

Environment

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Scope

This chapter covers how North Somerset Development Management and the work of the Environmental Protection Team will impact on the Environment in relation to:

- Sustainable development principles
- Provision of development that supports healthy and active lifestyles
- Protection and development of green infrastructure.
- Development of local response to mitigate the effects of climate change.
- Air pollution
- Bathing water
- Noise control and anti-social behaviour

Climate change and planning

There is significant evidence that the quality of the environment greatly influences people's physical and mental health and factors such as access to open space, the ability to lead an active lifestyle, access to health care facilities, community cohesion and well designed good quality housing all impact on health and well-being. These factors can all be influenced through planning policy and development and how we manage our built and natural environments.

The total population of the district is expected to grow by around 40% over the next twenty years, and around 20,985 new homes are expected to be built by 2026. Over 5,000 of these new homes are expected to be provided at the proposed Weston

Villages major mixed use development, and the majority of the rest will come within the existing Weston-super-Mare urban area. Accommodating this growth in the most sustainable manner and protecting and enhancing the environmental quality of both the built and natural environment will be critical to achieving broader health outcomes.

There is also overwhelming evidence that greenhouse gas emissions from human activity are changing the global climate, which is likely to have a significant effect on the local natural environment, people's health and wellbeing and our quality of life in the future. Rising global temperatures will bring changes in weather patterns, rising sea levels and increased intensity and frequency of extreme weather events.

Incidents of extreme weather events will increase the likelihood of inland flooding across the district North Somerset may be particularly susceptible to any adverse impacts in relation to flooding, having a significant coastline (with potential net rise in sea level of between 20cm and 80cm by the 2080s), areas within the defined Environment Agency flood zones and a large quantity of low lying land.

Providing up to date planning policies which guide development in accordance with the principles of sustainable development and which maximise developer contributions to the provision of community and related facilities will be key determinants in securing wider health outcomes in North Somerset.

North Somerset Council and its partners through a variety of initiatives are implementing measures that ensure that the environment has a positive impact on the quality of life for North Somerset residents. These initiatives are documented within the body of the report.

Challenges for consideration

Ensuring future development accords with the sustainable development principles outlined in the Core Strategy by progressing the plan to formal adoption, promoting good design and resisting inappropriate development.

Ensuring development provides essential community infrastructure which supports and promotes healthy and active lifestyles through the effective application of development management policy and procedures

Protecting and developing green infrastructure through the development process and encouraging its wider use to support healthy and active lifestyles.

Developing and funding the local response to climate change particularly the vulnerability of the older population to extreme weather occurrences and the need to manage the risk of flooding within available resources.

Environmental protection

Air Pollution: ‘Air quality has been assessed against eight parameters in line with government set guide values (based on adverse health impacts), the assessment is submitted to Defra each year; the results of long term monitoring have demonstrated that there are no public health issues associated with air quality within North Somerset. A link to the most recent Progress Report is attached below;

[http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/air%20quality%20progress%20report%202013%20\(pdf\).pdf](http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/air%20quality%20progress%20report%202013%20(pdf).pdf)

