



East Riding of Yorkshire Council

Local Flood Risk Management Strategy



Strategic Environmental Assessment
Scoping Report Appendices

2015

*"Reducing flood risk, sustaining
communities, enabling
growth"*

EAST RIDING OF YORKSHIRE

STRATEGIC ENVIRONMENTAL ASSESSMENT

LOCAL FLOOD RISK MANAGEMENT STRATEGY

SCOPING REPORT APPENDICES

2015

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APPENDIX A: REVIEW OF OTHER RELEVANT POLICIES, PLANS, AND PROGRAMMES

A.1 RELEVANT POLICIES, PLANS AND PROGRAMMES FOR THE EAST RIDING OF YORKSHIRE LOCAL FLOOD RISK MANAGEMENT STRATEGY

A comprehensive review of other policies plans, and programmes considered relevant to the East Riding of Yorkshire Local Flood Risk Management Strategy (LFRMS) is presented in Table A.1.

Table A.1 - Review of other relevant policies, plans, and programmes

Plan/Programme	Description	Relevance to LFRMS
International		
Floods Directive, 2007	<p>This Directive provides a framework for the assessment and management of flood risks, aiming to reduce the adverse consequences associated with flooding for human health, the environment, cultural heritage and economic activity.</p> <p>It requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.</p> <p>It requires Member States to first carry out a preliminary assessment by 2011 to identify the river basins and associated coastal areas at risk of flooding. For such zones they would then need to draw up flood risk maps by 2013 and establish flood risk management plans focused on prevention, protection and preparedness by 2015.</p>	<p>This Directive is directly relevant to the LFRMS as it provides the European policy framework for dealing with flood risk, which has been transposed into UK law through the Flood Risk Regulations 2009, Flood and Water Management Act 2010 and National Flood and Coastal Erosion Risk Management Strategy 2011.</p>
Water Framework Directive, 2000	<p>This Directive aims to prevent the deterioration of aquatic ecosystems and associated wetland by setting out a timetable until 2027 to achieve good ecological status or potential. The Water Framework Directive requires Member States to manage the effects on the ecological quality of water which result from changes to the physical characteristics of water bodies. It requires action in those cases where these “hydro-morphological” pressures are having an ecological impact which will interfere with the ability to achieve Water Framework Directive objectives. The Strategy should promote sustainable management of the water environment by carefully considering current land use and future climate scenarios, minimise the effects of flooding and drought events and to facilitate long term improvements in water quality, including the protection of groundwater near landfill sites, as well as minimising agricultural runoff.</p>	<p>The LFRMS will need to consider the requirements of the WFD and ensure that it does not compromise its objectives, and that it contributes to achieving its aims. The WFD uses the same unit of management (river basin districts) as the Floods Directive (see above) and is based on the same 6 year cycle of planning. To meet the requirements of the WFD and improve water quality and quantity within rivers, estuaries, coasts and aquifers, the Environment Agency have prepared River Basin Management Plans. These contain the main issues for the water environment and the actions needed to deal with them.</p> <p>Water quality and quantity is linked to the LFRMS as flooding events can lead to water pollution and changes in water levels.</p>
Bathing Water Directive (Revised), 2006	<p>The overall objective of the revised Bathing Water Directive remains the protection of public health whilst bathing. However, it also aims to:</p> <ul style="list-style-type: none"> • update the way in which water quality is measured, focusing on fewer microbiological indicators, and setting different standards for inland and 	<p>Bathing water quality is of some relevance to the LFRMS as coastal outfalls can be linked with bathing water pollution. However this is affected more by wastewater treatment than surface water treatment.</p>

Plan/Programme	Description	Relevance to LFRMS
International		
	coastal bathing sites <ul style="list-style-type: none"> • reduce the health risks linked to bathing by setting scientifically based minimum water quality standards • make changes to monitoring and sampling frequency • allow a limited number of water samples to be disregarded during short term pollution incidents, if the event is predicted and the public warned beforehand • provide better information to the public, allowing more informed choices to be made about the risk of bathing • improve the overall management of bathing water quality by requiring an assessment of potential sources of pollution • be compatible with other EU water related legislation, in particular the Water Framework Directive 	
Drinking Water Directive, 1998	Sets quality standards for drinking water quality at the tap (microbiological, chemical and organoleptic parameters) and states the general obligation that drinking water must be wholesome and clean.	The LFRMS may have implications for waters used as a drinking water supply.
Landfill Directive, 1991	The objective of the Directive is to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste, by introducing stringent technical requirements for waste and landfills. The Directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment, in particular on surface water, groundwater, soil, air and human health.	The LFRMS may have implications for some of the landfill sites in the East Riding, as some are at risk of flooding.
Hazardous Waste Directive, 1991	Hazardous waste is essentially waste that contains hazardous properties that may render it harmful to human health or the Environment. The European Commission has issued a Directive on the controlled management of such waste (91/689/EEC) and hazardous waste is defined on the basis of a list, the European Waste Catalogue, drawn up under that Directive.	The LFRMS may have implications for sites in the East Riding that generate or deal with hazardous waste.
Groundwater Directive, 1980	Aims to protect groundwater from pollution by controlling discharges and disposals of certain dangerous substances to groundwater. In the UK, the directive is implemented through the Environmental Permitting Regulations (EPR) 2010. The existing Groundwater Directive is to be repealed by the Water Framework Directive 2000/60/EC (WFD) in 2013.	Water quality is of relevance to the LFRMS as flooding can be linked with water pollution.
Urban Wastewater	Its objective is to protect the environment from the adverse effects of urban waste	Water quality is of relevance to the LFRMS as flooding can be

Plan/Programme	Description	Relevance to LFRMS
International		
Directive, 1991	<p>water discharges and discharges from certain industrial sectors and concerns the collection, treatment and discharge of:</p> <ul style="list-style-type: none"> • Domestic waste water • Mixture of waste water • - Waste water from certain industrial sectors 	linked with water pollution.
Nitrates Directive, 1991	Prevention of eutrophication and water pollution Human health and ecosystem protection. Nitrate Vulnerable Zones (NVZs) designated in vulnerable sites.	Water quality is of relevance to the LFRMS as flooding can be linked with water pollution.
Habitats Directive, as amended 2010	The Habitats Directive aims to conserve fauna, flora and natural habitats of EU importance. The Directive requires the establishment of a network of protected Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) across Europe, to be known as Natura 2000 sites.	The LFRMS should seek to avoid negative effects on sites of international or national importance detailed within this Directive. Where the LFRMS allows development that will negatively affect relevant sites, compensatory measures must be provided for. Any impacts that the LFRMS could potentially have on European sites (including SACs) may need to be considered through a Habitats Regulations Assessment.
Birds Directive, 1979	Member states have a duty to sustain populations of naturally occurring wild birds by sustaining areas of habitats in order to maintain populations at ecologically and scientifically sound levels. This applies to birds, their eggs, nests and habitats.	The LFRMS could potentially have an impact on birds (e.g. as a result of construction or changes to land use and habitats).
Freshwater Fisheries Directive, as amended 2006	<p>Aims to protect and improve the quality of rivers and lakes to encourage healthy fish populations</p> <p>It sets water quality standards and monitoring requirements for areas of water which are chosen, or 'designated' by Defra and the Welsh Assembly Government.</p> <p>These 'designated' areas of water are selected because they are significant bodies of water which are capable of supporting fish populations.</p> <p>In the UK, the directive is implemented through the Surface Waters Regulations 1997. A total of 34,500km of rivers and canals and more than 200 still waters are designated under the directive.</p> <p>In 2013, this directive will be repealed. Waters currently designated as Fish Directive waters will become protected areas under the Water Framework Directive.</p>	As this Directive is to be repealed, see text for Water Framework Directive (above).
European	The objectives of this Strategy are to:	The LFRMS will seek to mitigate the impacts of climate

Plan/Programme	Description	Relevance to LFRMS
International		
Sustainable Development Strategy, Renewed 2006	<ul style="list-style-type: none"> • Combat climate change • Ensure sustainable transport • Address threats to public health • Manage natural resources more responsibly and stop biodiversity decline • Combat poverty and social exclusion • Meet the challenges of an ageing population 	change and manage natural resources more responsibly - issues which are directly relevant to flood risk management.
European Spatial Development Perspective, 1999	<p>The ESDP emphasises the importance of achieving, equally in all regions of the EU, the three fundamental goals of European policy:</p> <ul style="list-style-type: none"> • economic and social cohesion; • conservation and management of natural resources and the cultural heritage; and • more balanced competitiveness of the European territory. <p>The ESDP states that to achieve more spatially balanced development, these goals must be pursued simultaneously in all regions of the EU and their interactions taken into account.</p>	The LFRMS will seek to contribute to sustainable development, which shares the principles of the ESDP, and the SEA is a tool for highlighting how the LFRMS can best do this.
European Union Biodiversity Strategy to 2020, 2011	<p>This strategy is aimed at reversing biodiversity loss and speeding up the EUs transition towards a resource efficient and green economy. Primary objectives of the strategy include:</p> <ul style="list-style-type: none"> • conserving and restoring nature; • maintaining and enhancing ecosystems and their services; • ensuring the sustainability of agriculture, forestry and fisheries; • combating invasive alien species; and • addressing the global biodiversity crisis. 	The contents of the LFRMS could potentially affect biodiversity, particularly if it results in land use change or changes in water levels. Any construction activities resulting from the LFRMS could also affect biodiversity.
European Sixth Environmental Action Programme, 2002	<p>The Action Plan takes a broad look at the environmental challenges and provides a strategic framework for the Commission's environmental policy up to 2012. The plan identifies four priority areas climate change, nature and biodiversity, environment and health and natural resource and waste.</p>	The LFRMS could potentially have a range of environmental impacts, as considered through the SEA.
Kyoto Protocol to the UN Framework Convention on	Proposes national strategies for addressing greenhouse emissions; 37 industrialized countries and the European Community have committed to reducing their emissions by an average of 5 percent against 1990 levels over the five-year period 2008-2012.	The LFRMS could potentially have implications for greenhouse gas emissions, as maintenance and construction of flood risk management infrastructure contributes to these.

Plan/Programme	Description	Relevance to LFRMS
International		
Climate Change, 1999		
Ramsar Convention, 1971	An agreement ratified by the UK in 1976 to conserve and protect ensure wise use of wetlands. Designation of Ramsar Protected Wetlands.	The LFRMS could potentially have implications for Ramsar sites in the East Riding. This will be considered through a separate assessment.
Bonn Convention on Migratory Species, 1979	This aims to conserve terrestrial, marine, and avian migratory species throughout their range. The Parties acknowledge the importance of migratory species being conserved and of Range States agreeing to take action to this end "whenever possible and appropriate". Further in Article 2(2) The Parties "acknowledge" [but do not commit in stronger language, cf Art 2(3) "shall"] "the need to take action to avoid any migratory species becoming endangered".	The LFRMS could potentially have implications for some migratory species.
Bern Convention of European Wildlife and Habitats, 1979	The convention has three main aims, which are stated in Article 1: <ul style="list-style-type: none"> • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species 	The LFRMS could potentially have implications for wild flora and fauna and their natural habitats, including endangered and vulnerable species / migratory species.
Rio Convention on Biological Diversity, 1992	Article 6A requires each contracting Party to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.	The LFRMS could potentially have implications for biological diversity - the national biodiversity strategy for England is reviewed below.
European Landscape Convention, 2007	This applies to the entire territory of the Parties and covers natural, rural, urban and peri-urban areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes. The Convention is aimed at: the protection, management and planning of all landscapes and raising awareness of the value of a living landscape. Through its ground-breaking approach and its broader scope, it complements the Council of Europe's and UNESCO's heritage conventions.	The LFRMS could potentially have implications for the East Riding's landscape.
Granada Convention on Protection of Architectural Heritage, 1985	This defines 'architectural heritage' and each signatory promises to maintain an inventory of it and to take statutory measures to protect it. There is also a promise to provide funding, but only within budgetary limitations, and to promote the general enhancement of the surroundings of groups. Signatories (including the UK) also promise to adopt integrated conservation policies in their planning systems and other spheres of government influence that promote the conservation and enhancement of architectural heritage and the fostering of traditional skills.	The LFRMS could potentially have implications for the East Riding's architectural heritage.

Plan/Programme	Description	Relevance to LFRMS
International		
Valetta Convention on Protection of Archaeological Heritage, 1992	This defines archaeological heritage and the signatories promise to make and maintain an inventory of it and to legislate for its protection. The emphasis is on protection of sites for future study, the reporting of chance finds the control of excavations and the use of metal detectors. Signatories (including the UK) also promise to allow the input of expert archaeologists into the making of planning policies and planning decisions.	The LFRMS could potentially have implications for the East Riding's archaeological heritage.

Plan/Programme	Description	Relevance to LFRMS
National		
National Flood and Coastal Erosion Risk Management Strategy, 2011	<p>The Strategy builds on existing approaches to flood and coastal risk management and promotes the use of a wide range of measures to manage risk. The strategy encourages more effective risk management by enabling people, communities, business, infrastructure operators and the public sector to work together to:</p> <ul style="list-style-type: none"> • ensure a clear understanding of the risks of flooding and coastal erosion, nationally and locally, so that investment in risk management can be prioritised more effectively; • set out clear and consistent plans for risk management so that communities and businesses can make informed decisions about the management of the remaining risk; • manage flood and coastal erosion risks in an appropriate way, taking account of the needs of communities and the environment; • ensure that emergency plans and responses to flood incidents are effective and that communities are able to respond effectively to flood forecasts, warnings and advice; • help communities to recover more quickly and effectively after incidents. 	The LFRMS is required to be in conformity with this Strategy.
Flood and Water Management Act, 2010	<p>The Flood and Water Management Act 2010:-</p> <ul style="list-style-type: none"> • embeds the principals of flood risk management into legislation; • introduces the concept of Risk Management Authorities and clarifies their roles 	This Act sets out the requirement for a Local Flood Risk Management Strategy, what it contains and who is responsible for developing it; risk and necessary management needs to be

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National		
	<p>and responsibilities;</p> <ul style="list-style-type: none"> • states the requirement for statutory flood and coastal erosion risk management strategies at both the national and local levels; • establishes Regional Flood and Coastal Committees; • updates reservoir safety legislation; and • amends existing legislation to provide Risk Management Authorities with the powers they need to implement their risk management approach. 	<p>detailed with respect to impacts on human health, the social and economic welfare of individuals and communities, infrastructure and the environment. The Act sets out courses of action which could be taken to mitigate against risk, stipulates that a Local Flood Risk Management Strategy must be in conformity to the National Flood Risk Management Strategy and that it must also specify:</p> <ul style="list-style-type: none"> • the risk management authorities in the authority's area, • the flood and coastal erosion risk management functions that may be exercised by those authorities in relation to the area, • the objectives for managing local flood risk (including any objectives included in the authority's flood risk management plan prepared in accordance with the Flood Risk Regulations 2009), • the measures proposed to achieve those objectives, • how and when the measures are expected to be implemented, • the costs and benefits of those measures, and how they are to be paid for, • the assessment of local flood risk for the purpose of the strategy, • how and when the strategy is to be reviewed, and • how the strategy contributes to the achievement of wider environmental objectives.
The Flood Risk Regulations, 2009	The EU Floods Directive has been transposed into UK law by the Flood Risk Regulations 2009. The Regulations require Lead Local Flood Authorities to determine whether, and if so, where, they have significant flood risk and document this in the	ERYC's Preliminary Flood Risk Assessment shows that ERYC has significant flood risk in its area. Consequently, Flood Risk and Flood Hazard maps in addition to a Flood Risk

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National		
	form a Preliminary Flood Risk Assessment Report. Where <i>Significant Flood Risk Areas</i> have been identified, subsequent flood hazard and flood risk maps in addition to flood risk management plans are to be produced. The Regulations additionally stipulate when these elements of work are to be completed.	Management Plan will be produced. These detailed, local scale plans are likely to be a key influence in implementing the higher level Local Flood Risk Management Strategy.
Future Water, The Government's Water Strategy for England, 2008	<i>Future Water</i> sets out how it is intended for the water sector to look by 2030. It is a vision where rivers, canals, lakes and seas have improved for people and wildlife, with benefits for angling, boating and other recreational activities, and where excellent quality drinking water can continue to be provided. It is a vision of a sector that values and protects its water resources; that delivers water to customers through fair, affordable and cost-reflective charges; where flood risk is addressed with markedly greater understanding and use of good surface water management; and where the water industry has cut its greenhouse gas emissions. The vision shows a sector that is resilient to climate change, with its likelihood of more frequent droughts as well as floods, and to population growth, with the forward planning detailed fully in tune with these adaptation challenges.	Flood risk management is one of the themes addressed by the Strategy.
Making Space for Water, 2005	<p>The policy aims at providing sufficient space for water so that the adverse effects that can result from coastal erosion and flooding both for people and the economy can be managed. It aims to do this by tackling these issues in a way that not only mitigates their impact but also achieves environmental and social benefits.</p> <p>The objective of the guidance is to manage the risks from flooding and coastal erosion by employing an integrated portfolio of approaches which reflect both national and local priorities, so as:</p> <ul style="list-style-type: none"> • to reduce the threat to people and their property; and • to deliver the greatest environmental, social and economic benefit, consistent with the Government's sustainable development principles. 	National guidance regarding flood risk management is directly relevant to the LFRMS.
The Water Supply (Water Quality) Regulations Act, 2000	Sets out the acceptable levels of various substances and chemical properties that must not be exceeded within drinking water. The Act also makes provision for the monitoring of water supplies, water treatment, maintenance of records and the function of local authorities in relation to water quality.	The LFRMS may have implications for waters used as a drinking water supply.
Water Act, 2003	<p>Goals of this Act include:</p> <ul style="list-style-type: none"> • to amend the Water Resources Act 1991 and the Water Industry Act 1991; 	The LFRMS may have implications for the issues covered by this legislation.

