are also energy security benefits from a decreased reliance on imported fossil fuels and affordable living benefits as the cost of travel is cheaper. Careful planning and infrastructure investment will be needed, however, to avoid a potential increase in road traffic accidents as more people walk and cycle. This is also heavily reliant on behavioural changes and shifts amongst local population.

A modal shift to active travel will prompt significant decreases in greenhouse gas emissions from transport. This will not only reduce demand and influence travel choices but will also reduce pollution and noise caused by transport.

There is also a need for active travel actions to be location specific and tailored to take into consideration social inclusion. For example, lower income communities are less likely to take advantage of cycling and associated benefits due to the initial cost of owning a bike. Therefore, targeted initiatives that support these groups (such as easy access cycle-hire schemes) are needed to maximise the benefits and ensure equitable distribution of benefits. The cost of public transport could be a barrier to the lowest income users. It is becoming increasingly expensive and this can prevent, for example, young people engaging in education or unemployed accessing jobs. Subsidies or concessionary fares is one solution to this barrier however this would need to be carefully planned.

A10: Economy

Summary of Current Baseline

Future Jersey Baseline

Introduction

Several Future Jersey indicators directly relate to the 'Economy' SA theme, with those of relevance to the SA process including health and safety at work, income, economic participation and outputs, productivity, workforce skills and levels of employment. Key trends on these indicators are summarised in the following sections.

Work-related injuries and ill-health

In 2015 there were 748 claims for short-term incapacity benefit (STIA) due to work-related injuries or incidents. This equates to 14.2 for every 1,000 full-time equivalent workers. In 2015, over 26,000 working days were lost and £736,257 was paid out in STIA. Despite a downward trend since 2006, as shown in **Figure A10.1** (below), recent increases have been driven by work-related stress[163].

The long-term ambition is to continue the trend, further improving personal safety, reducing economic losses and available costs to health and social security systems.

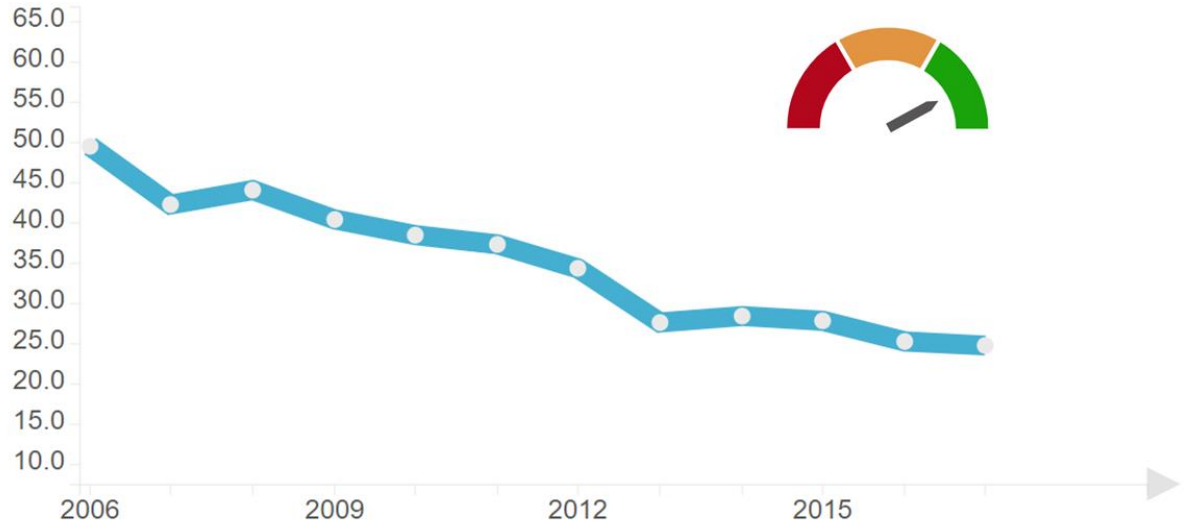


Figure A10.1: The number of claims for STIA due to work-related incidents per 1000 FTE employees

The Health and Safety at Work Inspectorate Annual Report 2016[164] states that in 2016, 58 investigations into serious work-related accidents and incidents including one fatal incident were carried out. In addition to the fatal accident, many of these resulted in people sustaining serious injuries including multiple fractures, amputations, serious head injuries and exposures to airborne asbestos fibres.