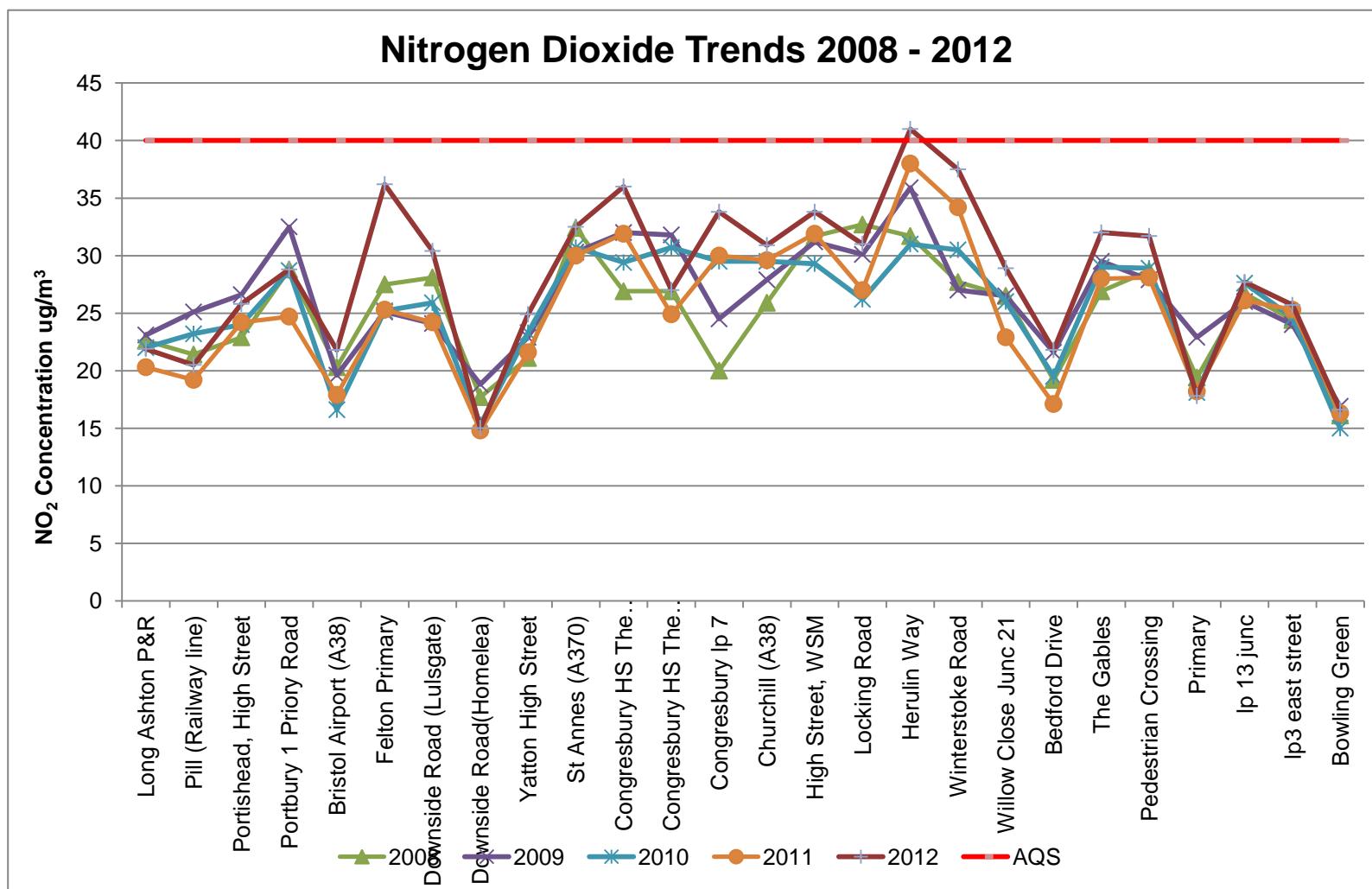
Air quality standards are set at EU level and incorporated into national standards, these limit concentrations of the major air pollutants that impact on public health as well as those, such as ozone which is also a potent greenhouse gas and can be transported great distances by weather systems.

Road transport is the main source of local air pollution, the current economic downturn has led to the ‘moth balling’ or closure of some businesses and has resulted in the continued decline locally in industrial emissions.

The principle pollutant associated with road transport is nitrogen dioxide, monitoring around the district at various road and kerbside locations confirmed that levels were below or well below the government set objectives at all relevant sites. Air Quality within North Somerset complies with the nationally set guide values and objectives, consequently there are no requirements to introduce Air Quality Management Areas or Air Quality Action Plans.

[http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/air%20quality%20progress%20report%202013%20\(pdf\).pdf](http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/air%20quality%20progress%20report%202013%20(pdf).pdf)

Figure 2: Trends in Annual Mean Nitrogen Dioxide Concentrations Measured at Diffusion Tube Monitoring Sites



Designated Bathing Beaches.

There are four designated bathing beaches in North Somerset, the Environment Agency take seawater samples from these throughout the bathing season (May to September). Last year they sampled on nineteen occasions from each of these beaches. In 2015 a new, revised set of criteria will be used to assess the quality of the water, these new microbiological standards will be much more stringent than the current standards. Based on the results from the 2013 bathing season it is predicted that the beach at Uphill will be categorised as poor.