Plan/Programme	Description	Relevance to LFRMS
National		
	<ul style="list-style-type: none"> • to make provision with respect to compensation under section 61 of the Water Resources Act 1991; • to provide for the establishment and functions of the Water Services Regulation Authority and the Consumer Council for Water; to make provision in connection with land drainage and flood defence; • to make provision about contaminated land so far as it relates to the pollution of controlled waters 	
Water Resources Act, 1991	The WRA regulates discharges to controlled waters, namely rivers, estuaries, coastal waters, lakes and groundwater.	Water quality and quantity is linked to the LFRMS as flooding events can lead to water pollution and changes in water levels.
Water Industry Act, 1999	An Act to make further provision in relation to England and Wales as to charges in respect of the supply of water and the provision of sewerage services.	The LFRMS may have implications for the issues covered by this legislation.
Groundwater Regulations, 1998	Any acts of disposal, or tipping for the purpose of disposal, of List I or List II substances (as defined in these Regulations) which could result in substances either directly or indirectly entering groundwater will be covered by the Groundwater Regulations. This includes the disposal of List I and II substances to land by surface application. The disposal of List I substances will only be authorised if the disposal will not lead to the substances entering groundwater. The disposal of List II substances will only be authorised if the disposal does not lead to the pollution of groundwater.	Groundwater quality is of relevance to the LFRMS as flooding can be linked with groundwater pollution.
Surface Waters Regulations, 1996	These Regulations prescribe a system of classifying the general quality of inland freshwaters which are relevant rivers or watercourses.	The LFRMS may have implications for waters used as a drinking water supply.

Plan/Programme	Description	Relevance to LFRMS
National		
Guidance for risk management authorities on sustainable development in relation to their flood and coastal erosion risk management functions, 2011	This document stresses the importance of adhering to sustainable development principles when devising flood mitigation strategies. This Guidance reiterates what is meant by sustainable development and what this means in the context of food risk management. Examples include increasing awareness amongst individuals, businesses and communities, utilising the environment to reduce surface run off and ensuring that there are emergency plans in place for flood emergencies.	This Guidance represents the current best practice relating to the inter-relationship between flood mitigation and sustainable development. Its contents are important to the SEA as the SEA will be expected to ensure that the LFRMS adheres to the principles detailed in this document.
Protection of Water Against Agricultural Nitrate Pollution (England and Wales) Regulations, 1996	The regulations aim to protect water quality across England and Wales by preventing nitrates from agricultural sources polluting ground and surface waters and by promoting the use of good farming practices.	Water quality is linked to the LFRMS as flooding events can lead to water pollution.
Defra Water for Life Paper, 2012	This White Paper is the government's response to pressures on water resources. Key commitments within the Paper include: <ul style="list-style-type: none"> • Reform of the abstraction regime; • Improving water quality; • Consider national infrastructure projects; • Strategic approach to wastewater and drainage; • Affordable water supply; • Using water wisely; and • Produce a new strategic policy paper to help deliver the White Paper's priorities. 	The White Paper sets out actions for the water environment that may link with measures included in the LFRMS.
Water for People and the Environment; Water Resources Strategy for England and Wales, 2009	The Strategy sets out how the Environment Agency believe water resources should be managed over the coming decades so that water can be abstracted and used sustainably. Implementing these will help to ensure there will be enough water for people and the environment now and in the future.	The LFRMS may potentially have implications for water resources and abstractions.

Plan/Programme	Description	Relevance to LFRMS
National		
Directing the Flow: Priorities for Future Water Policy, 2002	Sets future water policy to implement the Water Framework Directive 2000. Highlights that considerably more emphasis needs to be put on integrating water policies with policies in other areas other than to health, and particularly: <ul style="list-style-type: none"> • Agriculture and fisheries; • Biodiversity; • Tourism and recreation; • Land-use planning. 	The LFRMS presents a potential opportunity to integrate water policy with flood risk management.
The Impact of Flooding on Urban and Rural Communities, 2005	This document has two stated aims, namely: <ul style="list-style-type: none"> • understanding the relationships between urban/rural policies and flood risk management (FRM) policy such that opportunities for 'win-win' solutions could be explored; • understanding the social impacts (e.g. economic, health, community) on urban and rural communities from an empirical perspective (i.e. what evidence is there for differential impacts on urban and rural communities in terms of flooding). 	A key aim of the LFRMs will be to seek to identify measures that will reduce the impacts of flooding to both urban and rural communities, and identify opportunities for multi-functional projects.
Land Drainage Act, 1991, as amended 2004 and 2011	Gives relevant authorities, including ERYC, certain powers to undertake works or require others to undertake works to watercourses.	The LFRMS may have implications for how the provisions of this Act are utilised.
The Environmental Impact Assessment (Land Drainage Improvement Works) Regulations, 1999	These Regulations, which replace the Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988 (as amended), implement in part Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the Environment.	The LFRMS could potentially have a range of environmental impacts, as considered through the SEA.
Waste Strategy for England, 2007	The Strategy describes the Government's vision for managing waste and resources better. It sets out the changes needed to deliver more sustainable development through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.	Different forms of waste management can give rise to significant water issues and whether actions need to be proposed to address these.
Eutrophication Strategy, 2002	The Eutrophication Strategy sets the objective to combat eutrophication in order to achieve and maintain by 2010 a healthy marine environment where eutrophication does not occur.	Water quality is linked to the LFRMS as flooding events can lead to water pollution and changes in water levels.

Plan/Programme	Description	Relevance to LFRMS
National		
Underground, Under Threat; The state of groundwater in England and Wales	This document is intended to be used by anyone interested in groundwater and particularly those proposing an activity which may cause groundwater impacts and details the best ways to mitigate impacts on groundwater.	Groundwater quality is of relevance to the LFRMS as flooding can be linked with groundwater pollution.
Policy and Practice for the Protection of Groundwater, 2005	The Environment Agency's core groundwater policy is: "To protect and manage groundwater resources for present and future generations in ways that are appropriate for the risks that we identify."	Groundwater quality is of relevance to the LFRMS as flooding can be linked with groundwater pollution.
Wildlife and Countryside Act, 1981(as Amended)	The act is the principle mechanism for legislative protect of wildlife in Great Britain. The act deals with the protection of birds, other animals and plants. It provides for the notification of Sites of Special Scientific Interest and their protection and management.	The contents of the LFRMS could potentially affect biodiversity, particularly if it results in land use change or changes in water levels. Any construction activities resulting from the LFRMS could also affect biodiversity.
Countryside and Rights of Way Act, 2000	The Act improves the rights of way legislation by encouraging the creation of new routes and clarifying uncertainties about existing rights.	The LFRMS may have implications for public rights of way, particularly where these are in close proximity to watercourses and/or flood risk management infrastructure.
Environment Act, 1995	Created the Environment Agency and set new legislation for environmental protection.	The LFRMS could potentially have a range of environmental impacts, as considered through the SEA.
Natural Environment and Rural Communities (NERC) Act, 2006	Designed to help achieve a rich and diverse natural environment and thriving rural communities through modernised and simplified arrangements for delivering Government policy. Key Elements of the Act: Establishment of Natural England; Establishment of the new Commission for Rural; and, Communities; and, Commitment to curtail the inappropriate use of byways by motor vehicles.	The LFRMS could potentially have a range of environmental impacts, as considered through the SEA.
Conservation of Habitats and Species Regulations, 2010	The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.	The Regulations require HRA to be carried out in relation to certain plans, which may include the LFRMS depending on the measures to be included within it.

Plan/Programme	Description	Relevance to LFRMS
National		
Natural Environment White Paper, 2011	<p>The government aims for this generation to be the first generation to leave the natural environment of England in a better state than it inherited. To achieve this requires taking action across sectors, rather than treating environmental concerns in isolation. The strategy sets out how government intends to mainstream the value of nature across society by:</p> <ul style="list-style-type: none"> • Facilitating greater local action to protect and improve nature • Creating a green economy, where economic growth and health of natural resources sustain each other • Strengthening connections between people and nature • Showing leadership in the EU / Internationally to protect / enhance natural assets globally. <p>The government seek to establish an institutional framework with the establishment of Local Nature Partnerships, to work alongside Local Enterprise Partnerships, Nature Improvement Areas to reconnect and enhance nature on a significant scale and a strategic approach to planning for nature within and across large areas.</p>	There are two Local Nature Partnerships within the East Riding, and one Nature Improvement Area. The LFRMS may have implications for the natural environment, which could create opportunities to contribute towards the aims of this Paper.
Biodiversity 2020: A Strategy for England's Wildlife and Ecosystems, 2011	<p>Sets out the Government's strategy for improving biodiversity in England up to 2020. The objective is to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people. This will be achieved through four areas of action:</p> <ul style="list-style-type: none"> • a more integrated large-scale approach to conservation on land and at sea • putting people at the heart of biodiversity policy • reducing environmental pressures • improving our knowledge 	There may be opportunities for the LFRMS to provide for biodiversity enhancements, as well as reducing risks to habitats and species from flood events.
Working with the Grain of Nature: A Biodiversity Strategy for England, 2011	<p>This report references how the creation or restoration of habitats can help flood risk management. It is likely that through wetland creation and managed realignment it will be possible to provide washland storage to help flood alleviation of urban areas, and as compensation for freshwater wetland habitats lost due to coastal squeeze. In the process biodiversity targets set for flood defence operating authorities applicable to all flood defence capital schemes will result in net gains of habitats, such as chalk rivers and saltmarsh.</p>	The LFRMS may include measures that would result in biodiversity enhancements.

Plan/Programme	Description	Relevance to LFRMS
National		
England Biodiversity Framework, 2008	<p>The purpose of the new framework is to:</p> <ul style="list-style-type: none"> • encourage the adoption of an ecosystem approach and embed climate change adaptation principles in conservation action, • achieve biodiversity enhancements across whole landscapes and seascapes, • achieve our priority habitat targets, placing an emphasis on habitat restoration and expansion, • enhance the recovery of priority species and better integrate their needs into habitat-based work, • support the restoration of designated sites, • support the conservation of marine biodiversity, • improve the integration of national, regional and local levels of delivery, • improve the links between policy-makers and biodiversity practitioners, and • strengthen biodiversity partnerships (national, regional and local). 	The LFRMS may include measures that would result in biodiversity enhancements.
Making Space for Nature Review, 2010	This proposes that the overarching aim for England's ecological network should be to deliver a natural environment where: <i>Compared to the situation in 2000, biodiversity is enhanced and the diversity, functioning and resilience of ecosystems re-established in a network of spaces for nature that can sustain these levels into the future, even given continuing environmental change and human pressures.</i>	The LFRMS may include measures that would result in biodiversity enhancements.
UK Biodiversity Action Plan, 2004	<p>The UK BAP aims to maintain and enhance biological diversity within the UK and thus contribute to the conservation and enhancement of global diversity. Biological diversity in the UK will be maintained and enhanced by addressing:</p> <ul style="list-style-type: none"> • overall population and ranges of native species, the quality and ranges of habitats and ecosystems • internationally important and threatened species, habitats and ecosystems • biodiversity of natural and semi natural habits where they have been diminished over recent past decades 	The LFRMS may include measures that would result in biodiversity enhancements.
Salmon and Freshwater Fisheries Act, 1975	<p>This Act aims to regulate practice relating to freshwater fisheries and salmon fishing. The main issues addressed are:</p> <ul style="list-style-type: none"> • prohibition of certain modes of taking or destroying fish; • obstruction to passage of fish; • times of fishing and selling and exporting fish; and • fishing licences. 	The LFRMS may have implications for fish species e.g. measures that lead to creation or removal of obstruction to their passage within water courses.

Plan/Programme	Description	Relevance to LFRMS
National		
The Eels (England and Wales) Regulations, 2009	These implement Council Regulation (EC No. 1100/2007) establishing measures for the recovery of the stock of European Eel, which requires Member States to implement a number of short- and long-term measures to achieve a target of ensuring that at least 40% of the potential production of adult eels return to the sea to spawn on an annual basis.	The LFRMS may have implications for eels, which are present (e.g. measures that lead to creation or removal of obstruction to their passage within water courses).
National Wetland Vision, 2008	The Wetland Vision is of a future where wetlands are a significant feature of the landscape in which wildlife can flourish. It will be a future in which wetland heritage is recognised and safeguarded; where everyone can enjoy wetlands for quiet recreation and tranquillity. It looks to a future where wetlands are valued both for the roles they play in helping us deal with some of the challenges of the 21st century and in improving and sustaining our quality of life.	The LFRMS may include measures that would result in enhancements to wetlands.
Safeguarding our Soils; A Strategy for England, 2009	Sets out the Government's strategy for improving soil quality in England and safeguard the ability of soils to provide essential services. Its objectives are: <ul style="list-style-type: none"> • Improving our evidence base: filling the gaps in our knowledge, particularly in the light of the new challenges soils may face from climate change, and ensuring that policy development is based on the latest scientific information. • Providing information and guidance: giving those people actively involved in the management of our soils the necessary information or guidance to encourage them to employ best practice in managing soils sustainably. • Using regulation and incentives as drivers for action: where the need to safeguard public goods is essential or where market failure mean soils are being adversely affected, we will look to regulate potentially damaging activities or incentivise different behaviours. 	The LFRMS may have implications for soil quality, as flooding can cause soil erosion and/or pollution.
Contaminated Land (England) Regulations, 2006	Under the Contaminated Land Regulations, Local Authorities are responsible for surveying their areas and identifying sites which may give rise to environmental or human health problems. Local Authorities and the Environment Agency will then discuss the nature of the sites and those that are designated as 'special' will become the responsibility of the Environment Agency. Sites will then have action plans to remedy the contamination.	The LFRMS may have implications for contaminated land, as flooding events can cause the mobilisation of contaminants outside of areas already identified as contaminated land.

Plan/Programme	Description	Relevance to LFRMS
National		
Climate Change Act, 2008	<p>The Climate Change Act 2008 makes the UK the first country in the world to have a legally binding long-term framework to cut carbon emissions. It also creates a framework for building the UK's ability to adapt to climate change. The Act looks to improve carbon management, helping the transition towards a low-carbon economy in the UK. It sets a legally binding target of at least an 80 percent cut in greenhouse gas emissions by 2050, to be achieved through action in the UK and abroad. Also a reduction in emissions of at least 34 percent by 2020. Both these targets are against a 1990 baseline.</p>	<p>The LFRMS could potentially have implications for greenhouse gas emissions, as maintenance and construction of flood risk management infrastructure contributes to these.</p>
The Carbon Plan, 2011	<p>The carbon plan sets out a vision for Britain powered by cleaner energy used more efficiently, with more secure energy supplies and stable energy prices and benefits from jobs and growth that a low carbon economy will bring. Three key areas are set out:</p> <ul style="list-style-type: none"> • Electricity Generation • Heating homes and businesses • Travel <p>The aim of the plan is for it to be implemented across a range of different topics:</p> <ul style="list-style-type: none"> • Secure, sustainable low carbon energy • Saving energy in homes and communities • Reducing emissions from business and industry • Towards low carbon transport • Cutting emissions from waste • Managing land sustainably • Reducing emissions in the public sector • Developing leadership within the European Union • Building the case for global ambition with key countries and international institutions. 	<p>The LFRMS could potentially have implications for energy efficiency, e.g. maintenance and construction of flood risk management infrastructure generate significant energy use.</p>
Adapting to Climate Change in England: A Framework for Action, 2008	<p>This document sets out a framework for action for adapting to climate change in England</p>	<p>The Framework outlines a number of courses for action when dealing with flood risk. The LFRMS will need to show conformity with this framework.</p>

Plan/Programme	Description	Relevance to LFRMS
National		
Building a Low Carbon Economy - The UK's Contribution to Tackling Climate Change, 2008	The report is based around the overarching target of a reduction of emissions by 80% by 2020. Progress so far, along with future targets are addressed within different sections; <ul style="list-style-type: none"> • Decarbonising Electricity • Energy Use in Buildings and Industry • Reducing Domestic Transport Emissions • Other Emissions – including; Agriculture, Land Use Change and Forestry, Waste. 	The LFRMS could potentially have implications for energy efficiency, e.g. maintenance and construction of flood risk management infrastructure generate significant energy use.
Mainstreaming sustainable development; The Government's vision and what this means in practice, 2011	This outlines the coalition Government's commitment to sustainable development and provides a refreshed vision, building on the principles that underpinned the UK's 2005 Sustainable Development Strategy. It outlines ten themes that sustainable development is centred on: <ul style="list-style-type: none"> • sustainable development in Government • green economy • actions to tackle climate change • protecting and enhancing the natural environment • fairness and improving wellbeing • national and international sustainable development • building a big society • business planning • operations and procurement commitments • transparency and public accountability 	The LFRMS will seek to contribute to sustainable development, and the SEA is a tool for highlighting how the LFRMS can best do this.
Securing the Future: The UK Government Sustainable Development Strategy, 2005	The strategy outlines a number of shared principles including Living Within Environmental Limits and Ensuring a Strong, Healthy and Just Society. The agreed priorities within the strategy including sustainable consumption and production, climate change and energy, protecting our natural resources and enhancing the environment and creating sustainable communities and a fairer world.	The LFRMS will seek to contribute to sustainable development, and the SEA is a tool for highlighting how the LFRMS can best do this.