Figure A10.2 below outlines that most of these incidents in 2016 were construction related. The number of jobs in the construction industry has increased annually since December 2013 and in 2016, approximately 10% of the working population in Jersey worked in the construction sector.

The Health and Safety at Work Inspectorate have a vision to prevent death, injury and ill health to those at work and those directly affected by work activities. In order to achieve this, they lead and engage with those who influence health and safety at work.

[163] Government of Jersey (2019): 'Future Jersey Indicator: reduce work-related injuries / ill-health', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/SafetySecurity/Pages/WorkRelatedIllnessInjury.aspx> last accessed [16/12/19]
[164] States of Jersey (2016) Health and Safety at Work Inspectorate [online] available at: < https://www.gov.je/SiteCollectionDocuments/Working%20in%20Jersey/R%20HSI%20Annual%20%20Report%202016%20201 71018%20AM.pdf> [accessed 12/11/2019]

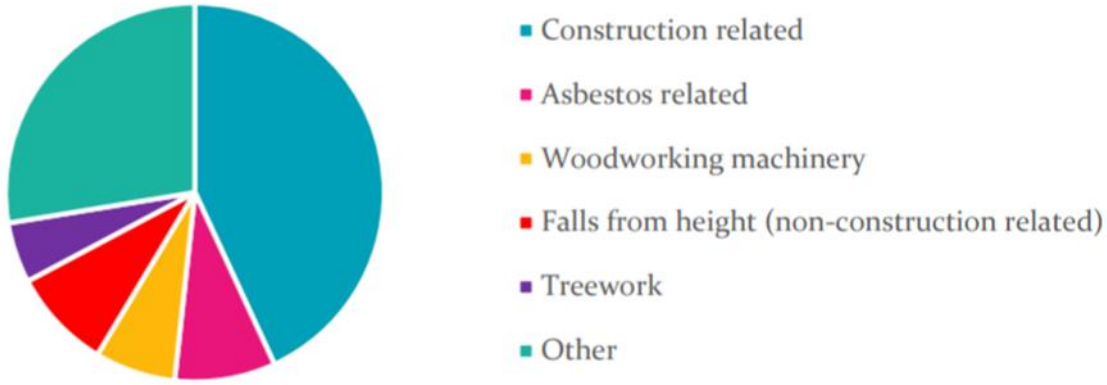


Figure A10.2: Nature of accidents investigated by the Health and Safety at Work Inspectorate in 2016[165]

Income

Earning a decent wage has a big impact on Islanders' overall quality of life, both in terms of being able to afford a good standard of living and the effect this has on their health and wellbeing. In June 2018, average weekly earnings in Jersey were 3.5% higher than in June 2017. This increase was the largest in a single year since 2008. During the twelve months to June 2018, however, the Jersey Retail Price Index increased by 4.5%, meaning that average earnings decreased by about 1% in real terms.

If earnings are growing faster than inflation, it shows that people in work are better off. Progress again this indicator benefits not only the individual and their family, but economic participation levels and Jersey's productivity[166].

The Index of Average Earnings measures changes in gross wages and salaries paid to employees. It includes overtime payments, but excludes bonuses, employers' insurance contributions, holiday pay and benefits in kind (e.g. free accommodation). **Figure A10.3** below demonstrates that there has been a reduction in earnings since 1999. However, earnings are now gradually increasing since 2010.

