

## DRAINAGE & WATER CONSERVATION

### ***NS/24 – Land drainage, water conservation, foul drainage and sewage disposal***

**Proposes a range of measures including the incorporation of surface water courses in green corridors and the water park as part of a SUDS, and measures to manage water levels to prevent increased flood risk to Oakington and Longstanton. The policy also prohibits occupation of dwellings at Northstowe until plans have been approved to ensure adequate sewage disposal capacity is available (and which will not add to flood risk) and that technology enabling a 25% reduction in piped water usage using various technologies.**

Sustainability Appraisal Objectives [abridged in some cases]	Assessment			Comments / Proposed Mitigation
	Short	Med.	Long	
1.1 Minimise irreversible loss of undeveloped land and productive agricultural holdings	~	~	~	
1.2 Reduce the use of non-renewable resources including energy	~	~	~	
1.3 Limit water consumption to sustainable levels	++	++(+)	+++	The primary objective of this policy.
2.1 Avoid damage to designated sites and protected species	+	+	+	Implicitly supportive provided that design and management of surface and foul water does not alter natural flows (ie. affecting water-sensitive environments) or result in discharges of effluent.
2.2 Maintain / enhance range and viability of characteristic habitats and species	(+)	(+)	(+)	As above.
2.3 Improve opportunities for people to access the countryside and wild places	~	~	~	
3.1 Avoid damage to designated historic sites and their settings	~	~	~	
3.2 Maintain diversity and distinctiveness of landscape and townscape	~	~	~	

3.3. Create places and spaces that look good and work well	~	~	~	
4.1 Reduce emission of greenhouse gases and other pollutants	+	+	+	The need to provide STW capacity to meet increased sewage output from Northstowe is addressed specifically.
4.2 Minimise waste production and support recycling	++	++	++	Specifically addresses 'recycling' of domestic waste water for second use before it is sent for treatment, wherever appropriate.
4.3 Limit or reduce vulnerability to flooding and other climate change impacts	+(+)	++	++(+)	Clearly supportive in terms of managing the water budget of the District; ensuring that treatment facilities and other infrastructure does not increase flood risks; and in providing specific measures to protect Longstanton and Oakington. However consideration needs to be given to how the flow of water from the site will be managed in such a way that it mimics the existing drainage pattern. According to the introductory detail in the AAP the area slopes gently to the north, and the principal surface drainage feature is Cottenham Lode to the east of the site. The design of the SUDS will need to take account of the area of relatively high flood risk land (10 year event) bordering the southeast of the settlement, and the need to prevent an increase in flood risk along Reynolds Ditch, which drains the northeastern edge of the site close to one end of the water park / drainage feature.
5.1 Maintain and enhance human health	~	~	~	
5.2 Reduce and prevent crime and the fear of crime	~	~	~	
5.3 Improve the quantity and quality of publicly accessible open space	~	~	~	
6.1 Improve the quality, range and accessibility of services and facilities	~	~	~	

6.2 Redress inequalities in age, gender, race, location, faith, disability, etc.	~	~	~	It is assumed incorporating water recycling technology will not adversely affect the cost of housing and the economics of funding affordable dwellings at Northstowe.
6.3 Ensure all groups have access to decent, appropriate and affordable housing	~	~	~	
6.4 Encourage and enable active involvement of local people in the community	~	~	~	
7.1 Help people gain access to satisfying work appropriate to skills, potential and location	~	~	~	
7.2 Support appropriate investment in people, places, communications and infrastructure	~	~	~	
7.3. Improve the efficiency, competitiveness, vitality and adaptability of the local economy	~	~	~	
<b>Summary of assessment:</b> Addresses one of the key absolute impacts of Northstowe in terms of its impact on the local water regime. The policy provides for recycling wherever possible while recognising its potential impact on recharging of groundwater through runoff. A particular concern is the need to expand local sewage treatment infrastructure on a rolling plan to accommodate the continued growth of the new settlement.				
<b>Summary of mitigation proposals:</b> Design of the water feature and SUDS will need to pay particular attention to the existence of an area of high flood risk along Cottenham Lode to the east and southeast of the site, and should avoid increasing the risk of flooding of Reynolds Ditch, which drains the north-east of the site and lies close to one end of the SUDS / water park.				
<b>Secondary, cumulative or synergistic effects:</b> None identified.				