Plan/Programme	Description	Relevance to LFRMS
National		
The Energy Challenge, Energy Review Report 2006	<p>The Government has four long-term goals for energy policy:</p> <ul style="list-style-type: none"> • To put the UK on a path to cut our carbon dioxide emissions by some 60% by about 2050, with real progress by 2020; • To maintain reliable energy supplies; • To promote competitive markets in the UK and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and • To ensure that every home is adequately and affordably heated. 	The LFRMS could potentially have implications for energy efficiency, e.g. maintenance and construction of flood risk management infrastructure generate significant energy use.
Energy White Paper, 2007	<p>This White Paper sets out the Government's international and domestic energy strategy to address the long-term energy challenges. The key priorities are to:</p> <ul style="list-style-type: none"> • save energy • develop cleaner energy supplies, and • secure reliable energy supplies at prices set in competitive markets. 	The LFRMS could potentially have implications for energy efficiency, e.g. maintenance and construction of flood risk management infrastructure generate significant energy use.
Code for Sustainable Homes: Setting the standard in sustainability for new homes, 2008	The code for sustainable homes is the national standard for the sustainable design and construction of new homes. It aims to reduce carbon emissions and promote higher standards of sustainable design above the current minimum standards set out by the building regulations. The code provides 9 measures of sustainable design, one of which is surface water runoff (flooding and flood prevention).	The LFRMS will seek to add value to national guidance/standards on managing surface water run-off arising from new development.
Strategy for Sustainable Construction, 2008	This helps to deliver the aims set out in the UK's Sustainable Development Strategy. It is a joint industry and Government initiative, and is intended to promote leadership and behavioural change, as well as delivering substantial benefits to both the construction industry and the wider economy.	The LFRMS may lead to construction of new infrastructure/assets, to which standards for sustainable construction may apply.
Urban White Paper: Our towns and cities - the future, 2000	The agenda is to facilitate an 'urban renaissance' creating attractive – well kept towns, with good access to quality services. Schemes put in place should encourage environmentally sustainable towns and cities through good design and planning.	The LFRMS may have a role in contributing to the urban renaissance of some of East Riding's towns.
Rural Strategy, 2004	The vision – of sustainable rural communities in which economic, social and environmental issues are all taken into account – remains at the heart of rural policy.	A key priority for the LFRMS will be to support the sustainability of the East Riding's rural communities.
Fair Society, Healthy Lives: The Marmot Review, 2010	This Review aims to facilitate the creation of fair, equal communities. It has five key themes, with Theme 6; Tackling health inequalities including a section on climate change.	The LFRMS will seek to mitigate the impacts of climate change and in turn, contribute to tackling health inequalities, in particular, psychological impacts of flood risk.

Plan/Programme	Description	Relevance to LFRMS
National		
The Localism Act, 2011	This makes provisions about: the functions and procedures of local and certain other authorities; the functions of the Local Commission for Administration in England; the recovery of financial sanctions imposed by the Court of Justice of the European Union on the United Kingdom from local and public authorities; local government finance; town and country planning, the Community Infrastructure Levy and the authorisation of nationally significant infrastructure projects; social and other housing; regeneration in London; and connected purposes.	The LFRMS may have implications for some of the issues covered by this Act.
Natural England's Green Infrastructure Guidance, 2009	Natural England will drive forward green infrastructure planning and delivery. In particular, the Guidance will help to: <ul style="list-style-type: none"> • Facilitate a co-ordinated and consistent approach to green infrastructure strategies; • Promote the contribution of green infrastructure to 'place-making', in addition to other government agendas and links to spatial planning; • Inspire through best practice examples and case studies of green infrastructure planning and delivery. 	The LFRMS will aim to contribute to the green infrastructure network of the East Riding, as the water environment and floodplains are a key component of this..
The National Planning Policy Framework, 2012	The NPPF is based around the presumption in favour of sustainable development. Sustainable development, for the planning system, is defined as: <ul style="list-style-type: none"> • Planning for prosperity – using the planning system to build a strong, responsive and competitive economy • Planning for people – using the planning system to promote strong, vibrant and healthy communities • Planning for places – using the planning system to protect and enhance the natural, built and historic environment. <p>The presumption in favour of sustainable development requires a positive planning system to help facilitate economic growth. The NPPF requires that significant weight is placed on securing economic growth.</p>	Paragraphs 100-104 and accompanying 'technical guidance' provide planning policy in respect to flood risk, namely the application of a 'sequential approach' to avoiding sites in Flood Zones 2 and 3, and ensuring that developments are designed appropriately so as not to increase flood risk to surrounding areas. The LFRMS is likely to complement existing planning policies regarding avoiding/mitigating flood risk posed to new development, and inform future reviews of the Strategic Flood Risk Assessment.

Plan/Programme	Description	Relevance to LFRMS
National		
The Historic Environment: A Force for Our Future, 2001	<p>This Statement seeks to ensure that:</p> <ul style="list-style-type: none"> • the full potential of the historic environment as a learning resource is realised. • the historic environment is accessible to everybody and is seen as something with which the whole of society can identify and engage. • the historic environment is protected and sustained for the benefit of our own and future generations. • the historic environment's importance as an economic asset is skilfully harnessed. 	The LFRMS may have implications for features of the historic environment in the East Riding.
Marine and Coastal Access Act, 2009	<p>This Act puts in place a new system for improved management and protection of the marine and coastal environment. It comprises eight key elements:</p> <ul style="list-style-type: none"> • A Marine Management Organisation (MMO), to operate as the competent marine planning authority on behalf of UK Government. • A Strategic Marine Planning System, to agree and clarify our marine objectives and priorities. • A Streamlined Marine Licensing System. • Marine Nature Conservation Zones. • Fisheries Management and Marine Enforcement, through the creation of Inshore Fisheries and Conservation Authorities (IFCAs). • Migratory and Freshwater Fisheries, introducing a new licensing and authorisation system for fishing activities with the Environment Agency as the competent authority. • Coastal Access, enabling the creation of a continuous, well signed and managed route around the entirety of the English and Welsh coastline. • Coastal and Estuarine Management to 'join-up' existing sectoral policies and bylaws. 	The LFRMS may have implications for some of the issues covered by this Act, particularly as the marine planning system's inshore limit is the mean high water mark.

Plan/Programme	Description	Relevance to LFRMS
National		
Marine Policy Statement, 2011	<p>This aims to facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby:</p> <ul style="list-style-type: none"> • Promote sustainable economic development; • Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects; • Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets; and • Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues. 	The LFRMS may have implications for some of the marine activities covered by this Statement, particularly as the marine planning system's inshore limit is the mean high water mark.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
Humber River Basin Management Plan, 2009	<p>The plan is about the pressures facing the water environment of the Humber river basin district. The major challenges are:</p> <ul style="list-style-type: none"> • The way urban land is used should also protect and restore habitats, species and natural processes • Controlling diffuse pollution and making wise use of water are priorities • There is concern about future trends of water availability • The impacts of modifications and invasive non-native species on wildlife • The legacy left behind from mining has led to contamination and rising mine waters. <p>The plan sets out actions for different sectors and organisations, including those for local government and urban and transport.</p> <p>For local government, the plan seeks to produce guidance for local planning authorities, to ensure that spatial planning documents take account of the objectives of the Humber River Basin Management Plan and to reduce the physical impacts of urban development.</p>	The River Basin Management Plan provides important context for the LFRMS.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
River Aire Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. Part of the East Riding, including the settlements of Gowdall, Rawcliffe, Snaith, and Airmyn are located on the River Aire. The CFMP's priority for this area is to optimise the use of existing washlands to respond to climate change.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.
River Derwent Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. Part of the East Riding, including the settlements of Pocklington, Stamford Bridge, and Wilberfoss are located in this catchment. The relevant CFMP priorities for these locations are to improve flood mitigation in Pocklington, and to ensure flood risk does not increase elsewhere.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.
River Don Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. Part of the East Riding, including the settlement of Goole is located in this catchment. The relevant CFMP priority for this area is to increase flood storage/washland capacity to mitigate the anticipated increased tidal flood risk associated with climate change.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.
River Hull and Coastal Streams Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. The majority of the East Riding lies within this catchment. The CFMP's priorities are to improve flood mitigation for the City of Hull and Haltemprice settlements, develop a Strategy for the upper catchment of the River Hull, focusing on a long term approach to maintenance of flood risk and drainage assets, and ensure that elsewhere in the catchment, flood risk does not increase.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
River Ouse Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. Part of the East Riding, including the settlements of Goole and Rawcliffe, are located in this catchment. The relevant CFMP priorities for these locations are to create some storage on smaller watercourses, address known low spots on current defences, undertake studies into the pumping regime to ensure that these can keep pace with future increases in fluvial flows.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.
River Trent Catchment Flood Management Plan, 2010	Catchment Flood Management Plans (CFMPs) aim to give an overview of the flood risk across each river catchment, and recommend ways of managing those risks now and over the next 50-100 years. The EA are currently looking at how to build on CFMPs to deliver Flood Risk Management Plans required by the Floods Directive. A small part of the East Riding is located in this catchment. The relevant CFMP priorities for this location is to complete a detailed flood risk management strategy for the Isle of Axholme.	The EA's review of the policies/actions of CFMPs through the development of statutory FRMPs is of direct relevance to the LFRMS, as these respective plans need to align.
Draft River Hull Flood Risk Management Strategy, 2010	<p>This set out the EA's long term draft plan for managing the risk of flooding from the main rivers and drains in the River Hull catchment. Its key proposals were to:</p> <ul style="list-style-type: none"> • Continue to maintain and in some locations, improve the flood banks, walls and other structures where we have the legal powers to carry out work to manage the risk of flooding • Continue to operate and maintain the Hull Barrier and our pumping stations on Holderness Drain at East Hull and Great Culvert • Work with Hull City Council and the owners of riverside land to develop a plan for repairing and improving the defences beside the River Hull through the city • Continue to maintain and operate Wilfholme, Hempholme and Tickton pumping stations until 2015 while we work with others to find a long term solution for how they are managed in the future • Continue to maintain the flood banks above Hempholme Weir (the upper catchment) until 2015 while we work with others to develop a longer term plan for managing the water levels in this area. 	The multi-agency review of this Strategy is of direct relevance to the LFRMS, as the recommendations of this review will inform future investment priorities for local flood risk management within the River Hull catchment.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
	In response to representations from ERYC, the EA agreed to delay the adoption of the Strategy to allow time for a review on a multi-agency basis, taking into account more recent flood risk data and re-examining some of the business cases associated with different flood risk management options.	
Humber Estuary Flood Risk Management Strategy, 2008	The Humber Estuary Flood Risk Management Strategy was published by the Environment Agency in March 2008. It establishes priorities for flood risk management looking 50-100 years ahead. It identifies preferred locations for compensatory habitat creation and water storage areas, and identifies sections of the estuary where it is anticipated there may be difficulties securing funding to maintain defences in the future. The delivery plan for the Strategy is currently being reviewed.	The EA's review of the delivery plan for this Strategy is of direct relevance to the LFRMS, as these respective plans need to align.
Flamborough Head to Gibraltar Point Shoreline Management Plan (Second Generation), 2010	The Shoreline Management Plan for Flamborough Head to Gibraltar Point is a high-level policy document from which the organisations that manage the shoreline set their long term plan. It describes the intent of shoreline management for particular stretches of the coast, for short, medium, and long horizons. For the East Riding coastline, the SMP's priorities are to: protect the main towns of Bridlington, Hornsea, and Withernsea, from coastal erosion, as well as the village of Mappleton, the north-south coastal road, and Dimlington and Easington gas terminals; maintain access to Spurn Head but cause minimal disruption to natural processes, and continue to provide sustainable flood protection to assets in the floodplain of the outer Humber estuary.	This is of some relevance to the LFRMS, given that there is some interaction between shoreline management and flood risk management, such as where there are coastal outfalls (e.g. Barmston Drain and Tunstall Drain).
Yorkshire and Humber Climate Change Plan, 2009-2014	This action plan sets a strategic direction for managing and combating climate change in the Yorkshire and Humber region over the next five years. It contains broad actions within the following themes: strategies and monitoring; built environment; transport; health services; business; land management; citizen engagement; energy; waste; and water. In respect to the latter, it states the region already recognises its vulnerability to flooding and must improve resilience to increased flood risk as a result of climate change.	The LFRMS will aim to contribute to tackling the causes of climate change, e.g. through promoting greater energy efficiency in flood risk management activities, and in promoting measures to help mitigate the impacts of increased flood risk resulting from climate change.
Yorkshire and Humber Regional Biodiversity Strategy, 2009	Sets a framework for the integration of biodiversity into regional and local policies and programmes, and promotes a more joined up approach to biodiversity. It describes the local biodiversity assets, including the number of protected sites, species etc. and identifies important regional habitats.	The LFRMS could potentially have an impact on biodiversity, depending on the measures proposed within it.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
	<p>Strategic objectives set out in the Strategy include:</p> <ul style="list-style-type: none"> • Protecting the best sites for wildlife in the region. • Focussing conservation action on the region's priority habitats and species. • Improving functional habitat networks and enhancing the wider environment. • Developing a robust evidence base for the region. • Engaging people with the region's biodiversity. • Helping the region's biodiversity adapt to climate change. 	
Regional Forestry Strategy for Yorkshire and the Humber, 2005	<p>Key aims of this Strategy are to:</p> <ul style="list-style-type: none"> • improve knowledge and understanding about the value of trees and woodlands amongst the region's policy makers and decision takers; • improve skills and business expertise within the forestry sector; • increase woodland creation in the reclamation of derelict and underused, and; • protect and improve woodland Sites of Special Scientific Interest and Ancient Woodlands; • increase accessible woodland near to where people live; • increase the use of wood in sustainable construction and as a source of renewable energy; • increase tree and woodland planting to help reduce flood risk. 	There may be opportunities, through the LFRMS, to contribute to the aims of this Strategy, particularly through joint / multi-functional projects.
Historic Environment Strategy for Yorkshire and the Humber Region, 2009-2013	<p>The purpose of this Strategy is to:</p> <ol style="list-style-type: none"> 1. <i>act as an advocacy document</i> - to broaden awareness and understanding and change the way organisations perceive and value the historic environment, clarifying and emphasising why it matters; 2. <i>act as a basis for integrating the historic environment with the ambitions of other agencies</i> - providing a framework to support, guide and inform the development of regional and local policy e.g. Integrated Regional Strategy, Local Area Agreements, Local Development Frameworks, Sustainable Community Plans, City Region and Sub-Regional Plans; 3. <i>provide a focus to inspire historic environment work in the Region</i> – giving a clear direction for activity and outlining priorities to secure the effective management of our historic environment in the future. 	There may be opportunities, through the LFRMS, to contribute to the aims of this Strategy, particularly through joint / multi-functional projects.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
Humber Estuary National Character Area Document, 2012	<p>This identifies the following Environmental Opportunities for the Humber Estuary:</p> <ol style="list-style-type: none"> 1. Protect and enhance the dynamic and inspiring estuarine and coastal landscape with its interrelated habitats of sand dunes, salt marsh, reed beds, saline lagoons and mudflats, extending the internationally important habitats and the wildlife dependent upon them, while addressing coastal squeeze, climate change and dynamic coastal processes. 2. Encourage a strategic approach to the planning of land uses around the estuary to address the pressures of climate change and development, ensuring that natural processes continue to function, the estuary's biodiversity value is protected and enhanced, and its open and expansive character is retained. 3. Work with landowners and managers to incorporate more habitats and features into the farmed landscapes that improve biodiversity, address water quality and availability, and contribute to landscape character. 4. Improve green infrastructure links between urban and rural areas, and seek opportunities for public enjoyment of the open, expansive landscape and its dynamic coastal features and wildlife . 5. Protect, record and manage the cultural and historic landscape associated with the history of the area as a longstanding key communication and trading route. 	There are likely to be opportunities, through the LFRMS, to help realise some of these aims, particularly through joint / multi-functional projects.
Hull and East Riding Catchment Abstraction Management Strategy, 2006	This strategy identifies how much water is available for abstraction in the watercourses in East Riding and indicates which watercourses/areas are over-licensed. Based on this information, policies are in place to determine how many water extraction licenses could be offered in the catchments areas.	Water availability for abstraction is of some relevance to the LFRMS as water levels can influence flood risk and vice versa.
Humber Local Enterprise Partnership - A Plan for the Humber 2012-2017	<p>This Plan establishes various economic objectives, based on:</p> <ul style="list-style-type: none"> • realising the true potential of the Estuary, developing a super cluster in renewable energy. • building on other key sector strengths, such as in chemicals, steel, food processing, engineering and manufacturing, healthcare, digital and creative, visitor economy, and education. • addressing barriers to growth, such as skills and infrastructure. 	The LFRMS will aim to contribute to addressing barriers to economic growth, e.g. flood risk.

Plan/Programme	Description	Relevance to LFRMS
Sub-National		
Rural strategy and action plan for the Hull and Humber Ports City Region, June 2009	This Strategy seeks to mitigate the tensions that exist between urban-centric planning policies and the pressure for modest development in evolving rural settlements	The LFRMS will aim to contribute to the sustainability of rural communities in the East Riding.