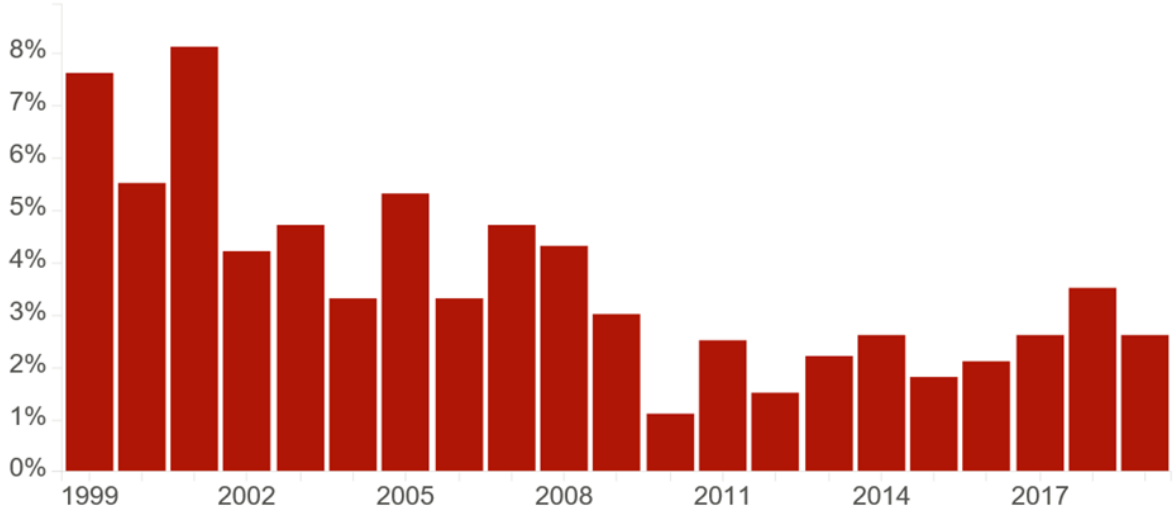


Figure A10.3: Annual percentage change in the Index of Average Earnings[167]

[165] States of Jersey (2016) Health and Safety at Work Inspectorate [online] available at: < https://www.gov.je/SiteCollectionDocuments/Working%20in%20Jersey/R%20HSI%20Annual%20%20Report%202016%20201 71018%20AM.pdf> [accessed 12/11/2019]
[166] Government of Jersey (2019): 'Future Jersey indicator: increase average earnings', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/JobsGrowth/Pages/AverageEarnings.aspx> last accessed [20/11/19]

The Jersey Household Income Distribution survey in 2014/15 revealed that average (mean) weekly household income was £860 per week before housing costs and £720 per week after housing costs. 75% of household income was from employment earnings, 4% was from income support, benefits and grants and 12% was from pensions.[168]

Although the average household income was about 50% higher than the UK in 2014/15, it has not kept pace with inflation over time. The long-term ambition is to transform this trend, increasing productivity, participation, skills and new, higher value employment opportunities.

Low Income Households

In 2013, it was estimated that 9,000 households, 3,700 children, 4,400 pensioners and 10,000 adults of working age were living in relative low income. Additionally, 10% of the workforce were earning less than £6.85 per hour. Two-thirds of those 10% were on permanent contracts.[169]

In 2014/15, it was reported that 26% of households and 23% of individuals were in relative low income.[170] Over half of one-parent families were in relative low income and one in three working-age adults were also reported as living on low income.

The long-term ambition is to improve the trend, building on current progress through improved employment opportunities and planning for retirement, in combination with a tax and benefits system that helps reduce income inequality.

Coping Financially

The Jersey Opinions and Lifestyle Survey collects detailed information on a wide range of social issues and provides official social statistics about Jersey. Data from the survey reveals that the % of households who find it 'quite' or 'very difficult' to cope financially was 18% in 2017. This has decreased from 26% in 2014.[171] Additionally, the Jersey Opinions and Lifestyle Report indicates that 44% of single parent families had difficulty coping financially in 2017. Also, in 2017, 19% of households thought their financial situation had improved over the last year whereas 28% of households thought it had got worse. It is important to note that this survey goes to a representative sample of Islanders, therefore the results cannot be as precise as if everybody in Jersey had responded.