	Existing Standard	New Standard
	Overall Score 2013	Overall Score 2013
Uphill Slipway		
Weston Main		
Sand Bay		
Clevedon		

Noise: Excessive noise can have a serious adverse effect on people's health and well-being, it can disturb sleep, harm health, as well as reduce performance and changes in social behaviour. In 2012 we dealt with more than 1,500 noise complaints, with South and Central wards in Weston-super-Mare accounting for approximately 15-20% of all noise complaints. Noise is often symptomatic of broader anti-social behaviour problems and Environmental Protection staff have developed excellent working relationships with partner agencies including the Police and social landlords to support victims of ASB and deal with the perpetrators.

Contaminated Land: Many parts of the country are faced with the legacy of historical industrial development, pollution of land and water courses can cause significant risk to health and the environment and pose a threat to sustainable development.

'In 2003 North Somerset Council produced a strategy which looked at the legacy of potentially contaminated land sites, this has been reviewed and was revised in 2007, see link below.

[http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/contaminated%20land%20strategy%20\(pdf\).pdf](http://www.n-somerset.gov.uk/Environment/Environmental_Protection/Documents/contaminated%20land%20strategy%20(pdf).pdf)

This document sets out how the Council will identify such sites and the assessment criteria it has adopted to evaluate these sites, this is an on-going exercise targeting high risk sites first and is designed to mitigate adverse health impacts arising from contaminated land'

Challenges for consideration – Environmental Protection & Licensing

Continue to secure improvements to bathing water quality at our designated bathing beaches (Uphill, Weston-super-Mare, Sand Bay and Clevedon).

Work closely with partner agencies to support victims of anti-social behaviour.

Review the comprehensive risk-based strategy to deal with potentially contaminated land sites that have been identified as posing potentially high risk to human health or eco-systems.

Continue to reduce incidents of noise nuisance across the district particularly in South/Central ward.

Work closely with partner agencies to mitigate negative impacts of the night-time economy.

Why is this important?

There is significant evidence that the quality of the environment greatly influences physical and mental health and factors such as access to open space, the ability to lead an active lifestyle, access to health care facilities, community cohesion and well designed good quality housing all impact on health and well-being. These factors can all be influenced through planning policy and development and how we manage our built and natural environments.

There is also overwhelming evidence that greenhouse gas emissions from human activity are changing the global climate, which is likely to have a significant effect on the local natural environment, people's health and wellbeing and our quality of life in the future. Rising global temperatures will bring changes in weather patterns, rising sea levels and increased intensity and frequency of extreme weather events.

Providing up to date planning policies which guide development in accordance with the principles of sustainable development and which maximise developer contributions to the provision of community and related facilities will be key determinants in securing wider health outcomes in North Somerset.

Accommodating growth in the most sustainable manner and protecting and enhancing the environmental quality of both the built and natural environment will be critical to achieving broader health outcomes.

Incidences of extreme weather events will increase the likelihood of inland flooding across the district. North Somerset may be particularly susceptible to any adverse impacts in relation to flooding, having a significant coastline (with potential net rise in sea level of between 20cm and 80cm by the 2080s) and areas within the defined Environment Agency flood zones and a large quantity of low lying land.

What are the needs of the population?

The population of North Somerset is changing. Coupled with further pressures from housing growth, this presents new challenges for the way in which development is planned across the district. Older people currently make up 23.8% of North Somerset's population, compared to 19.5% nationally. The total population of the district is expected to grow by around 40% over the next twenty years, and around 13,400 new homes are expected to be delivered by 2026. Over 5,000 of these new homes are expected to come forward at the proposed Weston Villages major mixed use development, and the majority of the rest will come within the existing Weston-super-Mare urban area.

Current Service Provision

North Somerset Council and its partners through a variety of initiatives are implementing measures that ensure that the environment in all its guises has a positive impact on the quality of life for North Somerset residents.