Plan/Programme	Description	Relevance to LFRMS
Local		
East Riding of Yorkshire Preliminary Flood Risk Assessment, 2011	As a Lead Local Flood Authority (LLFA), the East Riding of Yorkshire Council has produced a Preliminary Flood Risk Assessment to meet the requirements of the Flood Risk Regulations 2009 and European Floods Directive. The PFRA provides an initial assessment of local flood risk across the East Riding, including information on past floods and the potential for future flooding. Primarily the document considers potential flooding from surface water runoff, groundwater and ordinary water courses, but recognises the complex interactions and combined effects of the different types of flooding.	The PFRA is a key evidence base document for the LFRMS.
East Riding of Yorkshire Level 1 Strategic Flood Risk Assessment, 2010	As the Local Planning Authority, ERYC has prepared a Level 1 SFRA (2010). This identifies tidal, fluvial, surface water and groundwater flood risks across the East Riding, to inform strategic and site-specific policies in the East Riding Local Plan. In particular, it informs the application of the sequential approach, required by the National Planning Policy Framework (NPPF), to determine the location of future developments. This favours, in descending order, sites from 'low risk' through to 'high risk'. Exceptions can be granted to 'high risk' sites if they contribute significantly to addressing social and economic issues in areas of need, and provided the design of the development is such that it can remain safe in a flood event and not increase risk to other locations. For instance, provisions for escape/evacuation, effective flood warning and emergency planning should be made.	This provides additional flood risk data and context to the PFRA, which is relevant to the LFRMS.

Plan/Programme	Description	Relevance to LFRMS
Local		
Goole Level 2 Strategic Flood Risk Assessment, 2011	The Council has prepared a 'Level 2' SFRA (2011) for Goole to assess flood hazard posed from potential breaches and overtopping of the town's defences. It provides recommendations for managing flood risk through planning policy and development management.	This provides useful detail regarding consequences of flooding from overtopping and breach of river defences in Goole, which is relevant to the LFRMS.
East Riding of Yorkshire Multi Agency Flood Plan, 2010	<p>This aims to increase the effectiveness of the multi-agency response to flooding by:</p> <ul style="list-style-type: none"> • providing a single reference point for flood specific information that will support organisations' existing contingency plans and procedures • formalising communication arrangements between partner organisations in the event of a flooding event • identifying areas where flood mitigation methods can be improved. <p>Humber Emergency Planning Service, on behalf of ERYC, is responsible for initiating a review of this plan.</p>	The LFRMS is likely to identify priorities in relation to people and organisations being prepared for and responding to flood emergencies.
Flood Investigation Reports	<p>Under powers afforded to it as Lead Local Flood Authority, the Council has undertaken a number of Flood Investigations following flood incidents that caused significant disruption to communities and/or where it was considered necessary to examine the cause of the flooding and/or the response provided by the relevant agencies. A number of investigations have been undertaken and are ongoing for recent flooding events in the East Riding. These include:</p> <ul style="list-style-type: none"> • Report of Flood Review Panel into the June 2007 flooding that occurred across the East Riding (May 2008) • Investigation for flooding in Goole in August 2011 (January 2012) • Investigation for flooding in Cottingham in May 2011 (February 2012) • Investigation for flooding in Pocklington in April 2012 (February 2013) • Investigation for flooding in Swinefleet in July 2012 (March 2013) • Investigation for flooding in Burton Fleming during winter 2012-2013 (November 2013) • Investigation for flooding in Kelleythorpe and Driffield Showground during winter 2012-2013 (November 2013) • Investigation for flooding in Goole in July 2012 (ongoing) <p>The reports make recommendations as to what actions should be pursued to reduce or alleviate the risk and impact associated with further flooding.</p>	These reports provide a useful source of evidence for the LFRMS in relation to previous flooding events.

Plan/Programme	Description	Relevance to LFRMS
Local		
East Riding Community Plan ('Our East Riding') 2006-2016, 2013 Update	<p>This is the East Riding Local Strategic Partnership's Community Plan for the East Riding and provides a blueprint for the area for 2006-2016 period. As a group of partner organisations, the LSP is working together to ensure that the East Riding is a place where:</p> <ul style="list-style-type: none"> • Children and young people are happy, healthy, confident, safe and reach their full potential • Older people enjoy a healthy, independent lifestyle • Communities are healthy, thriving, prosperous and safe • Regeneration transforms deprived areas and reduces health and other inequalities • We value and care for the diverse character of the area 	<p>This plan is a key part of the wider policy context for the LFRMS, being the over-arching plan under which other local strategies sit. It highlights flood risk as a key challenge for the East Riding, and so the LFRMS will contribute to the plan's aim of reducing its impacts on East Riding communities.</p>
East Riding of Yorkshire Council Business Plan 2011-15, Updated 2013	<p>This sets out the Council's corporate priorities, which are:</p> <ul style="list-style-type: none"> • Maximising our potential - working with others to support sustainable economic growth and strong communities, ensuring the East Riding is a great place to invest in, live, work and visit • Valuing our environment – Responding to climate change, developing our infrastructure and safeguarding our heritage • Supporting vulnerable people, reducing inequalities – supporting in times of need, protecting from harm and improving the quality of life • Reducing costs, raising performance – developing our workforce and working with partners to provide excellent service, effective governance and value for money • Promoting health, wellbeing and independence – helping people to stay healthy, strong and fit for the future 	<p>The LFRMS has a significant role to play in helping the Council achieve its corporate priorities, particularly in respect to working with others to support sustainable economic growth and strong communities, and responding to climate change.</p>
East Riding of Yorkshire Council Proposed Submission Local Plan Strategy Document, 2014	<p>This is a draft of what will eventually be the overall planning policy document for the East Riding. It forms a key part of the East Riding Local Plan and sets the framework for other documents such as the Allocations Document. Once completed, planning applications will be determined in accordance with the policies within the Strategy and the Local Plan as a whole. It includes a draft vision and a number of objectives for the area, setting out how the East Riding will look in 2029. It also includes:</p>	<p>The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.</p>

Plan/Programme	Description	Relevance to LFRMS
Local		
	<ul style="list-style-type: none"> • a proposed spatial strategy setting out those settlements where development will occur and how much development is planned for. It also identifies significant areas of growth in the larger settlements; • proposed core planning policies on a number of important issues relating to housing, economic development, transport, the built and natural environment and community infrastructure. 	
East Riding of Yorkshire Council Proposed Submission Local Plan Allocations Document, 2014	The Allocations Document is an important part of the East Riding Local Plan. When adopted, it will allocate pieces of land for specific uses, including for housing, employment, retail, open space and transport. This draft version proposes numerous sites for development across the settlements identified in the Draft Strategy Document. Some proposed allocations are identified as being suitable only subject to completion of adequate surface water management schemes, to address flood risk constraints.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.
Joint Structure Plan for Kingston Upon Hull and the East Riding of Yorkshire, 2005	This sets out the strategy for the future development and use of land in the East Riding. It provides an overall approach to ensuring sustainable development takes place both now and in the future. However, it will soon be replaced by the new Local Plan for the East Riding, and a number of policies within the Joint Structure Plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.
Beverley Borough Local Plan, 1996	This sets out planning policies for the former Beverley Borough Council area. However, it will soon be replaced by the new Local Plan for the East Riding, and a number of policies within this plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.
Boothferry Borough Local Plan, 1999	This sets out planning policies for the former Boothferry Borough Council area. However, it will soon be replaced by the new Local Plan for the East Riding, and a number of policies within this plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.

Plan/Programme	Description	Relevance to LFRMS
Local		
East Yorkshire Borough Wide Local Plan, 1997	This sets out planning policies for the former East Yorkshire Borough Council area. However, it will soon be replaced by the new Local Plan for the East Riding, and a number of policies within this plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.
Holderness District Wide Local Plan, 1999	This sets out planning policies for the former Holderness District Council area. However, it will soon be replaced by the new Local Plan for the East Riding, and a number of policies within this plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications.	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.
Bridlington Town Centre Area Action Plan, 2013	<p>This sets out the planning policy approach and development proposals for the town centre and harbour area of Bridlington. The AAP is part of the East Riding's Local Plan which means it is used to help determine planning applications within the town centre area of Bridlington. The AAP puts forward six strategic objectives:</p> <ul style="list-style-type: none"> • Regenerate the town centre to meet the year round needs of Bridlington and its catchment for retail, leisure and other town centre uses, including office space to support the growth of its small business community • Create a marina which includes and regenerates the Harbour and integrates with the town centre Primary Shopping Area and The Spa • Create a good quality, well-designed and varied town centre residential offer • Make the town centre easily accessible and comfortably usable all year round • Create a strategic framework of new and enhanced public spaces and pedestrian environments in the town centre • Raise design standards in the built environment and conserve, recover and enhance the town centre's distinctive historic character 	The LFRMS will need to take into account the location and scale of future development in assessing and identifying priorities for managing local flood risk, and of relevant planning policies regarding flood risk management.

Plan/Programme	Description	Relevance to LFRMS
Local		
A Health and Wellbeing Strategy for the East Riding of Yorkshire, 2013-2016	<p>This is the East Riding of Yorkshire Health and Wellbeing Board's first Health and Wellbeing Strategy. It will provide the foundation for the commissioning of health, care and wellbeing services in the East Riding. From the local evidence summarised by the Joint Strategic Needs Assessment, the 3 long-term priority outcomes for health, care and wellbeing in the East Riding are:</p> <ul style="list-style-type: none"> • East Riding residents achieve healthy, independent ageing • Health and wellbeing inequalities in the East Riding are reduced • Children and young people in the East Riding enjoy good health and wellbeing <p>The Strategy highlights that good health and wellbeing is intrinsically linked to wider influences including employment, skills, housing, culture and leisure, accessibility of local services and personal responsibility, and that its success will therefore depend on the success of other linked strategies.</p>	The LFRMS can potentially contribute to tackling health inequalities, in particular, in reducing the psychological impacts of flood risk.
East Riding of Yorkshire Council Housing Strategy, 2011	This seeks to look forward over the next thirty years, its vision is that "the range, quality and affordability of housing in East Riding meets the needs of current and future residents, contributing towards more sustainable communities and encouraging economic growth and prosperity." The strategy includes three objectives which aim to assist this broader vision. These are: Knowing our community; Ensuring strong, vibrant and healthy communities; and Delivering excellent housing services".	The LFRMS may have implications for existing and new residential properties in the East Riding. The affordability of housing and mortgage availability can in some instances be dependent upon the level of flood risk and the availability of affordable flood insurance.
East Riding of Yorkshire Council Strategic Housing Market Assessment, 2011	This assesses the area's housing needs, identifying the scale and mix of housing and the range of tenures that the local population is likely to need over the next 15-20 years. It identifies that over 4,500 households are categorised as being in need.	The LFRMS may have implications for existing and new residential properties in the East Riding. The affordability of housing and mortgage availability can in some instances be dependent upon the level of flood risk and the availability of affordable flood insurance.
East Riding Economic Development Strategy and Action Plan, 2012-16	This sets out the Local Strategic Partnership's (LSP) strategy for economic growth in the East Riding area from 2012 to 2016. This includes supporting existing industry and businesses and encouraging new investment in the area. It identifies climate change and associated increased flood risk as a threat to the East Riding economy.	The LFRMS has a role to play in supporting sustainable growth of the East Riding economy and responding to climate change.

Plan/Programme	Description	Relevance to LFRMS
Local		
The East Riding of Yorkshire Council Local Economic Assessment, 2011	This provides an understanding of the local economic make up of the area and how it is performing. It is used to underpin policy and decision making for the area, including strategic planning, investment decisions and delivery plans.	This provides useful context and evidence for the LFRMS in relation to identifying impacts of flooding on businesses in the East Riding.
East Riding of Yorkshire Council Stage 2 Employment Land Review: Final Report, 2007, Partial Update 2009, and Demand Update 2011	This informs the requirement for employment land for the Local Plan, and helps the Council assess the suitability of sites for employment development, safeguard the best sites in the face of competition from other higher value uses and help identify those which are no longer suitable for employment development which should be made available for other uses.	This provides useful context and evidence for the LFRMS in relation to identifying impacts of flooding on businesses in the East Riding.
East Riding of Yorkshire Council Rural Strategy, 2012	Produced jointly by ERYC and the East Riding of Yorkshire Rural Partnership, the strategy assesses the implications for our rural areas both in relation to the current economic climate and in respect of implementing wide-ranging Government policy at the local level. The rural strategy is designed to help rural communities and businesses meet both the opportunities and challenges that come with rapid change. Following extensive consultation, twelve specific objectives have been identified which aim to grow the rural economy, safeguard the environment and enhance the wellbeing of rural communities generally.	The LFRMS has a role to play in supporting the sustainability of rural communities, as many of these are susceptible to flood risk from multiple sources.
East Riding of Yorkshire Council Infrastructure Study 2011-2026 (Update 2012-2029)	The Council has prepared an Infrastructure Study to support the production of the Local Plan, and in particular, the Strategy and Allocations Documents. The main purpose of the Study is to identify the various forms of infrastructure that are required to meet growth which may come forward over the plan period. Various types of infrastructure were reviewed in detail for this Study including: flood defence and drainage, utilities, health, education, leisure, sports and leisure, older and young person's services, emergency services, and transportation. The update takes into account changes to the level of housing and employment growth now being promoted through the draft Strategy Document.	This provides useful context and evidence for the LFRMS in relation to identifying impacts of flooding on key infrastructure and community facilities in the East Riding.

Plan/Programme	Description	Relevance to LFRMS
Local		
East Riding of Yorkshire Council Third Local Transport Plan, 2011-2026	<p>The Council has prepared a long-term Strategy for the LTP3 to 2026. This sets out a comprehensive framework within which the Council and its partners can plan transport improvements in the East Riding over the next 15 years. The purpose of this Strategy is to ensure a coherent and forward thinking approach to tackling transport issues in the wider context across the East Riding. An LTP3 Implementation Plan is a shorter-term document, which comprises a four-year prioritised programme of integrated transport schemes to be delivered between 2011 and 2015. This allows the Council to develop subsequent four-year Implementation Plans during the life of LTP3, which will take full account of emerging national, sub-regional and local policy changes and priorities.</p>	<p>There may be opportunities, through the LFRMS, to contribute to the delivery of this Strategy, through joint / multi-functional projects.</p>
East Riding of Yorkshire and North Yorkshire Waterways Strategy, 2012-2020	<p>This aims to balance and coordinate multiple ambitions for the inland waterways that fall within the Partnership's area, for the benefit of everyone. It sets out seven thematic outcomes, all completing the sentence 'Our Waterways are...:</p> <ul style="list-style-type: none"> • ...catalysts for economic growth and resilience; • ...outdoor classrooms, social resources and places to escape, relax and unwind; • ...modern sustainable transport routes; for business and pleasure; • ...open and accessible sites for sport and recreation; • ...precious, yet finite, water resources that benefit our communities; • ...havens for nature and wildlife; and • ...powerful reminders of a rich, industrial, agricultural and social heritage. <p>The Strategy acknowledges that many of the Partnership's waterways provide critical water abstraction, land drainage and flood risk management functions, and sets objectives to: 'ensure that flood and drought risk management is fully integrated and considered within broader economic development, regeneration and recreation schemes'; and 'raise awareness of the drainage and flood/drought management importance of the partnership's waterways'.</p>	<p>There may be opportunities, through the LFRMS, to contribute to the delivery of this Strategy, through joint / multi-functional projects.</p>

Plan/Programme	Description	Relevance to LFRMS
Local		
East Riding Cultural Strategy 2011 – 2015	<p>This Strategy is intended as a tool to help practitioners and providers make a strong case for culture. It demonstrates culture’s local, regional and national relevance, and provides a portrait of excellence in the East Riding that celebrates local talent and cultural achievements. It also strives to galvanise the creative and cultural sector by focusing efforts on three core outcomes, which are:</p> <ol style="list-style-type: none"> 1. Stronger advocacy for culture’s contribution to place-shaping and community well-being; 2. Broader and better opportunities for people to engage in culture; and 3. More participation and sustained interest in cultural activity. 	There may be opportunities, through the LFRMS, to contribute to the delivery of this Strategy, through joint / multi-functional projects.
Landscape Character Assessment for the East Riding of Yorkshire, 2005	This assessment contains an analysis of the landscape character of the East Riding. As part of the landscape assessment study, a number of detailed assessments around the East Riding’s major settlements were prepared, to help assess the impact that development would have on the setting of these settlements and consider factors of quality, sensitivity and capacity.	This provides useful context and evidence for the LFRMS in relation to identifying impacts of flooding on the East Riding’s landscape character.
East Riding of Yorkshire Council Climate Change Strategy Consultation Document, 2011	The Council is currently developing a Climate Change Strategy. The draft version of this document was out for public consultation during autumn 2010. This strategy will set targets and action plans for mitigating both council and area wide greenhouse gas emissions by 2020. These targets will be set with reference to the national Climate Change Act and resulting UK Low Carbon Transition Plan.	The LFRMS will aim to contribute to tackling the causes of climate change, e.g. through promoting greater energy efficiency in flood risk management activities, and in promoting measures to help mitigate the impacts of increased flood risk resulting from climate change.
East Riding of Yorkshire Council Environmental Statement 2012/2013	This sets out how ERYC aims to reduce the environmental impacts of its operations and service delivery, encourage and support others to do the same and continuously improve the environment for the benefit of residents, employees, businesses and visitors to the East Riding. To help achieve this, an Environmental Policy has been developed that sets out a range of environmental objectives that the council will work towards to manage and improve its environmental performance.	The LFRMS will aim to contribute to tackling the causes of climate change, e.g. through promoting greater energy efficiency in flood risk management activities, and in promoting measures to help mitigate the impacts of increased flood risk resulting from climate change.
The East Riding Integrated Coastal Zone Management Plan, 2002	The ICZM Plan sets out a framework for action in the East Riding coastal area. A comprehensive review of the Plan is ongoing.	There may be opportunities, through the LFRMS, to contribute to the implementation of this plan.