In 2014, 13% of households reported having difficulty keeping their home adequately warm due to financial reasons and an additional 18% said they sometimes found it difficult to do so. 38% of households with dependent children found it 'quite' or 'very' difficult to cope financially in comparison to 10% of households with at least one pensioner, 53% of households living in States/Parish accommodation, 34% living in private rental accommodation and 32% in non-qualified accommodation.[172]

In 2013, median household income in Jersey was 64% higher in Jersey compared to the UK. Excluding housing costs, health and education, price levels for consumer goods and services in Jersey were 9% higher than in the UK. The overall price level for consumer goods and services in

[167] States of Jersey (2019) Earnings and income statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/EmploymentEarnings/Pages/EarningsIncomeStatistics.aspx> [accessed 08/11/2019]
[168] States of Jersey (2019) Earnings and income statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/EmploymentEarnings/Pages/EarningsIncomeStatistics.aspx> [accessed 08/11/2019]
[169] States of Jersey (2015) Relative Low Income [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Relative%20Low%20Income%2020150127%20SU.pdf> [accessed 08/11/2019]
[170] States of Jersey (2019) Earnings and income statistics [online] available at: < https://www.gov.je/Government/JerseyInFigures/EmploymentEarnings/Pages/EarningsIncomeStatistics.aspx> [accessed 08/11/2019]
[171] States of Jersey (2017) Jersey Opinions & Lifestyle Survey Report 2017 [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Opinions%20and%20Lifestyle%20Survey%202017%20report%2020171130%20SU.pdf> [accessed 11/11/2019]
[172] States of Jersey (2015) Relative Low Income [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Relative%20Low%20Income%2020150127%20SU.pdf> [accessed 08/11/2019]

Jersey, including housings costs, education and health, was estimated at 20% greater than the UK average[173].

The long-term ambition is to transform the trend and improve affordability, as better performance against this indicator benefits a variety of health and wellbeing indicators and support's Jersey's appeal as a place to live and work.

Skilled Workforce

Jersey relies on the skills and abilities of its people to be competitive in a rapidly changing global economy. If Jersey doesn't provide a high quality, appropriate skilled workforce, others will. Sustaining a suitably skilled population is essential to the enterprise and innovation, and to deliver sustainable, productivity-led economic growth for the Island.

Providing opportunities and choices for Islanders, of all ages, to achieve their potential is also key to an individual's health and wellbeing. Skills are a foundation for good, secure employment that contributes to life satisfaction and sustains a decent standard of living[174].

The long-term ambition for this indicator is to improve the skills profile through education and migration targeted at the skills Jersey needs. This will benefit business growth and productivity while contributing to financial independence and other wellbeing indicators.

Economic Participation

Improved participation in the labour market helps to generate economic growth by increasing the productive capacity of the economy - the more people in employment, the more an economy can produce. This in turn helps to improve the standard of living of those moving into employment and helps to reduce some of the social costs associated with people being out of work[175].

The 2001 and 2011 Censuses both showed a participation rate of 82%. Although this rate is high, about one in ten working age people were unable to work due to sickness or disability, or they had retired early. The long-term ambition for this indicator is to improve Jersey's labour supply by removing barriers to participation. This could lessen demand for inward migration and benefit life satisfaction indicators.

Productivity and Economic Output

Increasing the amount the Island can produce per person – by working smarter, not longer – is the main way to achieve economic growth, improve competitiveness and raise the standard of living. It means using resources more efficiently, which is particularly important in a small Island, and can help to achieve environmental ambitions, as well as economic ones[176].

As shown in **Figure A10.4** (below), the long-term ambition for this indicator is to transform the trend, improving productivity by making best use of existing resources. This will be key to achieving sustainable economic growth and improving standard of living.

Continued economic growth helps to provide better paid jobs, more employment opportunities, helps to fund public services and encourages businesses to invest in Jersey. Achieving growth in a sustainable way by better use of resources also helps Jersey achieve its environmental ambitions.

GVA per head is a measure of the standard of living in the Island. Where GVA is increasing at a faster rate than the population, the standard of living is likely to rise. The total GVA of Jersey's economy in

[173] States of Jersey (2015) Relative Low Income [online] available at: < https://www.gov.je/SiteCollectionDocuments/Government%20and%20administration/R%20Relative%20Low%20Income%20150127%20SU.pdf> [accessed 08/11/2019]
[174] Government of Jersey (2019): 'Future Jersey Indicator: improve workforce skills', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BusinessEnvironment/Pages/SkilledWorkforce.aspx> last accessed [20/11/19]
[175] Government of Jersey (2019): 'Future Jersey Indicator: increase economic participation', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BusinessEnvironment/Pages/EconomicParticipation.aspx> last accessed [20/11/19]
[176] Government of Jersey (2019): 'Future Jersey Indicator: improve productivity', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/JobsGrowth/Pages/Productivity.aspx> last accessed [20/11/19]

2017 was £4.381 billion. In each year from 2014 to 2016, total GVA increased in real terms but, in 2017, it was essentially unchanged, increasing by 0.4% on an annual basis.