Activities include:

- Ensuring up to date planning policy through the preparation of the Core Strategy and related documents that maximise developer contributions to health and community infrastructure
- Applying the principles of sustainable development in determining development proposals and negotiations with the

development industry

- Protecting and managing change in the natural and built environments
- Ensuring that healthy lifestyles including walking and cycling are promoted through the design of new development. Supporting the best use of the Countryside and Green Infrastructure to support formal and informal recreation
- Co-ordinating action to reduce the risk of climate change on health outcomes and working with partners to reduce our carbon footprint.
- Taking action against those who pollute the environment through our Environmental protection legislation and services.

We are working to minimise greenhouse gas emissions across North Somerset, activity contributing to carbon reduction in the local area includes;

- specifications for low carbon development through implementation of the Code for Sustainable Homes;
- home efficiency policies for existing housing;
- sustainable travel initiatives
- encouraging waste minimisation.

However, even with effective policies designed to reduce emissions, there will still be significant changes in the climate in North Somerset. These implications mean we need to adapt to changing circumstances. A partnership group including membership from NHS North Somerset and North Somerset Council has assessed the risks posed by a changing climate.

Proposed actions to address those directly relating to health and wellbeing include

- plans to mitigate flood risk;
- improved resilience to combat the likelihood of overheating in urban areas (e.g. protecting and planting trees);
- Heat wave Recovery Plans;
- adopting a more co-ordinated approach to assessing the location of vulnerable people across North Somerset.

Climate change and health

We are working to minimise greenhouse gas emissions across North Somerset, activity contributing to carbon reduction includes;

- specifications for low carbon development through implementation of the Code for Sustainable Homes;
- home energy efficiency policies for existing housing;
- sustainable travel initiatives and continued efforts to encourage waste minimisation.

A partnership group including membership from North Somerset Clinical Commissioning Group and North Somerset Council has assessed the risks posed by a changing climate. Proposed actions to address those directly relating to health and wellbeing include:

- Adopting a more co-ordinated approach to assessing the location of vulnerable people across North Somerset, ensuring adequate plans are in place for re-housing people if long term damage is sustained to properties from flooding or extreme weather events. This will reduce the risk of communities becoming more vulnerable due to a changing climate.
- Increased likelihood of heatwaves with a changing climate will lead to an increased risk of heat stroke/ sun burn/ / hayfever and asthma and therefore increased pressure on care services/ health services. This can in part be addressed through effective coordination and implementation of measures in Heatwave Recovery Plans.
- Improved resilience to combat the likelihood of overheating in urban areas can include the protection and planting of trees in woodlands and urban areas, particularly native trees, for public amenity and climate change mitigation and benefits to biodiversity, health and recreation.

Incidents of extreme weather events will increase the likelihood of inland flooding across the district. North Somerset may be particularly susceptible to any adverse impacts in relation to flooding, having a significant coastline (with potential net rise in sea level of between 20cm and 80cm by the 2080s) and areas within the defined Environment Agency flood zones and a large quantity of low lying land. Plans to mitigate flood risk include:

Defending existing properties and where possible to locate new development in places with little or no risk of flooding.

Protecting flood plains and land liable to tidal or coastal flooding from development..

Follow a sequential approach to development in flood risk areas.

Use development to reduce the risk of flooding through location, layout and design.

Relocate existing development from\areas of the coast at risk, which cannot realistically be defended, and

Identify areas of opportunity for managed realignment to reduce the risk of flooding and create new wildlife areas.

North Somerset's contribution to the reduction in climate change is thus relatively minor and the major contribution is to attempt to mitigate its effects as far as able on local development.

Health Impact Assessments and Development

Health Impact Assessments are an important tool used to assess how development proposals will contribute to improving the health and wellbeing of the local population. Public authorities and developers alike increasingly need to consider how policies, strategies or developments will impact on health and health inequalities. A Health Impact Assessment can identify the potential health gains and risks to health and help to identify additional measures to reduce or avoid these risks. The North Somerset Core Strategy requires Health Impact Assessments to be submitted with applications for all major development within the district.

Health Impact Assessments are required for all large scale major developments i.e.

Residential developments of 200 or more dwellings and if the number is not specified then on sites of 4 hectares or more,

Non-residential developments with a floor space of 10,000m² or more or area of 2 hectares or more.