Plan/Programme	Description	Relevance to LFRMS
Local		
East Riding of Yorkshire Council, Planning for Renewable Energy Developments, Interim Planning Document, Volume One and Two, 2009	This Interim Planning Document (IPD) sets out East Riding of Yorkshire Council's approach to planning for renewable energy. It aims to promote the development of renewable energy technology, in those locations in the East Riding of Yorkshire which are identified as having the capacity to accommodate such development, and to set out how the East Riding of Yorkshire Council will assess planning applications for renewable energy proposals. It relates to grid-connected, on-shore renewable energy developments only, such as wind farms and biomass energy plants. It highlights that large areas of the East Riding are identified as at high risk of flooding, and that in the interests of guaranteeing secure energy supplies, wind turbines should not be sited where they will be unduly affected by potential flooding. It also highlights that no sites have been identified for hydropower within the East Riding of Yorkshire due to the low lying and relatively flat topography of the Humber region, which results in the lack of a hydraulic head.	The LFRMS will aim to contribute to making greater use of renewable and low carbon energy technologies in flood risk management activities.
East Riding of Yorkshire Biodiversity Action Plan, 2010	The LBAP identifies local priorities for biodiversity and how these will contribute to the delivery of national Species and Habitat Action Plan targets. It is prepared and implemented by the East Riding Yorkshire Biodiversity Partnership.	There are likely to be opportunities, through the LFRMS, to contribute to the delivery of this plan.
Humber Management Scheme, Updated 2012	<p>The Humber Management Scheme is a partnership which aims to deliver the sustainable management of the Humber Estuary European Marine Site. It includes the following objectives:</p> <ul style="list-style-type: none"> • To manage the estuary to meet the requirements of the conservation objectives • To bring people and organisations together to deliver the sustainable management of the Humber Estuary European Marine Site • To raise awareness and educate stakeholders about the Humber Estuary European Marine Site and increase participation in its management • To identify information gaps and research requirements and to promote sharing and availability of data for the management of the Humber Estuary European Marine Site • To ensure a coordinated approach to the management of the estuary and its hinterlands including planning for the future in respect to the features of the Humber Estuary European Marine Site 	There may be opportunities, through the LFRMS, to contribute to the delivery of this Scheme.

Plan/Programme	Description	Relevance to LFRMS
Local		
Flamborough Head Management Plan, 2007	The overarching objective of this plan is to <i>‘ensure that human activities are managed in ways that are compatible with the wildlife features of the European Marine Site’</i> .	There may be opportunities, through the LFRMS, to contribute to the delivery of this plan.
Hull and East Riding Joint Minerals Development Plan Document (Preferred Approach, 2010 and Site Selection and Additional Sites Consultation, 2012)	The 2010 consultation presented draft policies and allocations for minerals development. It included draft policies for aggregate provision, non-aggregate provision, provision of energy minerals, and generic development management policies. It included draft allocations for mineral safeguarding areas and allocations for the future working of crushed rock and sand and gravel. The 2012 consultation presented a method of apportioning the national and regional guidelines for aggregates provision in the East Riding, a site selection methodology, and recommended sites for aggregates provision based on assessment against the draft methodology.	The LFRMS will need to take into account the location and scale of existing and planned mineral extraction sites and safeguarded zones in assessing and identifying priorities for managing local flood risk.
Hull and the East Riding of Yorkshire Joint Mineral Local Plan, 2004	This identifies 7 areas of search for minerals, based on a range of criteria. It also identifies existing mineral works in the East Riding and those with planning consent. However, a number of policies within this plan have expired, as they have been superseded by more recent national and regional planning policies. Those that remain are called 'saved' policies, and are relevant to the determination of planning applications. A new Joint Minerals Local Plan is being prepared with Hull City Council, which when completed, will replace the existing plan.	The LFRMS will need to take into account the location and scale of existing and planned mineral extraction sites and safeguarded zones in assessing and identifying priorities for managing local flood risk.
Hull and East Riding Joint Waste Development Plan Document – Second Issues and Options Consultation, 2012	This consultation reviewed the evidence informing waste planning in the area including all the data on waste arisings, higher level guidance and integration with the Joint Sustainable Waste Management Plan. The document set out draft content of a Core Strategy Policy on waste to be incorporated within the East Riding Core Strategy. It also set out options as to how to select sites for waste management use, and options for policies that specific waste management proposals should be assessed against.	The LFRMS will need to take into account the location and scale of existing and planned waste facilities in assessing and identifying priorities for managing local flood risk.

Plan/Programme	Description	Relevance to LFRMS
Local		
Joint Sustainable Waste Management Strategy for Hull and East Riding (and Draft Joint Sustainable Waste Management Strategy Review), 2012	Target 45+ is the Joint Sustainable Waste Management Strategy (the Strategy) developed in partnership by Kingston upon Hull City Council and the East Riding of Yorkshire Council (the Councils). The document sets out how the Councils plan to manage Municipal Solid Waste (MSW) produced in the area. MSW includes waste from households, waste collected from businesses and other waste produced as a result of delivering environmental services such as street sweeping and gully cleaning.	There may be opportunities, through the LFRMS, to contribute to the delivery of this plan.
Hull and the East Riding of Yorkshire Joint Waste Local Plan, 2004	The Joint Waste Local Plan (JWLP) is a waste planning document prepared with Hull City Council. It aims to identify the future waste management needs for the Hull and East Riding area as well as promote more sustainable forms of waste management. The policies within the JWLP have been saved and will be eventually replaced by a new Joint Waste Development Plan Document.	The LFRMS will need to take into account the location and scale of existing and planned mineral extraction sites and safeguarded zones in assessing and identifying priorities for managing local flood risk.
East Riding of Yorkshire Council Draft Contaminated Land Inspection Strategy, 2010-	The Council has a duty to identify and inspect land which may be contaminated, for example, due to some previous industrial use and decide whether it is suitable for its current use. The Council publishes a Contaminated Land Inspection Strategy to prioritise sites, for example where there are houses directly on the site. For some plots of land, this may only need a brief study to be done, but for other sites it may require a more detailed assessment and testing to be carried out. The Strategy is currently being reviewed.	There may be opportunities, through the LFRMS, to contribute to the delivery of this plan, e.g. if a flood risk management scheme coincides with contaminated land.
Waterbody Action Plans (in development)	The Environment Agency is developing these plans to identify what needs to be done to improve the water environment of each water body.	There may be opportunities, through the LFRMS, to contribute to the delivery of these plans, through joint / multi-functional projects.

APPENDIX B: INTERNATIONAL, NATIONAL AND LOCALLY DESIGNATED SITES OF IMPORTANCE FOR BIODIVERSITY AND GEODIVERSITY

B.1 BIODIVERSITY DESIGNATIONS IN THE EAST RIDING OF YORKSHIRE

Special Protection Areas (SPA)

SPAs are areas which have been identified as being of national and international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the 'Birds Directive 1979' which provides enhanced protection given by the Site of Special Scientific Interest (SSSI) status all SPAs also hold. There are five SPAs within East Riding; these are summarised below¹:

Hornsea Mere - Hornsea Mere is the largest freshwater lake in Yorkshire, situated less than 1 km from the sea on the East Yorkshire coast in northern England. It is of glacial origin, shallow (1-2m deep), eutrophic and fringed with reedbeds, fen and carr. Its shallowness has encouraged the development of extensive marginal swamps of Common Reed, Bulrush and Common Club-rush. These are best developed at the west end of the mere, where they grade into Alder and willow. There are also fen communities, rich in plant species, as well as aquatic plants of open water such as Canadian Waterweed, Fennel Pondweed, Spiked Water-milfoil, Rigid Hornwort and Yellow Water-lily. Dense algal blooms occur in summer as a result of eutrophication. The reedbeds, swamp communities and wet woodland support a diverse invertebrate fauna. Hornsea Mere supports breeding and wintering waterbirds, which feed on the open water and use the marginal vegetation for feeding and roosting.

Flamborough Head and Bempton Cliffs - Flamborough Head is located on the central Yorkshire coast of eastern England. The cliffs project into the North Sea, rising to 135 m at Bempton Cliffs, and exposing a wide section of chalk strata. The cliff-top vegetation comprises maritime grassland vegetation growing alongside species more typical of chalk grassland. The site supports large numbers of breeding seabirds including Kittiwake and auks, as well as the only mainland-breeding colony of Gannet in the UK. The seabirds feed and raft in the waters around the cliffs, outside the SPA, as well as feeding more distantly in the North Sea. The intertidal chalk platforms are also used as roosting sites, particularly at low water and notably by juvenile Kittiwakes.

Lower Derwent Valley - The Lower Derwent Valley is a major floodplain system located in East and North Yorkshire in eastern England. The Lower Derwent Valley is one of the largest and most important examples of traditionally managed species-rich alluvial flood meadow habitat remaining in the UK. These grasslands, which were formerly widespread in the UK, are now very restricted in distribution due to agricultural intensification. The character and species composition of the grassland, fen and swamp communities is largely controlled by topography, differences in the extent of winter flooding and by the type of agricultural management. The site is of outstanding importance for a diverse range of

¹ Information taken from Joint Nature Conservation Committee website.

waterbirds throughout the year. In winter the site supports large numbers of swans, ducks and waders, as well as Bittern whilst in summer the floodplain holds breeding waders, Corncrake and Spotted Crake. The SPA also includes the subsumed SPA of Derwent Ings, a site that was subject to separate classification. This area is at risk due to agricultural runoff, water abstraction and recreational disturbance due to house building

Humber Flats, Marshes and Coastal Phase I – The Humber Flats, Marshes and Coastal Phase I comprises extensive wetland and coastal habitats within the Humber Estuary. The estuary drains a catchment of some 24,240 square kilometres and provides the largest single input of freshwater from Britain into the North Sea. It has the second-highest tidal range in Britain (7.2 m) and approximately one-third of the estuary is exposed as mud- or sand-flats at low tide. The inner estuary supports extensive areas of reedbed with areas of mature and developing saltmarsh backed by grazing marsh in the middle and outer estuary. On the north Lincolnshire coast, the saltmarsh is backed by low sand dunes with marshy slacks and brackish pools. The estuary supports important numbers of waterbirds (especially geese, ducks and waders) during the migration periods and in winter. It also supports important breeding populations of terns and raptors in summer.

Thorne and Hatfield Moors – The Thorne and Hatfield Moors is an extensive lowland raised mire system adjacent to the Humber estuary and is the largest remaining lowland peat land in England. Despite a long history of extensive peat extraction since the late nineteenth century, the site retains substantial areas of Sphagnum bog, which has been changed by succession to wet scrub woodland dominated by Birch *Betula* sp., sallows and Alder *Alnus glutinosa*. Where the peat surface has been removed, subsequent restoration of active bog has depended upon shallow flooding to allow Sphagnum and other bog plants to re-colonise. The mire communities are dominated by Hare's-tail *Eriophorum vaginatum* and Common Cottongrass *E. angustifolium*, Cross-leaved Heath *Erica tetralix*, Soft-rush *Juncus effusus* and Sphagnum mosses, and include a variety of scarcer bog plants such as Bog-rosemary *Andromeda polifolia* and Cranberry *Vaccinium oxycoccos*. Drier heath is dominated by Heather *Calluna vulgaris*, Bracken *Pteridium aquilinum* and Purple Moor-grass *Molinia caerulea*. Birch *Betula* sp. scrub, some of it dense, occurs throughout both moors. The diverse mosaic of habitats contributes greatly to the ornithological interest, which comprises breeding species, notably Nightjar *Caprimulgus europaeus*.

Special Areas of Conservation (SAC)

Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive i.e. those habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). There are five SACs in East Riding. These are:

- Flamborough Head
- Lower Derwent Valley
- River Derwent
- Humber Estuary
- Thorne Moor

Ramsar Sites

Ramsar sites are wetlands of international importance designated under the Ramsar Convention. There are two within the East Riding: the Lower Derwent Valley and Humber Estuary.

National Nature Reserves (NNR)

Natural England are responsible for declaring National Nature Reserves to protect sensitive features and provide suitable areas for research, managing habitats, rare species and significant geology. East Riding has three designated National Nature Reserves, summarised below²:

Lower Derwent Valley - The Lower Derwent Valley NNR comprises a series of flood meadows, pastures and woodlands. Parts of the Lower Derwent reserve are managed by the Yorkshire Wildlife Trust and the Carstairs Countryside Trust. The Lower Derwent Valley NNR supports a rich diversity of plant species and outstanding populations of breeding and wintering birds.

Spurn - The reserve's sand peninsula stretches southwards for 5.5 km to the mouth of the Humber Estuary. Spurn NNR is owned and managed by the Yorkshire Wildlife Trust. The NNR has sandy beaches and the North Sea on its eastern side, and areas of saltmarsh and extensive mudflats on its western side, the latter attracting thousands of birds.

Humberhead Peat land - This site is partially located in East Riding and partially located in South Yorkshire. The Humberhead Peat lands NNR comprises of Thorne, Goole, and Crowle Moors, as well as Hatfield Moor and it represents the largest area of raised bog wilderness in lowland Britain at 2,887 hectares in size. The site is a Special Area of Conservation (SAC) for its habitat. It was designated an NNR in 1995 and with a major extension in 2005.

In 2001 an agreement between Scotts UK and English Nature ended large-scale peat production and extraction ceased in 2004 within the boundary of the SSSI.

Restoration of the site by English Nature has included the creation of compartments with peat bunds so that water can be carefully controlled. This encourages the growth of peat-forming bog species, mainly comprising Sphagnum mosses and cotton grasses.

A wide range of habitats supports the 5,000 species of plants and animals that have been recorded on the Reserve of which more than 4000 are insects. There is a sizable population of adders on the Moors. More than 200 bird species have been recorded and approximately 75 have bred. Winter visitors include whooper swans, pink-footed geese and short-eared owls. From March-July the diminutive woodlark and oystercatcher, lapwing, ringed plover and great crested grebe can be spotted around the lakes.

² Information taken from Natural England website.

The site is an internationally important breeding site for the nocturnal, insect-feeding nightjar and its presence was responsible for the area being declared as a Special Protection Area (SPA) under the European Birds Directive.

Local Nature Reserves (LNR)

All district and county councils have powers to acquire, declare and manage Local Nature Reserves. To qualify for LNR status, a site must be of importance for wildlife, geology, education or public enjoyment. The East Riding has a number of declared LNRs, including:

- Beverley Parks
- Danes Dyke
- Eastington Ponds
- Flamborough Outer Headland
- Howden Marsh
- Hudson's Way
- Humber Bridge
- Mayfield Broom
- Millington Wood
- Sigglestone Station
- South Landing Flamborough
- Southorpe
- Sugar Mill Ponds

Sites of Special Scientific Interest (SSSI)

East Riding currently has 46 SSSIs, covering approximately 4,150 hectares of the district. A number of these SSSIs are also designated SAC sites and Ramsar sites.

Table B.1 - Sites of Special Scientific Interest in the East Riding

Allerthorpe Common (biological)	Flamborough Railway Cutting (biological)	Newbald Becksies (biological)
Barn Hill Meadows (biological)	Fordon Chalk Grasslands (biological)	Newton Mask (biological)
Beckhead Plantation (biological)	Hoddy Cows Spring (biological)	Pocklington Canal (biological)
Bishop Wilton Deep Dale (biological)	Hornsea Mere (biological)	Pulfin Bog (biological)
Boynton Willow Garth (biological and geological)	Horse Dale And Holm Dale (biological)	Rifle Butts Quarry (geological)
Brantingham Dale (biological)	Hotham Meadow (biological)	River Derwent (biological)
Bryan Mills Field (biological)	Humber Estuary (biological and geological)	River Hull Headwaters (biological)
Burton Bushes (biological)	Keasey Dale (biological)	Roos Bog (geological)
Cinquefoil Brow And Wood Dale (biological)	Kelsey Hill Gravel Pits (geological)	Skipsea Bail Mere (geological)
Cottam Well Dale (biological)	Kiplingcotes Chalk Pit (biological)	South Cliffe Common (biological)
Derwent Ings (biological)	Lambwath Meadows (biological)	The Lagoons (biological and geological)
Dimlington Cliff (geological)	Leven Canal (biological)	Tophill Low (biological)
Drewton Lane Pits (biological and geological)	Melbourne And Thornton Ings (biological)	White Carr Meadow (biological)
Enthorpe Railway Cutting (geological)	Melton Bottom Chalk Pit (geological)	Withow Gap, Skipsea (geological)
Everthorpe Quarry (geological)	Millington Wood And Pastures (biological and geological)	Wyedale (biological)
Flamborough Head (geological and biological)		

Analysis by Natural England suggests that of East Riding's current SSSIs:

- 57% of SSSI are in a favourable condition;
- 4% are in unfavourable and declining condition;
- 5% are in unfavourable condition with no change; and
- 33% are in unfavourable and recovering.

Local Wildlife Sites (LWS)

In addition to statutory designated sites, there are many other sites in East Riding which while not formally protected nevertheless make a vital contribution to sustaining the abundance and diversity of wildlife. Across the East Riding of Yorkshire there are numerous designated Local Wildlife Sites (formerly known as SNCIs). Local Wildlife Sites include, for example; water based habitats (e.g. village ponds, land drains, washlands, bogs and mudflats), tree and hedgerow habitat (e.g. woodlands, small copses, scrub, shelterbelts and urban trees), urban habitats (e.g. gardens and allotments, active and disused railway lines, parks,

cemeteries, buildings and derelict / disused brownfield sites) and farmland. There are currently 740 candidates for local sites in East Riding. East Riding also has a number of verge nature reserves.

B.2 GEODIVERSITY DESIGNATIONS IN THE EAST RIDING OF YORKSHIRE

SSSIs

- Dimlington Cliff;
- Enthorpe Railway Cutting;
- Everthorpe Quarry;
- Kelsey Hill Gravel Pits;
- Melton Bottom Chalk Pit;
- Rifle Butts Quarry;
- Roos Bog;
- Skipsea Bail Mere; and
- Withow Gap, Skipsea.

