
PR24

NORTHUMBRIAN
WATER *living water*

ESSEX & SUFFOLK
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BIORESOURCES TABLE COMMENTARY

NES_COM6



1.	BIO1	3
2.	BIO2	3
3.	BIO3	3
4.	BIO3b	3
5.	BIO4	4
6.	BIO5	4
7.	BIO6	4

1. BIO1

We have no material year-on-year variations, or changes in reporting methods or assumptions. Our forecasts are based on ONS forecasts for population growth.

Methodology to forecast PR24 sludge production (lines BIO1.1 to BIO1.3):

- We have forecast the following year on year % increase, based on ONS population growth forecasts:

2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
0.24%	0.23%	0.21%	0.20%	0.19%	0.17%	0.16%

- We have then included the impact of phosphorus removal schemes within the total forecast volumes. These volumes start to materialise in 2026-27 (matching enhancement schemes) and increase year on year.
- So, our forecast sludge volumes include both growth and additional volume from phosphorus schemes.
- Our forecast for “sewage sludge disposed of by incumbents” assumes that we will continue with our business-as-usual activities with current legislation and regulatory guidance, and that there will be disposal routes available that can manage the forecast volumes. There is still considerable regulatory uncertainty about this, as we outline in our [sludge strategy](#) (NES64) and in lines BIO4.11 and BIO5.10

There are no new technologies at PR24 which will impact on the amount of sludge produced.

2. BIO2

There are no material year-on-year variations, or changes in reporting methods or assumptions. The data is based on our historic costs which we use to estimate future operating expenditure.

3. BIO3

There are no material year-on-year variations, or changes in reporting methods or assumptions. The data is based on our historic energy consumption and costs which we use to estimate future operating expenditure. We already use assets which incorporate 100% of the sludge generated through an AAD process, and so there are no changes for PR24.

4. BIO3B

There are no material year-on-year variations, or changes in reporting methods or assumptions. The data is based on our historic energy consumption and costs which we use to estimate future operating expenditure. We do not expect any changes from ammonia permits at PR24, and (as described for BIO3) there are no changes from our bioresources strategy at PR24.

5. BIO4

Currently, all our sludge is processed through one of our two AAD plants. This model will not change, so this will remain at 100% through the AMP.

There is an unprecedented level of regulatory uncertainty associated with the deployment of biosolids to land across the entire sector which will not be finalised prior to the business plan submission. These uncertainties are associated with pending interpretation by the EA of Farming Rules for Water (FRfW) and the EA Sludge Strategy which will replace the current Sludge Use in Agriculture Regulation (SUiAR). Regulators expected to review this by 2025, and the current likely impact is that we will no longer be able to deploy biosolids in autumn. Currently, around 80% of our biosolids are deployed in this period.

We have therefore applied an 80% reduction from 2025-26 onwards in BIO4.11. There are currently no alternatives at the volumes required. This is a worst case (but possible) scenario, that will only change when the new EA Sludge Strategy has been published and any new interpretation of FRfW has been completed and announced.

Other than this, there are no changes in reporting methods or assumptions.

6. BIO5

There are two material variations:

- Line BIO5.5 to BIO5.9 – this increase is based on our WINEP enhancement programme, see [NES34](#) for details.
- Line BIO5.10 – reduces to 20% as explained in BIO 4 above.

7. BIO6

This table reflects investments set out in our [bioresources enhancement case](#), NES34.