This is documented in Core Strategy Policy CS26 for all large scale developments.

Protecting and Developing Green Infrastructure

Green infrastructure is the integrated network of multi-functional spaces within and linking urban and rural environments which has significant environmental, social and economic benefits. Green infrastructure, particularly if properly planned and integrated into development, can enhance the townscape and visual amenity, promote a sense of place and community identity, and improve the health and sense of well-being of people.

Parks, sports fields, allotments and play space are clearly beneficial to health. Networks of green spaces and corridors provide opportunities for recreation, walking and cycling and also benefit wildlife by conserving and enhancing habitats and providing buffers from development to important wildlife sites and watercourses.

Green infrastructure is important not only in urban areas, but also in rural areas and on the urban-rural fringe, particularly where it supports a vibrant rural economy and enhances facilities available to villages for recreation, walking and cycling.

The North Somerset Core Strategy reflects the importance of green infrastructure and its value for health, biodiversity, landscape and climate change. The document sets out the green infrastructure priorities for North Somerset. Clear priorities will be established through an overarching Green Infrastructure Strategy which will incorporate local open space standards, map the green infrastructure and set out principles guiding development and management of green infrastructure.

Important areas of green infrastructure are to be provided in association with the expansion of Weston-super-Mare (Weston Villages). These will deliver an integrated range of spaces for informal and formal leisure and children's play, support biodiversity through retaining, enhancing and connecting habitats, creating desirable routes for walking and cycling to maximise accessibility, promote healthy lifestyles and stimulate community engagement.

The best way to enjoy and explore the countryside is to use the 850km local rights of way network which North Somerset Council maintains, crossing the entire district. The public rights of way improvement plan aims to increase resident's and tourist's access to the countryside.

Location and design of new development

The design and layout of development can have a significant influence on the health of a local community. The Core Strategy's location policy aims to place new jobs, services and facilities where they are easily accessible by public transport, walking and cycling, and give existing and future residents a choice of how to travel. While it is recognised that car use will remain a convenient, attractive and in many areas, essential mode of travel, the approach seeks ways to encourage walking and cycling.

Layouts and land use distributions will be based on a network of cycleways/footpaths and public transport routes that ensure safe, convenient and direct access to local services. Larger developments in particular must be within safe and direct walking distance of shops and other key services.

Developers will be required to undertake an assessment of their development proposals. This would need to include a full accessibility assessment by non-car modes to determine the transport needs arising from the development and the means by which any adverse impacts should be mitigated.

For larger scale developments a Travel Plan aimed at delivering sustainable transport objectives will be required. A Travel Plan will set out measures that will result in a reduction in car usage and an increased use of cycling and walking as alternative modes of transport.

Creating a Community

The provision of any new development e.g. Weston Villages should be underpinned by an aspiration to foster a strong and self-sustaining community where people have a sense of pride in their local area. Central to this community ethos is the need to deliver efficient and sustainable services and facilities located within the development to support community interaction and to facilitate sustainable living.

In large developments a community engagement strategy is required which will aim to involve all local residents. In order to create viable, strong communities from the outset, mechanisms must be explored to encourage and facilitate new residents becoming involved in decisions which affect their emerging communities. This will include having a direct voice in all aspects of the new development from commenting on planning applications to identifying community needs and priorities and identifying issues and concerns in relation to implementation of infrastructure, the street scene and green spaces.

Active Recreation

Sport, recreation and community facilities not only underpin quality of life but can help create diverse sustainable communities as well ensuring that biodiversity, learning and health targets are met. Community facilities are those facilities that provide for the health, welfare, social, educational, spiritual, recreational, leisure and cultural needs of the community. With the population of North Somerset set to expand considerably by 2026, it is imperative that these facilities are provided through the development process.

North Somerset Council has also published The Go4Life Active Directory which is a guide for adults looking for physical activity sessions.. The directory provides information on a wide range of activities to cater for the beginner, those returning to exercise and those who want to try something different in a fun and social environment

Crime

The Core Strategy reflects the council's priority of making streets and communities safer as set out in the Corporate Plan (2008–2011). Within this priority there is a stated action to help to promote good quality design in new developments and to help promote community safety.