Table B.2 - Regionally Important Geological Sites Rigs (being replaced with Local Geological Sites)

Arras Road Chalk Pit - Turonian Coniacian Chalk; Kiplingcotes Marls, Arras Flint and Enthorpe Marls	Kiplingcotes Station Quarry - Turonian Chalk; type section of Kiplingcotes Flints and Marls; site of large ammonites found by C W & E V Wright; former SSSI
Atwick TA191513 - 12.64ha elongated area of alluvium exposed in cliff section	Lambwath Mere near Withernwick - relatively complete Holocene record
Barmston Mere near Skipsea early- to mid-Holocene record	Langtoft East Chalk Pit - tilted Burnham Chalk Formation
Bessingby Chalk Pit - Lower Campanian Chalk; former SSSI	Langtoft West Chalk Pit - the junction between the Burnham Chalk Formation and the Flamborough Chalk Formation
Bishop Wilton Chalk Pit - Cenomanian Turonian Chalk	Little Weighton to Willerby railway cutting - Chalk (added 1998 - including a 50m boundary around the site)
Bracken Quarry, Bainton - base of the Flamborough Chalk Formation	Mappleton TA218448 - late glacial to early/mid holocene environmental history
Brandesburton Gravel Pits - Devensian sands and gravels	Mappleton Sea defences - boulders from Scandinavia forming a useful teaching resource (added July 2000) Coastal exposure, good public access
Brammere near Aldbrough - late glacial deposits	Middleton on the Wolds Chalk Pit - Burnham Chalk Formation; type section of the Middleton Marl; used to be worked by hand; former SSSI
Brantingham Dale - dry valley	Nafferton Grange Chalk Pit- Lower Campanian Chalk; youngest in situ exposed in Yorkshire
Brigham Quarry - Devensian sands and gravels	Newbold Wold Chalk Pit - Turonian Chalk; Deepdale Marls
Burdale Quarry - Turonian Chalk	North Cave Wetlands - 100 acres of former gravel pits now owned by the Yorkshire Wildlife Trust - Lowest Jurassic and possibly uppermost Triassic under Quaternary gravels
Cess Dell near Thorpe Garth - kettle hole	North Grimston Quarries - Upper Jurassic - Corallian limestones: Malton Oolite and Urchin Dirt Beds
East Leys Pit - Lower Campanian Chalk	Pocklington Beck - mid- to late-Holocene record
Eppleworth Quarry - Coniacian Chalk; Eppleworth Flint and De La Pole Flint; also Quaternary till, loess and head deposits	Redcliff, North Ferriby - moraine and lacustrine sediments of Lake Humber, late Devensian. Public access but may be hazardous
Fairy Stones, Burdale - chalk fault breccia	Routh Quarry - late-glacial/Holocene sequence
Goodmanham Channel - glacial overflow channel	Ruston Parva Chalk Pit - Lower Campanian Chalk
Goodmanham Black Band exposure - Cenomanian-Turonian boundary	Sand le Mere beach - late glacial to early-Holocene and sea level change
Gransmoor Quarry - Devensian Flandrian mere deposits filling a kettle hole	Sands Top Quarry, North Newbald -Cave Oolite, Middle Jurassic, and karst features

Hornhill Top Quarry, near Bainton - top of the Burnham Chalk Formation	St. Austin's Stone, Drewton - chalk fault breccia
Hornsea Mere - geomorphology - last of the Devensian Flandrian meres of Holderness	Seaton TAI61464 - Late-Devensian valley connecting Hornsea Mere to River Hull valley
Hornsea Old Mere	Skipsea Bail Mere TAI58558- dry mere with pollen record of lake sediments from the late Devensian (circa 12,000 BC)
Hotham Crossroads Pits - Rhaetian to Hettangian	Skipsea Low Mere - continuous pollen record for late-glacial, early- and mid-Holocene
Humber Bridge Country Park - Turonian Chalk; Barton Marls; former SSSI	Snevver Scar - glacial drainage channel
Jarret's Ings near Brigham - late glacial to recent Holocene	Sunderland Bottom - part of floodplain of the upper Keyingham valley
Kelsey Hill Gravel Pits (I & II) - late Devensian glacial outwash, yielding mammalian bones	Weaverthorpe East Pit - tilted Coniacian Chalk
Keyingham Gravel Pits	Willerby Railside Pit - Coniacian Chalk
Keyingham Gravel Pits	Willow Garth - (added 1995) Late glacial to early Flandrian pollen record
Kilwick Percy Quarry - Turonian Chalk; Ulceby Marl & Ulceby Oyster Bed	Wold Newton Monument - brick obelisk at the site of meteorite impact of 13th December 1795; former SSSI
Kiplingcotes Nature Reserve - Turonian Chalk; Deepdale Marls	

APPENDIX C: CONSERVATION AREAS

C.1 CONSERVATION AREAS IN THE EAST RIDING OF YORKSHIRE

Adlingfleet	Etton	North Frodingham
Airmyn	Everingham	North Newbald
Aldbrough	Flamborough	Ottringham
Allerthorpe	Foston-on-the-Wolds	Patrington
Atwick	Garton-on-the-Wolds	Paull
Bainton	Goodmanham	Pocklington
Barmby Moor	Great Hatfield	Preston
Bessingby	Halsham (West)	Rawcliffe
Beswick	Hedon	Roos
Beverley (Town)	Hedon Haven	Seaton
Beverley (Grosvenor Place)	Hessle (Southfield)	Sewerby
Bewholme	Hessle (Town)	Shiptonthorpe
Bishop Burton	Hilston	Siggleshorpe
Bishop Wilton	Holmpton	Skidby
Brandesburton	Hornsea	Sledmere
Brantingham	Hotham	Snaith
Bridlington (Old Town)	Howden	South Cave
Bridlington Hilderthorpe	Hutton	South Newbald
Bridlington Quay	Kilham	Sproatley
Brough	Kirby Underdale	Stamford Bridge
Bugthorpe	Kirk Ella	Sunk Island
Burton Agnes	Langtoft	Swanland
Burton Pidsea	Lelley	Swine
Catwick	Leven	Tibthorpe
Cherry Burton	Lockington	Tickton
Cottingham	Londesborough	Tunstall
Cranswick	Long Riston (new)	Walkington
Driffield (North)	Lund	Warter
Driffield (South)	Market Weighton	Welton
Dunnington	Middleton-on-the-Wolds	West Ella
Easington	Nafferton	Wetwang
East Cottingwith	North Cave	Winestead
Ellerker	North Dalton	Withernwick
Elloughton	North Ferriby (Parkfield)	Wold Newton
Elloughton (Dale Road)	North Ferriby (Village)	Wyton

APPENDIX D: LANDSCAPE CHARACTER AREAS

D.1 LANDSCAPE CHARACTER AREAS IN THE EAST RIDING OF YORKSHIRE

1. Vale of York: Flat Open Farmland

Key characteristics:

- Generally flat open landscape between 10m and 30m AOD gradually falling southwards
- Drained intensively farmed arable land with occasional grass fields
- Overall tree and woodland cover is sparse. One large woodland block at Allerthorpe.
- Parkland at Everingham is distinctive.
- Field boundaries consist of a combination of fragmented and intact hedgerows with few hedgerow trees.
- Field pattern is dominated by medium sized regular shaped fields that are occasionally incised by small natural watercourses.
- Drainage pattern overall is regular and manmade with few small improved natural watercourses of less regular shape. Land generally drains southwards.
- Combination of linear and nucleated villages with potential Iron Age settlement origins.
- Large farmsteads are scattered throughout the area.
- Influence of past human activity includes the route of A1079 that follows the route of a Roman road.

Some areas in the landscape character type could be considered high quality e.g. Everingham Parkland. However, even here elements of the parkland character have been lost. Overall the quality of the landscape in this area is assessed to be ordinary.

2. Vale of York: Open Farmland

Key characteristics:

- Low lying gently undulating landform.
- Topography varies between 80m AOD and 10m AOD.
- Numerous villages and hamlets scattered throughout.
- Medium to large rectilinear fields bound by hedges. Smaller fields with hedgerow trees concentrated around settlements creating a sense of enclosure.
- Small becks, fed by rectilinear drainage system, meandering through the rectilinear fields draining the intensively farmed land.
- Ponds are scattered throughout the area.
- Arable land use dominates with some areas of grassland.
- Medieval sites scattered throughout.
- Romano-British settlement, roads and agriculture.
- Airfield and industrial estate at Full Sutton are prominent in the landscape.

The quality of the landscape character areas that border the Wolds is assessed to be good because of their relative intactness and the lack of detractors in the area.

3. Vale of York: River Corridors

Key characteristics:

- Low lying flat floodplain of the Lower Derwent River valley and Pocklington Beck and canal corridor.
- Combination of grassland pasture and meadow subject to seasonal flooding
- Man made embankments formed as a result of dredging in the twentieth century
- Riparian woodland and trees in the corridor
- Areas of species rich alluvial flood meadow habitat designated
- Organic arrangement of medium sized fields combined with more regular boundaries of enclosed fields.
- Edges of the floodplain defined by lanes and linear settlements.
- Cultural and historic associations include churches and crossing points. There are some moated sites in the corridor
- Intimate isolated corridor landscape that is a marked contrast from surrounding intensively farmed land.
- Villages, hamlets and farmsteads line the corridor just above the floodplain.

Landscape quality of this corridor is assessed to be high due to the distinctiveness of the water course and its intactness in addition to the tranquillity of sections that are away from the built development. The ecological diversity and value of this area also contributes to quality. The influence of the river on character is restricted to a very narrow corridor in the flat arable landscape of the Vale of York.

4. Humberhead Levels: River Corridors

Key characteristics:

- Low lying flat floodplain of the river valleys on the western edge of the East Riding
- Combination of grassland pasture and meadow that are subject to seasonal flooding
- Man made embankments formed as a result of dredging in the twentieth century
- Riparian woodland and trees in the corridor
- Areas of species rich alluvial flood meadow habitat
- Organic arrangement of medium sized fields combined with more regular boundaries of enclosed fields
- Cultural and historic associations include churches and river crossing points
- Several moated sites within the corridor
- Windmills are a particular feature on the Ouse east of Goole
- Intimate isolated corridor landscape that is a marked contrast from surrounding intensively farmed land
- Villages, hamlets and farmsteads line the river corridor just above the floodplain

The quality of landscape character varies along the different river corridors. The River Derwent Corridor is assessed to be a high quality landscape due to the relative intactness of the meadows and grassland adjacent to it and the distinctive character of the structures that cross it. The villages on the corridor boundary also make an important contribution to landscape character and have historic origins, traces of which can be seen in the landscape today. The remaining river corridors are assessed to be good to ordinary quality due to the number of detractors and their condition.

5. Humberhead Levels: Open Farmland

Key characteristics:

- Low lying flat landscape below 10m AOD.
- Relatively featureless intensively farmed arable landscape.
- Large areas are in the riparian flood plain of the River Derwent.
- Large scale fields with fragmented hedgerow boundaries. Boundaries lost in places.
- Open character with extensive views across the flat landscape.
- Few woodland blocks and relatively little tree cover contributing to extensive views that include Drax Power Station to the southwest.
- Howden is the largest settlement.
- Howden Minster is an important landmark.
- Small villages and Farmsteads are scattered throughout but overall settlement density is low. Many of these villages have Saxon origins.

This is a fragmented landscape that contains a number of detractors. There is little to distinguish the landscape character from similar areas nationwide. Nevertheless it is a pleasant landscape that has pockets of interest including the medieval market town of Howden, historic sites at Ellerton, Wressle and Aughton and small villages which break up the large scale arable landscape. The quality of this area is assessed to be ordinary.

6. Humberhead Levels: Wooded Open Farmland

Key characteristics:

- Low lying flat arable farmland with occasional grass fields and small woodland blocks.
- The land rises gradually west.
- One area of ancient semi natural woodland at Seaton Olde Wood west of Holme on Spalding Moor.
- Historic links to the Roman Pottery Industry.
- Church Hill at Holme on Spalding Moor is a prominent landmark.
- Random irregular field size and pattern.
- Hedgerow field boundaries in varying condition many with hedgerow trees.
- Scattered villages and farmsteads.
- Relatively remote and tranquil place away from villages.

The condition of the landscape has been assessed to be reasonably good and the character type does have a strong sense of place as a result of the plantations, the settlement pattern and field pattern. Overall the character of the area is assessed to be good to ordinary in quality.

7. Humberhead Levels Foulness Open Farmland

Key characteristics:

- Low lying flat landscape with open views stretching as far as the Wolds in the east.
- Very few trees and woodland.
- Sparse settlement consisting mainly of scattered farmsteads
- Few roads or public rights of way.
- Large and very large rectilinear fields surrounded by fragmented hedgerows.
- Regular rectilinear drainage ditches feeding into the more sinuous River Foulness.
- Important location of Iron Age settlement and iron working.
- Roman and medieval archaeology is also present.

This is assessed to be an ordinary landscape because of its relatively featureless character and lack of trees. Intensive farming practices have contributed to a lack of distinctiveness in the area. The area was once a hub of human activity but there is no visible evidence of this.

8. Humberhead Levels: M62 Corridor Farmland

Key characteristics:

- Low lying flat agricultural landscape.
- Open views particularly from the motorway which is slightly raised above the surrounding area.
- Communication infrastructure is a prominent feature i.e. motorway, roads and canal.
- Settlement pattern is linear along communications corridors.
- Linear tree and woodland cover associated with roads and railway lines.
- Hedgerows field boundaries in varying condition.
- Varied field size and field pattern along the corridor.
- Varying scales of commercial development is present along the corridor.
- The port of Goole is a major settlement in the East Riding located in this corridor.
- Horticultural development is a feature of the corridor north east of Goole.
- Railway lines and pylons are present.
- Views of land mark structures e.g. Howden Minster and Boothferry Bridge and Goole Docks.

The number of detractors and the fragmentation of the landscape have affected the quality of this landscape type which is assessed to be ordinary overall with areas of poor quality where the landscape is affected by commercial industrial development.

9. Humberhead Levels: Drained Open Farmland

Key characteristics:

- Low lying flat intensively farmed arable landscape.
- Sparse settlement concentrated along the river corridor.
- Scattered farmsteads and villages.
- Windmill towers are visible in several villages on the south bank of the River Ouse.
- Open large scale landscape with very few trees and woodland.
- Generally large fields south of the river.
- Combination of fragmented hedgerow and ditch field boundaries.
- Long linear field pattern unique to Goole Fields reflects past farming method.
- Extensive views across the flat open landscape.

The landscape quality of this area is assessed as good due to the strong sense of place it has and the value placed on its openness and the historic development of land use in the area. Thorne and Hatfield Moors to the south is a SSSI that just extends into the East Riding. The neighbouring Authority of Doncaster Metropolitan Borough Council has designated this area an area of High Landscape Value and the Thorne and Hatfield Moors Character Area in this landscape type is also assessed to be a high quality landscape not only because of its ecological value but also because of its rarity i.e. there are few similar landscapes remaining today.

10. Yorkshire Wolds: Complex Sloping Farmland

Key characteristics:

- Sloping Landform of the west facing Yorkshire Wolds scarp slope.
- Steep sided dales incising the scarp slope with small water courses fed by numerous springs.
- Grassland, woodland and forestry associated with the steep sided dales.
- Diverse landform from the steep sided dales to the rolling elevated farmland.
- Estate villages at Londesborough and Warter.
- Vernacular materials vary between dales but are a mix of red brick and local stone with pantile and Welsh slate roofs.
- Historic field systems and enclosures.
- Narrow roads winding up the dales to the elevated Wolds tops. Straight roads across the Wold tops.
- Extensive views from the elevated farmland between the dales.
- Extensive woodland and tree cover.
- Remote, attractive diverse landscape that has a tranquil nature.

Overall this is a complex attractive and beautiful landscape that is assessed to be of high landscape quality.

11. Yorkshire Wolds: Jurassic Hills Farmland

Key characteristics:

- Sloping landform leading up to the chalk scarp slope of the Wolds.
- Undulating topography between 15m and 60m AOD.
- Pockets of acidic grass and heathland provide diverse habitats and contrasting appearance among the arable landscape.
- Parkland and estate farmland associated with Hotham and Houghton Hall.
- Trees scattered in hedgerows and parkland throughout.
- Strong hedgerow boundaries reinforce the field pattern as well as contribute to wildlife corridors.
- Stone and brick built nucleated villages dispersed across the sloping land are smaller scale than the surrounding open farmland.
- Views from elevated land west over the Humberhead levels and south over the River Humber and east to the Humber Bridge.

This is a diverse attractive landscape on the south west edge of the Yorkshire Wolds. Detractors do exist particularly in the southern part of this character area. The A63 Dual carriageway is a detractor and development along its corridor has resulted in the loss of key landscape features and fragmentation of landscape pattern.

Landscape quality of the West Facing Open Farmland, is assessed to be high. For the remainder of this landscape character type it is assessed as good due to the presence of detractors and the influence of the urban edge of Elloughton cum Brough in an otherwise high quality landscape.

12. Yorkshire Wolds: Sloping Wooded Farmland

Key characteristics:

- Sloping Landform of the west facing Yorkshire Wolds chalk scarp slope.
- Sparsely populated area with villages of North Newbald and Sancton at the bottom of the slope on the boundary with the Jurassic Hills Farmland.
- Few scattered large farmsteads.
- Minor roads ascending the scarp slope of the Wolds are narrow with hedgerows either side.
- Steep sided wooded dales incise the scarp slope of the Wolds.
- Brantingham Estate Parkland is a distinctive area.
- Contrasting land management of the steep sided grassland dales and flatter arable Wold tops.
- Extensive views west over the Jurassic Hills to the Humberhead Levels.

