

## 15 Section 15: Errata

This document contains updates to the full documentation that describes the Phase 6 watershed model used in the 2017 Midpoint Assessment. It does not contain the changes requested by the partnership for the milestone updates of CAST-2019, CAST-2021, etc., which are documented separately.

### Section 3.6

The calculation of fixation rate is not clearly stated. Annual pounds fixed is equal to the values in the table, multiplied by a fraction related to the available N. With more available N, less is taken up. Using the soil organic matter as 45, there can never be more than 77% of the values in the table as fixation

The equation is

YearlyNFixLbs =

$$\text{YieldPerAcre} * \text{NFixedPerYieldUnit} * ((98.61 - (0.5107 * (\text{SoilOrganicMatterPlantAvailableNPerAcre} + \text{PANNitrogenApplied/Acres}))) + 0.0008292 * \text{POWER}((\text{SoilOrganicMatterPlantAvailableNPerAcre} + \text{PANNitrogenApplied/Acres}), 2)) / 100 * \text{Acres}$$

SoilOrganicMatterPlantAvailableNPerAcre = 45

Table 3-31: The other haylage; grass silage and greenchop land use now has a fixation value of 30.24

### Section 9.3.2

Due to a coding error, the stream loads downstream of impervious areas have an additional 3/3 rather than 4/3 of the impervious sediment load added to them. The values are specified as integers so 4/3 = 1

### Section 10.9.1

CAST SALs are the same as dynamic model EOPs. Table 10-38 has the SALs and N/A cells reversed. The table should read:

Scale name in dynamic model	Scale name in CAST	Description
Edge of Plot (EOP)	Scenario Average Load (SAL)	Average Load + $\sum(\Delta\text{inputs} * \text{sensitivity})$
Edge of Field (EOF)	N/A	EOP * land-to-water factors
Edge of Stream (EOS)	Edge of Stream (EOS)	EOF with BMP effects other than tidal BMPs
Edge of River (EOR)	Edge of River (EOR)	EOS * stream-to-river factors
Delivered (DEL)	N/A	EOR * river-to-bay factors
BAY	Edge of Tide (EOT)	DEL + tidal BMPs