Field Spreading Area Calculations

Hadewij Sint

The Farm Platform database holds information on a range of different field areas, like fenced area, FYM spreading area, inorganic fertilizer spreading area, cutting area, and total hydrological catchment area. The different areas often depend on distance from a feature (e.g. fence or a water course), where these distances are dictated by regulation.

On the Farm Platform the position of the fence line, hedges and water-courses have been determined using GPS RTK (Real time Kinematic) that provides positions with an accuracy within 10 cm. In a GIS, we can create the spreading area polygons by excluding buffer zones around these features, and then snapping to these features.

The Farm Platform is located in a Nitrate Vulnerable Zone, so restrictions apply on the spreading of FYM and inorganic fertilizer, which are as follows:

2m from the centre of a hedge:
- For both organic (FYM) and inorganic fertilizer
  N.B. As the coordinates of the centre of the hedge (which appear to be at least 2m wide) have not been recorded, a buffer of 1m from the fence-line has been used.

2m from the edge of a watercourse:
- Inorganic Fertiliser
  Applied for French Drains and Open Ditches

10m from the edge of a watercourse:
- Organic Fertiliser
  Applied for French Drains and Open Ditches

The area of each resulting polygon is determined and then assigned to the relevant field and inserted in the Farm Platform database.