The good condition of the landscape and its diverse arrangement of land cover and landform provide an important setting for villages on the approach to Hull. There are few detractors in the area which contributes to the landscape setting of several large villages including South Cave and Elloughton cum Brough. This character type also contains a range of nationally designated ecologically important sites and overall has high ecological value as a result of the mixed land use. The landscape quality is assessed to be high.

13. Yorkshire Wolds: Open High Rolling Farmland

Key characteristics:

- Elevated rolling landform of the Yorkshire Wolds dip slope falling east.
- Large scale open landscape with long distance views and dominated by the sky.
- Sparsely populated area with scattered villages and Farmsteads.
- Large and very large rectilinear regular arable fields.
- Fragmented hedgerows that are severely clipped.
- Very few trees resulting in an open landscape.
- Shelterbelts around farmsteads on the hill tops are a prominent feature.
- Pockets of parkland and estate land to the east on the lower slopes provide diversity.
- Enclosure Roads that conform to the enclosure field pattern along side older routes are well spaced.
- Very few public rights of way.
- South Dalton Church spire is a prominent landmark in the relatively featureless landscape.

This character type is part of the distinctive chalk lands of the Wolds in Yorkshire and contributes to the diversity of the Yorkshire Wolds from the escarpment landform to the steep sided dry vales and the rolling arable farmland. The coastal landscape is also a highly valued recreation and landscape resource that is recognised in the Heritage Coast designation at Flamborough Head. The character type is assessed to be high quality.

14. Yorkshire Wolds: Central Dissected Plateau

Key characteristics:

- Rolling elevated landform cut by occasional deep steep side dales.
- Intensive arable production on the elevated rolling land contrasts with the grassland of the steep sided valleys where sheep and cattle production is dominant.
- Enclosed character of the dales contrasts with open elevated land in between.

- Sparse woodland cover overall except around Sledmere Estate and Park
- Large rectilinear enclosure field pattern dissected by sinuous fields of the steep sided grass dales.
- Scattered villages with village ponds.
- Scatter farmsteads on elevated land surrounded by rectilinear shelter belts.

The landscape quality of this character type is assessed to be high due to the diverse characteristics that contribute to character and the good condition of these characteristics. The presence of a Grade I listed Historic Park and Garden also contributes to the quality of the area.

15. Yorkshire Wolds: Wolds Valley Farmland

Key characteristics:

- Broad valley landscape with small intermittent water course.
- Sloping valley sides with large rectilinear arable fields bound by hedgerows.
- Remote and tranquil location.
- Few villages nestled in the valley bottom.
- Buildings are generally brick with pantile roofs.
- Woodland cover is good at lower elevations downstream.
- Historically significant landscape with some physical evidence from Neolithic period.
- Minor road along the valley bottom linking villages.
- Few scattered farmsteads higher up on valley sides.

This is a high quality landscape type due to its uniqueness as the only valley landscape in the Wolds to have water courses. The large scale field patterns, the historic sites and the varied scale landscape of the valley from upstream to downstream contribute to the high quality of this Wolds valley landscape. The valleys are also remote and generally tranquil landscapes that are attractive with elements of interest.

16. Holderness: Sloping Farmland

Key characteristics:

- Gently rolling landform sloping gradually down to the east.
- Intermittent scattered woodland blocks throughout.
- Intensively farmed rectilinear arable fields of large to medium size intersperse with less regular early enclosure fields particularly around villages.
- Free draining land with dispersed streams arising in the Wolds and flowing east to the River Hull.
- Horticultural development between Beverley and Hull.
- Views across the open landscape and views of Beverley Minster.
- Hedgerow trees in places.
- Scattered villages and farmsteads.
- Parkland characteristics at Beverley Westwood, Risby Park and Kilnwick Percy.

Based on the number of detractors the landscape character of the area between Beverley and Hull is assessed to be ordinary to poor. However, the area does play a very important role in separating Beverley from Hull and Cottingham. It also provides the setting for views of the Minster and approaches to the town. The landscape quality of this character type west and north of Beverley and around Driffield is assessed to be ordinary to good. There are fewer detractors in these areas. However, detractors are still present such as the airfield at Leconfield and pylons

crossing the area. The Westwood is an important area of historic pasture. Risby Park and Kilnwick are also important wooded landscapes that contribute to diversity in this area.

17. Holderness: Farmed Urban Fringe

Key characteristics:

- Gently undulating to flat landform generally below 20m AOD
- Strong urban influences encroaching into rural areas
- Community land use e.g. sports pitches, allotments, cemeteries
- Hedgerow boundaries around medium to large sized fields.
- Mixed land use combining agriculture, horticulture and recreation
- Lighting along major roads and in settlements
- Neglected appearance of some fields and hedgerows
- Presence of recreation activities both formal and informal
- Enclosed character with many areas surrounded by urban development on three sides
- Mixed field size and pattern.

The quality of the landscape on the urban edge to the west of Hull is assessed to be good as a result of the slightly varied landform and the extent of tree cover and integration of the urban edge.

The landscape to the east is assessed to be ordinary in quality as there are few distinctive characteristics in the area and the urban edge is not so well integrated with the adjacent landscape.

18. Holderness: Low Lying Drained Farmland

Key characteristics:

- Flat, low lying flood plain generally below 10m AOD.
- Sparse settlement in the floodplain. Farmsteads and villages concentrated on the edge of the flood plain.
- Few crossing points on the River Hull contributing to low density of development between North Frodingham and Tickton.
- Pockets of fens and reed swamps indicating a former landscape.
- Sparse tree and woodland cover.
- Rectilinear field systems with hedgerow and drainage ditch boundaries.
- Sand and gravel extraction.
- River Hull and Beverley Barmston Drain are major watercourses with embankments.
- Numerous water bodies particularly associated with gravel extraction.
- Recreation associated with water bodies and the River Hull.

Good overall with areas of high quality linked to Hornsea Mere and the upper reaches of the river Hull Headwaters. The upper reaches of the river Hull headwaters in the vicinity of Harpham are within the Yorkshire Wolds Area of High Landscape Value, identified in the East Yorkshire Borough wide Local Plan. The local designation is a reflection of the high quality on the edge of the Wolds.

Other designations in this landscape character type that are linked to landscape character are open areas identified in the local plan to maintain separation between settlements as at Foston on the Wolds and Seaton and Sigglesthorne.

The ecological importance of the area is recognised by national and local designations. The River Hull Head waters is a habitat protection area

19. Holderness: Open Farmland

Key characteristics:

- Gently undulating topography, hummocky in places
- Very open landscape with few trees overall
- Irregular field pattern of pre parliamentary enclosure
- Dispersed villages linked by winding roads
- Red brick buildings with pantile roofs sometimes painted white
- Churches are often prominent features on the skyline
- Irregular drainage pattern overall
- Hedgerow field boundaries with few trees
- Intensive farmed arable landscape

Vertical features and large scale farm buildings are dominant and detract from landscape character. Other detractors such as industrial development at Carnaby, pylons and communication masts, are spread throughout the area but overall do not seriously harm the quality of the landscape which is assessed to be ordinary to good with pockets of high quality.

20. Holderness: Coastal Farmland

Key characteristics:

- Flat to gently undulating topography sloping gently eastwards.
- Boulder clay cliffs eroding into the sea.
- Seaside resorts of Bridlington, Hornsea and Withernsea.
- Coastal static caravan parks are prominent.
- Limited tree cover due to exposed windswept coastal landscape.
- Smaller villages and farmsteads and minor roads threatened by erosion.
- Fragments of historic field pattern around villages and hamlets.
- Tourism development along the coast.

Due to the presence of detractors such as numerous caravan parks and the gas terminal at Easington coupled with the fact that the condition of the landscape is not considered to be good the quality of this landscape character type is assessed to be ordinary overall. However, it should be recognised that there are areas of higher quality within this character type and these areas should be protected. For example, Skipsea is an important historic settlement and the landscape character in that area reflects this. Hornsea has medieval origins and the Mere is an important feature unique in the East Riding.

The high value of this coastal landscape to the tourist industry in the East Riding should also be recognised when considering landscape quality and development proposals.

21. Humber Estuary: Low Lying Drained Farmland

Key characteristic:

- Flat low lying flood plain of the River Humber.
- Regular drainage pattern forming field boundaries.

- Sparse tree cover concentrated around scattered farmsteads
- Large scale fertile arable landscape.
- Open, extensive views across the simple remote landscape.
- The sky dominates views across the flat open landscape.
- Few hedgerows, many of them fragmented.
- Scattered farmsteads of nucleated form.
- Paull is a village on the north bank of the Estuary and the largest settlement in the character type.
- Views of Salt End industry to the west on the edge of Hull.

There are few detractors in this landscape which is unique in the East Riding. The key characteristics, e.g. reclaimed field pattern, open uninterrupted views, historic characteristics and sparse scattered settlement, are intact and good condition overall. The historic context of this landscape and its intact nature that is the result of land reclamation and subsequent management make this a good to high quality landscape.

22. Humber Estuary: Farmed Urban Fringe

Key characteristics:

- Flat low lying flood plain of the River Humber.
- Flood banks along the Humber.
- Large Scale industrial development to the west.
- Regular field and drainage pattern.
- Sparse tree cover.
- Brough Airfield and Brough Haven.
- Views of the Humber Bridge

Landscape quality is assessed to be ordinary. Small pockets of the original landscape character of this low lying area remain. Overgrown hedgerows and mature trees are present in places. However, the large number of detractors such as the cement works, the railway line and the large scale industrial and residential development on the edge of this character area reduce its quality to ordinary.

23. Humber Estuary: Humber Banks

Key characteristics:

- Flat low lying flood plain of the River Humber with manmade river banks to defend neighbouring farmland from flooding.
- Grassed banks grazed by livestock.
- Reed beds are a unique feature.
- Extensive views across the river and neighbouring low lying farmland, particularly from top of river bank.
- Diversity of river habitat.

The characteristics that define this unique landscape are largely intact. Habitat value contributes to the quality. Large boats move slowly up and down the river. There are elements of high quality to the landscape. For example there is limited access to the riverbanks resulting in a remote character and the riparian habitat contrasts strongly with the neighbouring arable farmland. There are very few properties nearby. The historic use of river for transportation continues to contribute to its character.

Section 1:

APPENDIX E: CONSULTATION RESPONSES ON THE DRAFT SEA SCOPING REPORT

E.1 CONSULTATION RESPONSES ON THE DRAFT SEA SCOPING REPORT

A schedule of the responses is provided in Table E1 below, with officer comments as to how each response has been or will be taken into account.

Table E.1 - Consultation responses on the Draft SEA Scoping Report and Officer Comments

Consultee	Response	Officer Comment
Beswick Parish Council	<p>Vital to (a) the assessment of flood hazard mitigation and (b) the public understanding of any proposed strategy, and, hence, acceptance of any physical measures of flood control that might require individual or community sacrifices, is an appreciation of the historical development of drainage and flood prevention measures since the late Medieval and during the 18th, 19th and 20th centuries.</p> <p>By acknowledging the drainage and flood prevention legacy of our forebears, there is an additional benefit that important elements of cultural heritage can be accommodated by any physical changes incorporated in future strategic management.</p> <p>Beswick Parish Council has a large vested geographical interest in the River Hull valley. It has been a major player in a community-led heritage project under the auspices of the River Hull Valley Drainage Heritage Group (RHVDHG). As a source of collated drainage heritage information, it commends the RHVDHG's publication: <i>Becks, Banks, Drains and Brains, 2nd Edition, ERYC, Beverley, ISBN: 978-0-9552912-1-0</i> as an item of relevance for consultation during development of the Local Flood Risk Management Strategy.</p>	<p>The historical development of the flood risk and drainage measures are referenced in the LFRMS and RHVDHG's publication has been taken into account in preparing the LFRMS.</p>
Bridlington Council	<p>Page 1 – 1.2 line 8 states that local flood risk does not include that posed from the sea, however this does need to be considered in their potential interaction with local sources to ensure that all joint risks of flooding are assessed at the local scale. I am therefore surprised there is no mention of sea flooding of Bridlington Harbour and surrounding properties.</p>	<p>A reference to the tidal flood event of 5 December 2013, which caused substantial damage at a number of locations in the East Riding, has been added to Section 3.6 - Flood Risk.</p>
	<p>Page 30 – last paragraph states pumping operations that rely on wind energy rather than electricity may be a future potential option. Wind energy is dependent on wind and pumps need to be used either constantly or within a critical timescale so cannot wait for the wind to blow to power a turbine.</p>	<p>The use of wind energy for this purpose is something that will require further investigation and feasibility testing.</p>
	<p>Page 32 Paragraph 4 line 9 – approximately 65% of land for employment allocation falls within tidal or fluvial flood risk areas. This highlights the need for a substantial investment in flood risk management infrastructure. Would it not be better not to build on this land and not spend “substantial investment” on flood risk infrastructure?</p>	<p>The majority of this land is found along the M62 corridor close to the Humber and therefore at risk of tidal flooding. There are limited sites elsewhere that offer the same access to the ports and rail/road network. Development of this land may create opportunities for partnership funding of flood defences that benefit the wider community, that might not otherwise be financially viable.</p>

Consultee	Response	Officer Comment
	Page 35 – paragraph 4 – some new house building sites have been allocated on sites at risk of flooding – WHY? No homes should be built where there is a risk of flooding, apart from the misery of having your property flooded insurers will not insure these properties.	The Local Plan (Proposed Submission version, January 2014) allocates land for housing in accordance with national planning policy and taking into account local circumstances. Some settlements in the East Riding, such as Goole, have little land available that is not classified at flood risk, but have a strong need for new housing for regeneration and sustainability purposes. In these instances, the Local Plan requires developers to install flood resilience measures as part of the design of the dwellings/site.
Councillor Hardy, on behalf of Anlaby Common Parish Council	P. 31 Para 3.9 3rd sentence.."There area is home..."needs redrafting.	This has been corrected.
	P. 38 Para that starts "A significant number...." needs to have Community buildingS..	This has been corrected.
	P. 46 6. Clay (not Glay)	The existing text ('gley') is correct.
	P. 39 Communications... There ARE also...	This has been corrected.
	P. 53 Para re Identifying Alternative ... 2nd Sentence ..".This will be an INTERACTIVE process..."	The existing text ('iterative') is correct.
ERYC - Culture, Tourism and Sustainable Development	In Section 2.2 (pg 13), please add '2012-2020' after the reference to the Waterways Strategy to clarify its implementation period.	This text has been added.
	In Section 3.3 (pg 19), please change to 'Hull and East Yorkshire Local Nature Partnership' (not East Riding).	This change has been made.
	In Section 3.3, it is pleasing to see detailed mention of green infrastructure.	Noted
	In Section 3.4, it would be worth adding that specific locations are vulnerable to isolated individual cliff losses in excess of 20m. It should also be checked that the 1.8m average stated here and on pg.46 is acceptable to the Flood and Coastal Erosion Risk Management team, given the typically stated average annual erosion rate of 1.5m - 2.5m.	The text in Section 3.4 has been amended to incorporate these comments.
	If required, the Sustainable Development team can supply a clearer version of Figure 3.3 (as developed last year with Print and Design).	Noted. Figure 3.3 has been updated.
	Consider updating Section 3.4 as follows: "The rate of coastal erosion is expected to increase with climate change. The Flamborough Head to Gibraltar Point Shoreline Management Plan (SMP), approved by the Department for Environment, Food and Rural Affairs (Defra) in June	Section 3.4 has been amended to incorporate this text.

Consultee	Response	Officer Comment
ERYC - Culture, Tourism and Sustainable Development (cont'd)	2011, sets out the management intent for the coast over a period of 100 years. Informed by Defra's sea level rise projections, the adopted SMP policies include 'hold the line' to ensure the continued protection from coastal flooding and erosion to the towns of Bridlington, Hornsea and Withernsea, plus significant infrastructure at Easington and Mappleton. Elsewhere, rural stretches of coastline are under a policy of 'no active intervention', meaning that the natural process of erosion will not be impeded by physical defences, but will instead continue to pose a threat to property, infrastructure and agricultural land. The LFRMS..."	
	In Section 3.5, the introduction to WFD currently on pg 26 would be more effective if placed on pg 23, at the beginning of the section.	Section 3.5 has been changed as per this suggestion.
	In Section 3.5, it is important to mention the role of the Local Catchment Partnerships, which Defra established in 2013 to lead on local water quality/WFD priorities. For the SEA, the relevant partnerships are the Derwent Local Catchment Partnership and the Hull & East Riding Local Catchment Partnership.	Reference to the Local Catchment Partnerships has been added to Section 3.5.
	In Section 3.10 (pg 33), the description of the Humber Ports is a little unclear at present.	The description has been revised to improve clarity.
	In Section 3.10 (pg 33), the Driffeld Canal is not currently disused. It is used for navigation by leisure craft from its meeting with the River Hull to the fixed road bridge at Wansford, and by canoes, kayaks and smaller craft between Wansford and Riverhead.	The text has been amended accordingly.
	In Section 3.10 (pg 33), the Market Weighton Canal is not currently navigable. This was investigated through, and is detailed within, the Market Weighton Canal & River Foulness Action Plan.	The text has been amended accordingly.
	In Section 3.11 (pg 34), consider using "flats" rather than "flatted accommodation".	The text has been changed as per this suggestion.
	In Section 3.16 (pg 43), it is pleasing to see detailed mention of the Waterways Partnership.	Noted
	Section 5: Strategic Environmental Assessment Objectives and Framework In Section 5.1 (pg 50), working with Local Catchment Partnerships and the broader East & North Yorkshire Waterways Partnership, will be important for implementing objectives 2 and 5.	Noted
	Typing errors: <ul style="list-style-type: none"> • There are typing and spacing errors in the keys of Figure 1.2 and Figure 1.3 respectively. • In Section 2.2 (pg 12), 'Humber Local Enterprise Partnership' is spelt incorrectly. • In Section 3.1 (pg 15), there is a reference to 'East Riding of Yorkshire Council', even though this has been abbreviated previously to 'ERYC'. 	All typing errors noted and corrected.