The financial services sector accounts for 40% of Jersey's total GVA so its performance is central to that of the Island's economy as a whole. The construction sector recorded the strongest real-term growth in GVA in 2017 whilst the financial services, hotels, restaurants and bars, and manufacturing sectors all saw GVA decline in real terms[177].

As shown below in **Figure A10.5**, the long-term ambition is to transform this trend. Sustained economic growth is essential is Jersey is to meet the cost of future challenges and meet Islanders' expectations for higher incomes, greater job opportunities and quality services.

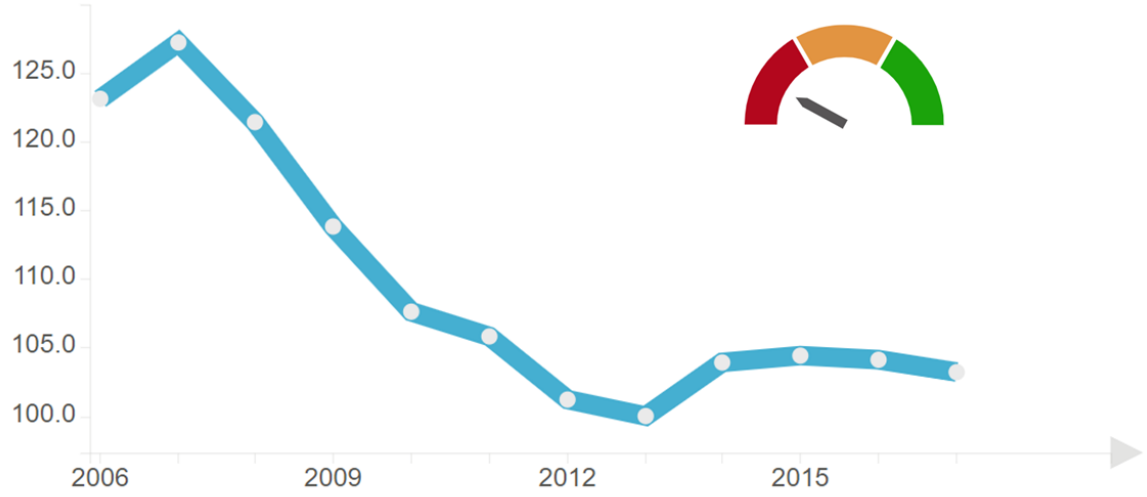


Figure A10.4: Jersey's productivity by dividing economic output by the number of FTE employees. It is indexed against 2013 (value = 100) to allow comparison between years.

