

## Source-pathway-receptor concept and tick list

- ★ A Catchment Sensitive Farming advisor (CSFA) will use the **Source – Pathway – Receptor** approach to understand the risk of pollution when they come to your farm.
  - **Source:** What is the scale of pollution risk and where is it located? Can the risk be reduced or removed?
  - **Pathway:** How is it reaching the receptor (e.g. watercourse or priority habitat) and what is the distance? Can the pathway be broken or slowed?
  - **Receptor:** How can the watercourse or habitat be protected, or the impacts be mitigated?

### How diffuse pollution can affect drinking water

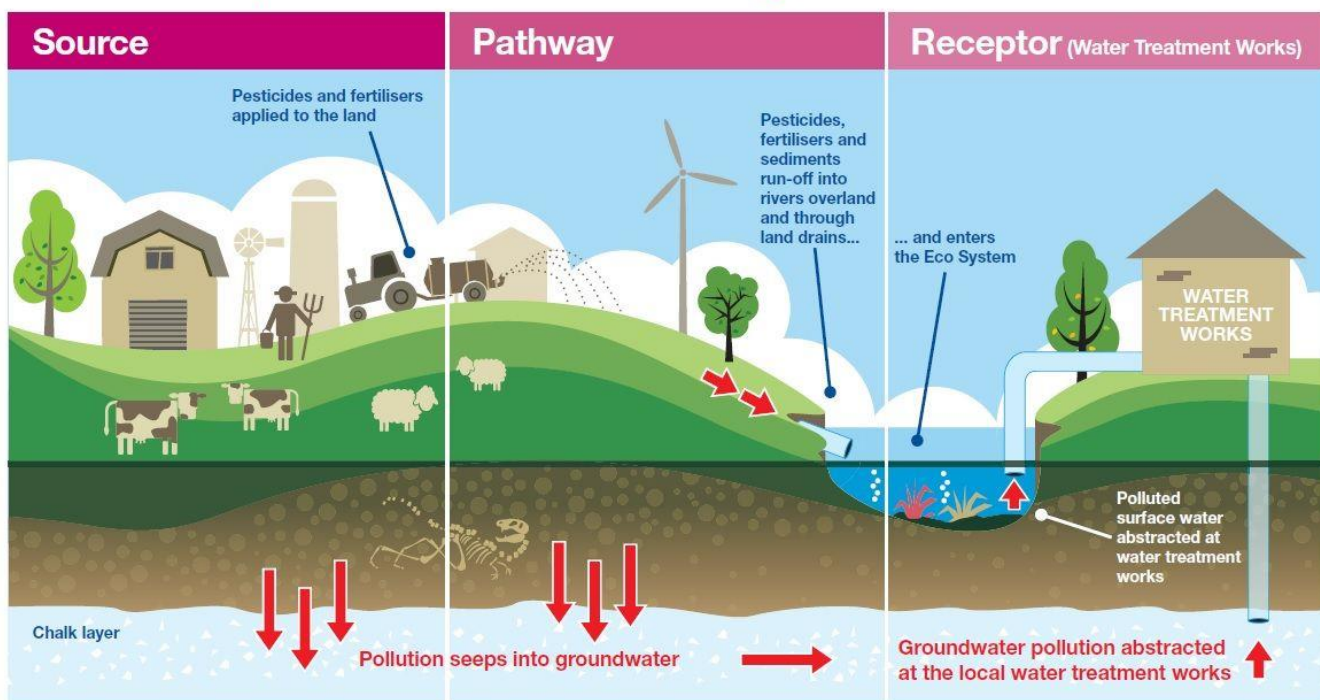


Image provided by Affinity Water

If there is low pollution risk or very indirect connectivity it is likely a CSFA will be unable to support your application. Their priorities include:

1. Land close to ditches, streams and rivers; where there is a high density of standing water bodies or where underdrainage provides a connection to a water body.
2. Farming practices that risk causing agricultural run-off, for example, spring cropping, horticultural crops or intensive livestock.
3. Land at high risk of erosion.

**Also remember the priority will be the named pollutant in your catchment such as sediment, phosphate or nitrate, so check this before your visit on [www.magic.gov.uk](http://www.magic.gov.uk)**

**Source-pathway-receptor - Water pollution risks on the farm**

Source	Pathway	Receptor
<input type="checkbox"/> Field <input type="checkbox"/> Livestock in field <input type="checkbox"/> Pesticide handling area <input type="checkbox"/> Farmyard manure heap <input type="checkbox"/> Slurry store <input type="checkbox"/> Silage clamp <input type="checkbox"/> Livestock building <input type="checkbox"/> Yard area / open livestock yard <input type="checkbox"/> Other .....	<input type="checkbox"/> Drain <input type="checkbox"/> Underground pipe <input type="checkbox"/> Ditch <input type="checkbox"/> Surfaced road/track <input type="checkbox"/> Sloping field <input type="checkbox"/> Other .....	<input type="checkbox"/> Pond <input type="checkbox"/> River/stream/ditch <input type="checkbox"/> Groundwater <input type="checkbox"/> Priority habitat <input type="checkbox"/> Designated site: Site of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) <input type="checkbox"/> Other .....

**How grant funding can reduce this risk - water**

Source	Pathway: Slow it down	Receptor: Protect it
<input type="checkbox"/> Field: Reduce inputs/cover crops/grass ley <input type="checkbox"/> Livestock in field: Fencing, relocate gateway, alternative watering <input type="checkbox"/> Pesticide handling area: Improve <input type="checkbox"/> Farmyard manure heap: Cover <input type="checkbox"/> Silage clamp: Cover <input type="checkbox"/> Yard: Renew concrete, gutters, drains <input type="checkbox"/> Livestock yard: Cover/renew concrete <input type="checkbox"/> Other .....	<input type="checkbox"/> Drain <input type="checkbox"/> Underground pipe <input type="checkbox"/> Surfaced road/track , cross drain <input type="checkbox"/> Sloping field: Improve soil cover: In-field grass strips/ cover crops/ grass ley <input type="checkbox"/> Other .....	<input type="checkbox"/> Surface water course: Buffer strip <input type="checkbox"/> Groundwater: Cover crops <input type="checkbox"/> Designated site: SSSI, SAC: Buffer <input type="checkbox"/> Other .....

Land management options (SFI), water Countryside Stewardship capital items, other Countryside Stewardship capital items

### How grant funding can reduce air pollution risk (ammonia)

For ammonia emissions there are some funded items for reducing emissions within livestock housing, yard areas and slurry stores.

Source	Pathway: Slow it down	Receptor: Protect it
<input type="checkbox"/> Livestock building: Automatic slurry scraper, low ammonia emission flooring for livestock buildings <input type="checkbox"/> Yard area / open livestock yard: Cover <input type="checkbox"/> Slurry store: Cover  <input type="checkbox"/> Other .....	<input type="checkbox"/> Create barrier: Tree shelter belt <input type="checkbox"/> Low emission slurry spreading equipment (dribble bar, trailing shoe, injector)  <input type="checkbox"/> Other .....	<input type="checkbox"/> Surface water course: Buffer strip <input type="checkbox"/> Groundwater: Cover crops <input type="checkbox"/> Designated site: SSSI, SAC: Buffer  <input type="checkbox"/> Other .....

Land management options (SFI), water Countryside Stewardship capital items, other Countryside Stewardship capital items, Farming Equipment and Technology Fund items

Note: These lists are not exhaustive. Other options and capital items may be available for your farm.