Development proposals should demonstrate a commitment to designing out crime through the creation of safe environments (private and public) that benefit from natural surveillance, visible streets and open spaces, lighting and other security measures. Achieving Secured by Design certification will help to demonstrate how designing out crime has been taken into account.

Lifetime Homes

The Government has a stated aspiration that all new homes will be constructed to the Lifetime Homes standard by 2013 (see Lifetime Homes, Lifetime Neighbourhoods, DCLG 2008). Lifetime Homes have 16 design features that ensure a new flat or house will meet the needs of most households. The features focus on accessibility and design that will make a home flexible enough to meet the demands of a lifetime. Thus reducing the requirement to move to alternative accommodation as a family grows, as circumstances in health change or as the household ages. This can help to increase independence for the elderly and ensure they are not inconvenienced or stressed by having to change their accommodation.

New Health Facilities

New health facilities will primarily be delivered in areas of housing growth to meet the needs of new communities. New health facilities will also be provided in towns and service villages where there is a proven deficit in such a service and within Weston-super-Mare to meet the needs of the growing population of the town.

Partnership working between North Somerset Council, North Somerset Clinical Commissioning Group and other health care service providers will ensure that appropriate health facilities are provided in the best locations. Equally, the development management process will ensure that any new developments meet the necessary requirements in terms of provision of green infrastructure, access to open space. The requirement for Health Impact Assessments to be submitted with large scale applications will ensure that health issues are given due consideration at the planning application stage.

Mixed and Balanced Communities

An ageing population presents its own challenges in terms of the design of buildings and spaces, the location of facilities, accessibility issues and appropriate accommodation. The Core Strategy approach is to ensure that a range of accommodation choices are provided to meet local needs with a variety of support which will maximise independent living and minimise the need for residential care.

Balanced communities consisting of a range of services and housing types can help to achieve a sustainable community by:

- Supporting a wider range of social and community infrastructure such as schools, nurseries and shops;
- Encouraging stability and community cohesion by allowing residents to move house but remain in the same area;
- Reducing the transient population and fostering community spirit by an increased sense of belonging, identity and pride of place;

- Reducing the social isolation of a particular age group, such as older people or the young;
- Encouraging a range of accommodation choices to meet the needs of an ageing population through promoting independent living whilst minimising the need for residential care

Community voice

The Core Strategy has been developed with extensive stages of public engagement and this is embedded into the consideration of development proposals and production of more detailed development guidance including master planning utilising specialist community consultation procedures including “Enquiry by Design”.

Community building principles that should be pursued include:

- Engage with the new and existing communities at the earliest stage and throughout the design and build process
- Adoption of a community engagement strategy on larger development.
- Development must be adaptable to adjust to future community needs and the impacts of climate change.
- Build and develop strong partnerships between developers; public services and local residents to ensure that buildings and spaces are flexible and relevant.

Challenges for consideration

Climate change and planning

Ensuring future development accords with the sustainable development principles outlined in the Core Strategy by progressing the plan to formal adoption, promoting good design and resisting inappropriate development.

Ensuring development provides essential community infrastructure which supports and promotes healthy and active lifestyles through the effective application of development management policy and procedures.

Protecting and developing Green Infrastructure through the development process and encouraging its wider use to support healthy and active lifestyles.

Developing and funding the local response to climate change particularly the vulnerability of the older population to extreme weather occurrences and the need to manage the risk of flooding within available resources.

Environmental Protection & Licensing

There a number of significant challenges facing Environmental Protection, in the future the following key priorities require action to preserve and enhance the health and well being of our local communities.

Continue to secure improvements to bathing water quality at our designated bathing beaches (Uphill, Weston-super-Mare, Sand Bay and Clevedon).

Work closely with partner agencies to support victims of anti-social behaviour.

Review the comprehensive risk based strategy to deal with potentially contaminated land sites that have been identified as posing potentially high risk to human health or eco-systems.

Continue to reduce incidents of noise nuisance across the district particularly in South/Central ward.

Work closely with partner agencies to mitigate negative impacts of the night time economy

Core public health functions will be maintained and fresh challenges from new legislation will be picked up by professional, flexible and highly motivated staff.