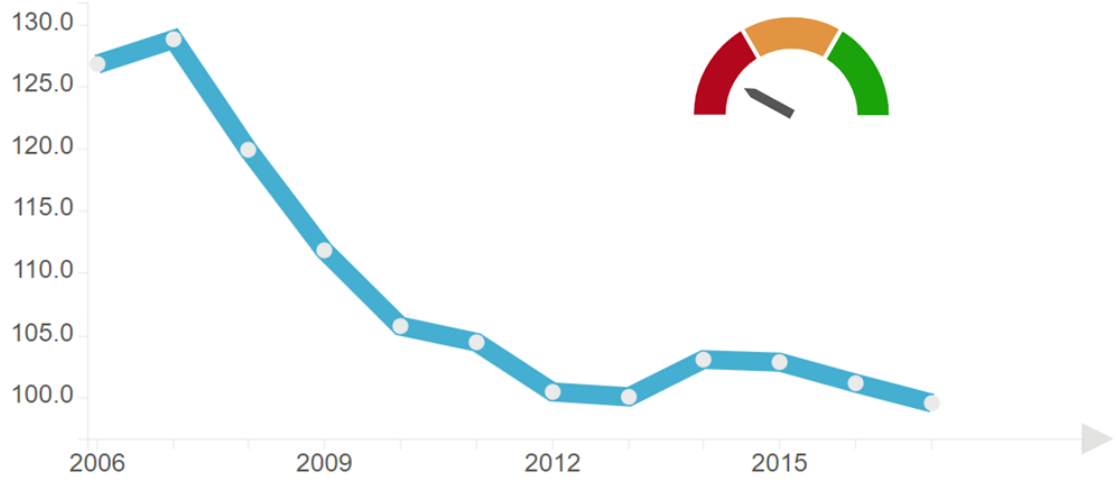


Figure A10.5: The total value of Jersey's economy divided by population. It is indexed against 2013 (value = 100) to allow comparison between years.

Digital Economy

This indicator is widely used elsewhere because of the economic importance of improving digital infrastructure and availability of next generation broadband connectivity. Such connectivity will support future innovation in the digital economy, help create better jobs and ensure local businesses

[177] Government of Jersey (2019): 'Future Jersey indicator: increase economic growth', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/JobsGrowth/Pages/EconomicGrowth.aspx> last accessed [20/11/19]

can grow and remain competitive in the global digital environment. It will also enable the delivery of digital services to support public sector efficiencies and savings.

Improved digital infrastructure, for example, opens up new opportunities for different ways of living and working that could contribute to progress on transport, health and environmental indicators. In 2017, the number of Jersey properties with fibre optic broadband rose to 93%.

The long-term ambition for this indicator is to continue the trend. Jersey is the third in the world for the percentage of broadband customers directly connected to the internet with fibre-optic cabling. Progress improves Jersey's appeal as a place to live and do business, and creates opportunities to improve health, education, productivity and participation indicators[178].

Unemployment

The level of unemployment in Jersey helps to determine the overall state of the Island's economy and has an impact on Islanders' quality of life. This indicator is vitally important for establishing whether Islanders have access to work and can afford to live independently. High levels of unemployment bring fiscal and social costs and can have a negative impact on Islanders' wellbeing and health[179].

Of concern is when there is high long-term unemployment, or high unemployment among young people. By 2018, the average number of people registered as Actively Seeking Work (ASW) in Jersey had fallen by 53%, compared to the previous peak in 2013. Over the course of the year an average of 883 people were classified as ASW.

As shown below in **Figure A10.6**, the long-term trend for this ambition is to continue to increase employment levels on the Island.

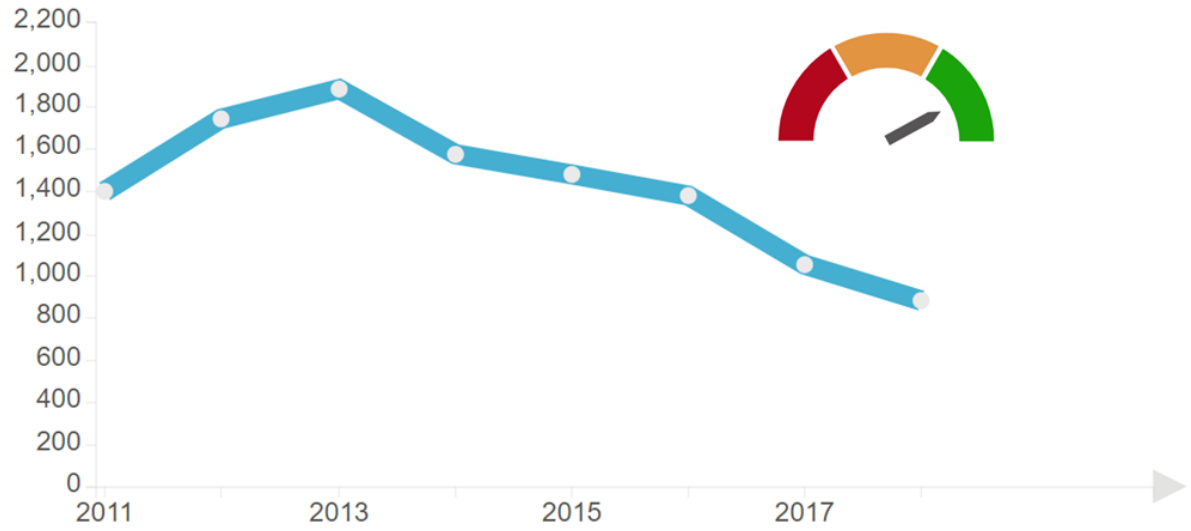


Figure A10.6: The estimated number of unemployed plus those not registered but still seeking work, expressed as a percentage of the entire workforce

