

1-Page Summary of OVERSEER® Nutrient Budget Input Data Sensitivities

Most Sensitive Inputs In OVERSEER To Changing Nutrient Loss Report Results

- Varies between nutrients and systems and the output being considered.
- In general:
 - Inputs that influence the size of **source** of a nutrient e.g. animal intakes, fertiliser inputs.
 - Inputs that influence the **transport** of a nutrient e.g. soil, drainage, slope, climate.

What Are Some Of The Key Drivers Of N-Loss In OVERSEER?

- Drainage (rainfall, irrigation, soil water holding capacity)
- Animals (intake requirements, numbers, winter grazing, species, gender)
- Effluent management (dairy, pads/animal shelters)
- Fertiliser (type, amount and timing)
- Crops (ex-pasture, cultivation, yield/type e.g. winter crops)
- Imported feed (i.e. supplements)

| Input Variable | Impact on N Loss | Ability to Influence |
|---|--|-----------------------|
| Animal Intakes | Moderate to High Dependent on stocking rate , timings and production levels | Yes |
| Animal Species | Moderate to High | Yes (except on dairy) |
| Gender of Cattle | Moderate | Yes (except on dairy) |
| Wintering Cows Off Farm | Low to Moderate Dependent on the timing, number and how long off farm | Yes |
| Soil Type and Soil Properties and Slope | Moderate (slope) to High | No |
| Rainfall | Moderate to High | No |
| Irrigation Management / System | Moderate to High | Yes |
| Amount of Supplement Imported | Low to Moderate | Yes |
| Type of Supplement Imported | Low to Moderate Dependent on low N v high N supplements use | Yes |
| Effluent Management / System | Low to Moderate to High | Yes (on dairy) |
| Effluent N | Generally a Low to Moderate Dependent on timing and rate | Yes |
| Fertiliser N | Generally a Low to Moderate Dependent on timing and rate | Yes |
| Crops | Low to High Dependent on whether ex-pasture, cultivation practice, crop yield / type and grazing period | Yes |

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