



FAQs

Stodmarsh

Southern Water and nutrient removal from Wastewater

What does the Levelling-up and Regeneration Act mean for nutrients and the Stodmarsh?

The Levelling-up and Regeneration Act 2023 (LURA)¹ introduced a new statutory duty on English sewerage undertakers to reduce the level of nutrients being released into the environment. The duty requires that wastewater treatment works (WTW) serving a population equivalent over 2,000 in designated nutrient sensitive catchment areas meet specified nutrient removal levels for nitrogen and/or phosphorus.

The catchment area² for the Stodmarsh Special Area of Conservation (SAC) has been designated sensitive for phosphorus and nitrogen under LURA. This places a requirement on us to upgrade our nutrient significant plants to the most stringent standard that is currently technically achievable. This is known as the standard upgrade duty. The Technically Achievable Limits (TAL) are 0.25mg/l for Phosphorus (P) and 10mg/l for Nitrogen (N).

It is expected that the required improvements to wastewater treatment works in these catchments will deliver significant reductions in nutrient loads, support the recovery of some of our most precious habitat sites, and unlock housing affected by nutrient neutrality.

When considering planning proposals for developments that drain via a sewer to a wastewater treatment works that is subject to this upgrade duty, "Competent Authorities" for Habitats Regulations Assessments (including the local planning authorities) now have certainty in the nutrient reductions that will be delivered by us by 2030. This enables any additional nutrient reduction to be calculated and delivered as part of the development to achieve nutrient neutrality.

¹ Defra's [Notice of designation of sensitive catchment areas 2024](#)

² Natural England's ["Stodmarsh Special Area of Conservation/Ramsar - Catchment Map \(TIN212\)"](#)

Is Southern Water open to agreements to increase the nitrogen or phosphate removal rate at Wastewater Treatment Works beyond consented levels?

All of our nutrient significant WTW linked to Stodmarsh SAC are being upgraded to meet the highest Technically Achievable Limit (TAL) under the LURA by April 2030 – so there is no increase in treatment standards currently technically possible beyond this. Our smaller WTW (less than 2000 population equivalent) are not part of the LURA upgrade duty to TAL.

This is also not feasible within the existing environmental and financial regulatory framework of the water industry, for the following reasons:

- The Environment Agency determines the requirements to protect the environment through the Water Industry National Environment Programme (WINEP) and we propose solutions to meet these requirements. We need to seek the approval of the water industry's economic regulator (Defra/ Ofwat), to invest in upgrades to our WTWs to meet tighter discharge standards.
- Defra ensures that we deliver WINEP efficiently and protects customers interests, as customer bills increase to pay for the improvements required. It is very unlikely that it would be possible to justify costs beyond the LURA commitments, where our economic regulator is also looking to protect the interests of customers, and ensure operational efficiency.
- There is currently no mechanism for accepting developer contributions to improve the quality of discharges from our WTW.

Nutrients include both Nitrogen and Phosphorous and WTWs tend to have either a “P” or an “N” permit, rather than both. What is the difference?

Both Nitrogen (N) and Phosphorus (P) are essential building blocks for life, however excessive levels of either of these nutrients in a waterbody can lead to excessive growth in plants and algae, in a process known as eutrophication. Environmental permits for discharges from WWTWs are determined based on statutory water quality standards and objectives, which includes limits on these key nutrients. These standards and objectives differ depending on whether the receiving watercourse is inland or coastal and also depending on its quality, amenity and whether there are any protected sites located nearby.

For inland receiving water, the assessment will take into account the immediate receiving water and main receiving river. In general, P is usually believed to be the primary limiting nutrient for UK inland waters, hence for inland waters discharges often only P removal is required. Stodmarsh is an exceptional case, where both nutrients are risk factors to the Special Area of Conservation.

What is the capacity of works? Is there enough capacity for the proposed development?

Growth within each WTW catchment is monitored through population forecasts, as well as through Local Plan housing allocations, and monitoring of local authorities housing supply and delivery. Where this monitoring identifies a risk that capacity at a WTW is likely to be reached within the next 5 year AMP, we would make a case in our business plan for new infrastructure to support the projected growth in population. Once our business plan is agreed, we can then work towards delivering the required additional capacity to accommodate projected growth.