Additional SA Baseline

Key employment sectors

Agriculture

As outlined in the State of the Environment Report 2011-2015, in terms of monetary value, potatoes are still the most lucrative crop with exports of £29M in 2014. In real terms (allowing for inflation), the

[178] Government of Jersey (2019): 'Future Jersey Indicator: increase fibre optic infrastructure', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/BusinessEnvironment/Pages/Digital.aspx> last accessed [20/11/19]
[179] Government of Jersey (2019): 'Future Jersey Indicator: reduce unemployment', [online] available to access via: <https://www.gov.je/Government/PlanningPerformance/GovernmentPerformance/FutureJersey/Examine/JobsGrowth/Pages/Unemployment.aspx> last accessed [20/11/19]

export value of potatoes has decreased since 2006. Exports would have needed to be £30.1M to keep pace with inflation.

Agri-environment schemes are voluntary agreements that provide annual payments to farmers and land managers to ensure they manage their land in an environmentally sensitive way that goes clearly beyond the minimum required.

- Indicator NE1a: Area of farmed land under environmental stewardship schemes: Green – between 2011-2015 there was an increasing proportion of land under environmental stewardship schemes (improving trend in comparison to the 2005-2010 data).

Additional information regarding the extent of agricultural land on the Island is discussed within the 'Air, Land, Soil and Water Resources' SA theme.

Tourism and Recreation

The countryside and coast form a significant part of the Island's attraction to visitors and residents alike. The changes in the tourism industry towards catering for a more environmental or 'green' form of tourism are already being felt in the Island and will influence land-use planning in the countryside and along the coast in the future. This is already evident in the development of coastal footpaths, cycle ways and Green Lanes and demand for car parking, signage and interpretation. Access in the countryside often raises conflicts with landowners and a balanced, agreed approach is essential if all are to benefit.

Summary of Future Baseline

As stated in the Future Jersey Report (2017-2037), technology will change the types of jobs which are available in Jersey and the skills required in areas such as finance, agriculture and tourism. Without embracing digital opportunities, the Island may not be able to protect existing businesses and jobs or create new ones.

By 2030, 82% of people in the developed world are expected to live in urban areas. Cities offer the jobs and lifestyle many young, skilled workers want. Jersey will face increasing competition for the talent, business and investment it needs. Persuading young Islanders not to head to the big city lights - or attracting others to take their place - will get harder but become more important.

Businesses and talent are highly mobile in today's world and will leave if their aspirations can be better met elsewhere. Tax policy must be fair and competitive, and not risk triggering a downward economic spiral that compromises Jersey's capacity to meet the costly challenges of the future.

Links with cross-cutting themes

The Aether Report acknowledges several risks to the economy from climate change. Jersey is a thriving and growing place founded on its reputation for international financial services. The Island's future economic success in growing investment will be dependent upon the degree to which it clearly demonstrates a pathway for future resilience to factors such as severe weather.

For example, flooding and coastal change risks to communities, businesses and infrastructure – will potentially impact property values, business revenue and viability of communities. Risks to communities' link to the resilience of local energy, transport and communications infrastructure.

Likewise, there are risks to domestic and international food production and trade from climate change. Extreme weather events affecting international production, trade and supply could make food prices volatile. Longer term incremental changes in climate will likely alter agricultural productivity. Jersey is also an exporter of agricultural goods and these could be threatened by climate change.

Furthermore, the erosion of beaches causes economic losses from the loss of land and reduced tourism. However, the most significant monetary losses arise during extreme weather events caused by the combination of sea level rise, storm surges and high tides. Protection against these events therefore brings associated economic benefits in the form of retained or increased income per capita from tourism. In this respect, adaptation measures could help existing, local businesses to thrive. For example, protection of the harbour allows for the development of the fishing, tourism and associated businesses.

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