Consultee	Response	Officer Comment
	<ul style="list-style-type: none"> • In the final paragraph of Section 3.2 (pg 17), there needs to be an additional comma: "...can have significant effects on physical and, in particular, psychological wellbeing of communities." • In Section 3.5 (pg 26), there are two instances of 'licenses' which should be replaced with 'licences'. • In Section 3.6 (pg 27), there is a comma to be deleted from, "The low lying, flat landscape around the Humber Estuary and River Hull, is particularly susceptible." The following sentence should also be revised to, "The potential frequency and impacts of flooding are...". • In Section 3.8 (pg 30), the penultimate paragraph is missing 'of' at the end of the 4th line down. • In Section 3.9 (pg 31), the following text is incorrect: "There area is home to major installations..." • In Section 3.9 (pg 32), the following text is required: "...the Humber Local Enterprise Partnership has expressed its aspirations for the area." • In Section 3.10 (pg 33), on the rail paragraph, the 3rd line down repeats the word 'the' unnecessarily. • In Section 3.10 (pg 33), the following text is required: "The Port of Goole combines with Hull, Immingham and Grimsby to form the largest port complex in the UK (in terms of tonnage)." • In Section 3.13 (pg 39), there are several instances where "is" should in fact be "are" (e.g. within the first sentences under the 'water and sewerage' and 'communications' headings). • In Section 3.14 (pg 40), there should be another comma: "This clay, where suitable, is used for engineering purposes..." 	
ERYC - Forward Planning	The references to the emerging Local Plan needed to be January 2014 (which is the date it was agreed at Full Council) rather than December. It's also the Proposed Submission version rather than the draft.	References to the emerging Local Plan have been amended where necessary.
English Heritage	In terms of the historic environment, we consider that the Scoping Report has identified the majority of plans and programmes which are likely to be of relevance to the development of the Strategy, that it has put forward a suitable set of Objectives and Indicators, and that it has established an appropriate Baseline against which to assess the Plan's proposals. Overall, therefore, we believe that it provides the basis for the development of an appropriate framework for assessing the likely significant effects which the Local Flood Risk Management Strategy might have upon the historic environment of the East Riding. There are, however, a small number of areas where you might consider amending the Sustainability Appraisal as	Noted

Consultee	Response	Officer Comment
English Heritage (cont'd)	follows:-	
	<p>Table 2.1: International For completeness, reference should also be made to:-</p> <ul style="list-style-type: none"> • The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) • The European Convention on the Protection of Archaeological Heritage (Valetta Convention) <p>National Heritage Protection for the 21st Century is now largely irrelevant and can be deleted from this list.</p>	Table 2.1 has been amended accordingly.
	<p>Table 4.1 Issue 16 (Cultural Heritage) Whilst there are some heritage assets that would benefit from reducing the impact of flooding, others, such as waterlogged deposits may be harmed by measures designed to reduce flooding. For example, whilst flood defences might protected some heritage assets from the harmful effects of flooding, the sheet piling associated with these defences could, potentially, provide a barrier between the river and archaeological remains which could lead to the desiccation and eventual destruction of those remains. In addition, poorly-designed flood defences could harm elements which contribute to the significance of a heritage asset or the character or appearances of a historic settlement.</p>	Noted. Section 3.17 and Table 4.1 have been amended to reflect this comment.
	<p>Table 5.1 Issue 16 (Cultural Heritage) Given the large numbers of heritage assets in the East Riding, the percentage figures of any who are provided with flood risk management measures are likely to be pretty small. In addition, as has been pointed out above, there are some heritage sites which may be harmed by flood risk management measures. Therefore, it might be preferable to amend the indicators as follows:- “Number and percentage of heritage assets whose significance is threatened or harmed through flooding that have been protected by flood defence measures”. “Number and percentage of heritage assets whose significance has been harmed by or enhanced through flood defence measures”.</p>	These changes have been made, except the term 'risk management' is used rather than 'defence'.
	English Heritage strongly advises that the Council's conservation section and the staff of the Humber Archaeology Partnership are closely involved throughout the preparation of the SEA of the Strategy. They are best placed to advise on local historic environment issues and priorities, including access to data held in the HER (formerly SMR); how the policy or proposal	Noted

Consultee	Response	Officer Comment
	<p>can be tailored to minimise potential adverse impacts on the historic environment; The nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of historic assets. Finally, we should like to stress that this opinion is based on the information provided by you with your letter dated 14th February, 2014. To avoid any doubt, this does not affect our obligation to provide further advice and, potentially, object to specific proposals which may subsequently arise (either as a result of this consultation or in later versions of the Strategy) where we consider that, despite the SA/SEA, these would have an adverse effect upon the historic environment.</p>	
Environment Agency	<p>The approach is supported and we hope that the final full assessment, its objectives and recommendations will feed into the Strategy and the Action plan, to help link FCRM activity to environmental outcomes.</p>	Noted
	<p>We would like to see mention of the considerable value and contribution angling on East Yorkshire waterways makes to the local economy. ERYC event and publicity team spend quite a lot of time and money successfully promoting the sport. The Waterways Partnership Strategic Plans have made these links and to the local cultural heritage in its' documents.</p>	Reference to the contribution that leisure pursuits associated with East Riding's waterways make to the local economy, such as angling, has been added to Section 3.9 - Local Economy.
	<p>These [detailed comments on specific sections of the report] are a mixture of observations and suggestions either for improvements to the Scoping Report or for inclusion/consideration in the full assessment.</p>	Noted
	<p>Table 2.1: In the Local section there should be reference to the developing WFD documents i.e. the Waterbody Action Plans (WAP) or the Reasons For Failure (RFF) database</p>	Table 2.1 has been updated accordingly.
	<p>Section 3.3: Biodiversity, Fauna and Flora: The reasons for the important designations on the Derwent (SAC and SPA) and Humber (SAC, SPA, Ramsar etc) must be emphasised. The designations are there because of the sites of national and international importance for threatened species such as sea lamprey, breeding and wintering birds. Hedgehogs may be BAP species but there are other species of national and international significance that deserve a mention.</p>	Text has been added in Section 3.3 to reflect this comment.
	<p>Figure 3.1 reference to ERYBAP, Biodiversity Priority Areas: This complements the RBMP WAPs because of the association of the Biodiversity in East Yorkshire with the water environment – should make links here.</p>	Text has been added in Section 3.3 to reflect this comment.
	<p>Section 3.5 Water: Water Quality - The RBMP is about more than just Water Quality. The WAPs identify that habitat improvements and best practice/sensitive maintenance are also</p>	Text has been added in Section 3.3 to reflect this comment.

Consultee	Response	Officer Comment
	key.	
	<p>Section 3.5: Likely Evolution - Much of the investigation requirements stated in the RBMP cycle 1 document (that is referenced in this section) has been done, or is close to completion, these are the WAPs and the Catchment Hosts are in place. It's important therefore that these are considered in the full SEA.</p> <p>Poor maintenance activities are likely to have detrimental impact upon waterbodies.</p> <p>Also note that all LAs must have due regard for the WFD.</p> <p>The activities that present the greatest risk to ecological status are maintenance activities such as inappropriate timing or quantities of weed and tree cutting, removal of vegetation, lack of habitat, inappropriate hydrology. Dredging is also potentially harmful. Also barriers to fish migration such as weirs and pumping stations.</p> <p>The impact of Eel Regulations should be referenced. It is also important to reference the requirement to reach good ecological potential under the WFD. Historical modification is a factor in the WFD but we must still look to make improvements and create "potential".</p>	Text has been added in Section 3.5 to reflect these comments.
	Section 3.6 Flood Risk: Likely Evolution - Acknowledgement of managed realignment needed here.	Text has been added in Section 3.6 to reflect this comment.
	<p>Section 3.7 Climate Change: Likely Evolution - Adapting to climate change includes making space for water and need for compensation habitat i.e. managed realignment along the Humber.</p> <p>Flood risk management needs to adapt and take a more holistic catchment based approach to flood risk. This includes adoption of catchment wide techniques such as upland storage, better land management and woody debris etc.</p>	Text has been added in Section 3.7 to reflect these comments.
	<p>Section 3.17 Landscape - There are opportunities here through the various partnerships to address flood risk and enhance landscape and quality of the water environment. This is what DEFRA's Catchment Based Approach is calling for.</p> <p>Agriculture seems to have been omitted here and deserves mention in its own right - especially as it dominates the majority of the County.</p> <p>Flood risk activities are likely to impact upon agriculture and vice versa. Agricultural practice also has an impact upon WFD.</p>	Text has been added in Section 3.17 to reflect these comments.
	Section 5.1 Table 5.1, Objective 3 - WFD is relevant here too.	Noted
	Section 5.1 Table 5.1, Objective 5 - Water management authorities must have due regard for WFD and must ensure that there is no deterioration in ecological status or potential.	Objective 5 (<i>sustain and enhance water quality</i>) is intended to align with WFD obligations.
	Section 6.1 Assessment methodology: should follow a catchment approach.	The methodology will be applied to measures in the

Consultee	Response	Officer Comment
		catchment-based Flood Risk Management Plans, which will sit underneath the LFRMS.
Marine Management Organisation (MMO)	<p>The MMO has reviewed the document and whilst we have no specific comments to make we would like to draw your attention to the remit of our organisation as you may wish to be aware of this in relation to the consultation.</p> <p>As the marine planning authority for England the MMO is responsible for preparing marine plans for English inshore and offshore waters. At its landward extent, a marine plan will apply up to the mean high water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high water spring mark there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark. In our duty to take all reasonable steps to ensure compatibility with existing development plans, which apply down to the low water mark, we are seeking to identify the 'marine relevance' of applicable plan policies.</p> <p>The MMO began planning for the east area, which stretches from Flamborough Head to Felixstowe, in April 2011 and consultation on the draft plans closed on 8th October 2013. The next round of planning began in 2013 in the south plan area. Until such time as a marine plan is in place for the east plan area we advise local council to refer to the Marine Policy Statement for guidance on any planning activity that includes a section of coastline or tidal river. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area must do so in accordance with the UK Marine Policy Statement unless relevant considerations indicate otherwise. The Marine Policy Statement will also guide the development of Marine Plans across the UK. More information can be found at http://www.defra.gov.uk/news/2011/03/18/marine-policy-statement/</p> <p>The MMO is responsible for issuing marine licences under the Marine and Coastal Access Act 2009. We also issue consents under the Electricity Act 1989 (as amended) for offshore generating stations between 1 and 100 megawatts and are a Statutory Consultee to the Planning Inspectorate for relevant Planning Act developments (Nationally Significant Infrastructure Projects). A marine licence may be needed for activities involving a deposit or removal of a substance or object below the mean high water springs mark or in any tidal river to the extent of the tidal influence. Any works may also require consideration under The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) and early consultation with the MMO is advised. We would suggest that reference to this be made within planning documents to ensure that necessary regulatory requirements are covered. We would encourage applicants to engage early with the MMO alongside any application for planning consent to ensure that the consenting process is as efficient as possible.</p>	Noted

Consultee	Response	Officer Comment
Natural England	3.3 Biodiversity Link the notable examples of habitats to the designations, rather than listing them separately.	Text has been added in Section 3.3 to reflect this comment.
	3.4 Geology and soil List the geological SSSIs (list RIGS in the Annex).	This change has been made.
	Table 4.1 4. Biodiversity, flora and fauna. Two issues have been identified, these should be listed separately and indicators identified for each: <ul style="list-style-type: none"> • Requirement to maintain designated sites in favourable condition. • Loss/ decline/ fragmentation of habitats in the wider countryside. 	Table 4.1 has been amended accordingly.
	Table 5.1, in the table there is a mix of positive and negative indicators for some issues, which means that it will be difficult to assess whether the impact will be positive or negative, this needs to be rectified.	While the mix of positive and negative indicators may appear confusing, to arrive at an assessment of impact, both positive and negative factors will need to be considered.
	4. Biodiversity indicator Current indicator ‘ changes to condition of designated sites’, suggest changing to ‘number of sites where condition has been maintained/ improved’.	This change has been made.
	7. Geology and soil Current indicator: ‘ Area of agricultural land protected from flood risk management measures’. This needs clarifying, either ‘ area of land protected from flooding’ or ‘area of land protected by flood risk management measures’. It may be appropriate to use agricultural land for flood storage to prevent flooding to properties during flood events, this should be considered as a positive outcome (if properly managed).	This has been changed to: "area of agricultural land protected by flood risk management measures".
	17. landscape Current indicator ‘number of LVIA undertaken...’ this doesn’t tell us anything useful. Suggest changing to ‘ number of flood related planning applications that have a positive or neutral impact on landscape after LVIA undertaken.	This change has been made.
	Fig 5.1, this needs further labelling/ explanation as there is a mix of positive and negative indicators identified, which means that it is difficult to assess the overall effect.	The main areas of incompatibility are between objectives that may lead to physical works. and those that seek to protect the existing landscape.

Consultee	Response	Officer Comment
Yorkshire Wildlife Trust	Overall we would like to state that the document does appear to adequately cover all aspects and considerations that will need to be thought about and balanced when carrying out the assessment.	Noted
	<p>One overarching question would be as to whether a weighting system will be applied when trying to balance conflicting issues – with one issue being seen as more important than another to ensure a clear and transparent decision making process has been applied. As a strategic strategy document it needs to direct future decisions of potential schemes ‘on the ground’ with the ability to see how that decision was brought about.</p> <p>We are pleased to see that the document understands and reflects the ability that Flood Risk Management can have positive benefits and links with biodiversity enhancement and would encourage this view to be a starting point for any future discussions as to how the LFRMS can be applied.</p>	It is not considered appropriate to apply a weighting system at this strategic level. Rather, this should be considered at project level if required, as there will be different priorities over the life of the LFRMS and within different catchments.
	We have two further document wide comments; firstly there appears to be no mention of Fracking in the assessment and feel that this needs including as a potential issue in light of current national pronouncements on energy supply in the future. As an activity with the potential to have huge impacts in terms of water availability and use, along with questions around groundwater contamination and pollution, fracking needs to be acknowledged in the ongoing LFRMS process.	Text has been added in Section 3.14 to reflect this comment.
	The second comment is more of a question; are the Flood Investigation Reports available to view by third parties? As the lead partner on the East Riding Catchment Based Approach work it would seem sensible to be able to frame future discussions from a position of having as full a picture of the information as is possible.	Flood Investigation Reports prepared under the provisions of Section 19 of the Flood and Water Management Act are available upon request.
	<p>We would also like to make some specific comments in relation to certain sections in the document.</p> <p>In section 1.2 at the top of page 2, first bullet point we would ask that acknowledgement of restoration of natural systems and wetlands as key considerations in mitigation and management of flooding. You do allude to it elsewhere in the document with reference to wet woodlands, floodplains and washlands and feel it important to show this at the outset when framing the scale and scope of the assessment.</p>	The relevant text in Section 1.2 has been amended to reflect this comment.
	In section 3.3 on page 17 we would like to see mention of the River Hull headwater chalk streams as these are not only locally important but of national significance as the most northerly chalk fed river catchment in the UK. The UK has over 80% of Europe’s chalk rivers and as such they should be recognised as a valued habitat.	The relevant text in Section 3.3 has been amended to reflect this comment.

Consultee	Response	Officer Comment
	<p>In section 3.4 on page 21 under the agricultural land classification the statement about salinisation is misleading. The land referred to has undergone the process of ‘warping’ on many occasions over many years and this involved actively allowing brackish, saline water onto the land for agricultural improvement. To suggest that the recent tidal flooding may lead to significant impact to the land through salinisation does not give a true reflection of how the land in question used to be managed and how the addition of water and silts from the estuary over time has actually improved the land for agricultural production.</p>	<p>The relevant text in Section 3.4 has been amended to reflect this comment.</p>
	<p>We welcome the inclusion of a section on Water Resources in 3.5 on page 25. The LFRMS, as indicated in this scoping report, needs to be framed around the increasing likelihood of water shortages and drought affecting us – with potentially more severe consequences for all. The ability to look at Water Level Management Planning and Strategy along with water storage opportunities should be equally as important as flood risk management.</p>	<p>Noted</p>
	<p>In section 3.17 at the bottom of page 44 we feel there is a slight contradiction in terms of on the one hand stating that the water environment is a key feature of the landscape and that reversion to marshland should be avoided, aligned with the need and acceptance that flood attenuation areas may be needed. As stated at the beginning of your report the link between FRM and biodiversity enhancement are not mutually incompatible and many flood attenuation schemes are also wetland habitats such as marshland.</p>	<p>The relevant text in Section 3.17 has been amended to reflect this comment.</p>
	<p>We would also like to make the point that landscapes constantly evolve, as currently being seen across the East Riding with the proliferation of renewable energy schemes in the form of windfarms, with the inevitable changes to the Landscape Character of the area in question. The role of the SEA should be to look at how an evolving landscape can assist with the LFRMS not to decide that one landscape feature/habitat is undesirable and dismiss it. The terminology and word marshland is also open to interpretation as it actually covers a wide range of habitat types with associated levels of wetness, some of which are still able to be farmed with livestock – an evolving and changing landscape adapting to changes in climate.</p>	<p>The relevant text in Section 3.17 has been amended to reflect this comment.</p>

