

3. STRATEGIC POLICIES

ST7: Infrastructure Delivery and Impact Mitigation

Comments:

Colchester infrastructure Audit and Delivery plan - Electricity

Table 5-1	Primary Substation Peldon Primary	1	1kV
	Current Max Demand (MW)		15
	Demand Headroom Availability		36.7%
	Max Capacity (MW)		23.7
	Spare Capacity (MW)		8.7
	Est increase for emerging development		4.8
	Est 2041 Peak Demand (MW)		19.8
	Demand Headroom Availability		Green (Over 5%)

However there seems to be little or no consideration for the 300 proposed dwellings at West Mersea not being allowed to fit Gas Boilers and therefore presumably requiring night store/electric heating or Heat pumps.

Also no allowance seems to have been indicated for the 64.4%* of the dwellings at West Mersea having Gas Boilers and 14.4 %* having Oil Fired Boilers. All to be converted before the end of 2050, some 9 years after the plan period 2041.

No allowance for electric car charging and the general increase in usage of electrical devices.

It is noted that there is now a coffer damn around the main electric sub station supplying Mersea Island and we hope this will work in practice.

* WMPP survey of households 2020

ST7 requires that necessary infrastructure is in place to support development and mitigate its impacts. Without proper assessment and provision for additional sewerage arising from new development, key infrastructure requirements are not secured. This undermines ST7, as well as the effectiveness of Policies LC1 (Landscape), EN3 (Biodiversity and Geodiversity) and ST2 (Environment, Green Network and Waterways), because environmental impacts on waterways, habitats, and landscapes cannot be properly mitigated. Policy EN3 (Biodiversity and Net Gain) requires development to avoid harm to habitats and species and deliver measurable net gains for biodiversity. Additional sewerage and wastewater from new development can degrade water quality in rivers, estuaries and coastal areas, harming habitats and species and making net gain unachievable. Where sewerage impacts are not properly assessed or mitigated, compliance with EN3 cannot be demonstrated, and the objectives of ST2 (Environment, Green Network and Waterways) and ST3 (Infrastructure Delivery and Impact Mitigation) are also undermined.

WRC Capacity & Wastewater:

- i) The IADP does not demonstrate that the Water Recycling Centre (WRC) can accommodate cumulative housing allocations (~600 dwellings, including existing Local Plan and West Mersea Neighbourhood Plan dwellings).
- ii) The only operational change (increased storm flow) does not provide additional treatment capacity for new development.

Environmental Policies at Risk:

Without adequate wastewater mitigation, development risks breaching:

- LC1 – Landscape and Coast
- LC3 – Coastal Protection Belt
- EN3 – Biodiversity and Net Gain
- ST2 – Environment, Green Network and Waterways
- ST3 – Infrastructure Delivery and Impact Mitigation
- NZ3 – Wastewater and Water Supply

Marine Conservation (MCZ/SAC):

- i) Features of the MCZ (native oyster beds, intertidal sediments) and the Essex Estuaries SAC are in unfavourable condition and under active recovery.
- ii) Any additional nutrient, chemical, or bacterial load from the WRC will hinder recovery and compromise conservation objectives.
- iii) The 2021 FSA Sanitary Survey confirms that housing developments increase bacterial loading, which negatively affects shellfish, including oysters.

Cumulative Impacts:

All existing and proposed housing allocations must be considered together in assessing WRC capacity and environmental impacts.

Required Actions for Sound Plan:

1. Provide evidence of cumulative WRC capacity for all housing allocations.
2. Include timing and delivery of wastewater infrastructure upgrades before occupation.
3. Assess and mitigate impacts on MCZ, SAC, and coastal/estuarine landscapes.
4. Reinstate a Mersea Island-specific policy to protect sensitive coastal and estuarine areas.

Conclusion:

Without these measures, the IADP is incomplete, and the Local Plan cannot be considered sound.

Summary 2. STRATEGIC POLICIES

ST7: Infrastructure Delivery and Impact Mitigation

No consideration for the 300 proposed dwellings at West Mersea not being allowed to fit Gas Boilers and therefore presumably requiring night store/electric heating or Heat pumps. Or for the replacing of the some 3000+- existing oil and gas boilers.

Without proper assessment and provision for additional sewerage arising from new development, the IADP is incomplete, and the Local Plan cannot be considered sound.