The Environment Agency is the water industry's environmental regulator and defines the environmental permits and the associated effluent discharge standards that water companies are required to meet. These permits are designed to protect the environment and ensure that water quality objectives are met.

We operate our WTWs in accordance with environmental permits issued and enforced by the Environment Agency. The permits set the maximum volume of treated wastewater that the company is permitted to recycle to the environment (in terms of Dry Weather Flow, or "DWF"). They also define the standards of treatment that must be met in order to protect water quality objectives.

If the future release of treated wastewater at a WTW is anticipated to exceed the maximum allowed by the environmental permit (as a result of new development), we could apply to the Environment Agency for a new or amended permit. This would increase the volumetric permit headroom above that which is currently available. The Environment Agency would normally permit increased flows provided the treatment standards are tightened so that the total load (e.g. of nitrogen or phosphates) to the environment is not increased. This is in line with the "no deterioration" principle.

Fundamentally wastewater treatment capacity is not a constraint to future new development even if investment requirements are significant. We have a statutory obligation to find solutions and provide infrastructure to serve new development. Local Plan periods generally run for 15 years so there are repeated opportunities through the water industry's five yearly price review process to investigate and implement solutions.

In the absence of a Nitrogen or Phosphate permit level, are you able to provide details of the nitrogen/phosphate effluent levels for WWTW?

The LURA applies to all our nutrient significant plants in the Stodmarsh SAC catchment. For our smaller sites, where we have no N or P permit, Southern Water does not monitor N or P levels in the final effluent discharging from that WTW. It is therefore not possible to state what levels of N or P are in the discharges from a WTW that has no N or P permit.

Are you able to provide advice as to the mitigation of nutrients from our development?

Unfortunately not. Natural England has produced guidance on mitigation in their document "Nutrient Neutrality and Mitigation: A summary guide and frequently asked questions (NE776)"³. There are also calculators available online to assist developers⁴.

Natural England also offer a paid for service or it would be best to speak to the Local Planning Authority about what needs to be included in your planning submission.

³ [Nutrient Neutrality and Mitigation: A summary guide and frequently asked questions \(NE776\)](#)

⁴ [Using the nutrient neutrality calculators](#)

What N and P permit levels are required for our WTWs within the Stodmarsh SAC Catchment from April 2030?

The following WTW are within the Stodmarsh SAC catchment area.

Southern Water WTW (waterbody discharges into in brackets)	Total Phosphorus Limit (mg/l TP)	Total Nitrogen Limit (mg/l TN)	Nutrient Significant* WTW?
Ashford WTW (Great Stour between Ashford and Wye)	0.25 mg/l	10 mg/l	Y
Canterbury WTW (Great Stour between A2 and West Stourmouth)	0.25 mg/l	10 mg/l	Y
Charing WTW (Upper Great Stour)	0.25 mg/l	10 mg/l	Y
Chartham WTW (Great Stour between Wye and A2)	0.25 mg/l	10 mg/l	Y
Chilham WTW (Great Stour between Wye and A2)	None	None	N
Good intent cottages Egerton WTW (Upper Great Stour)	None	None	N
Lenham WTW (Upper Great Stour)	0.25 mg/l	10 mg/l	Y
May St (Herne Bay) WTW (Great Stour / Hogwell Sewer & Chislet Stream)	0.25 mg/l	10 mg/l	Y
Nats Lane Brook WTW (Great Stour between Ashford and Wye)	None	None	N
Sellindge WTW (East Stour)	0.25 mg/l	10 mg/l	Y
Westbere WTW (Great Stour between A2 and West Stourmouth)	0.25 mg/l	10 mg/l	Y
Westwell WTW (Upper Great Stour)	None	None	N
Wye WTW (Great Stour between Ashford and Wye)	0.25 mg/l	10 mg/l	Y

* WTW with a Population Equivalent less than 2000 are not considered “Nutrient Significant” under the terms of the LURA, however the Nutrient Neutrality constraints apply to all development within the Stodmarsh SAC catchment, regardless of the neutrality significance of the associated WTW.