Water protection and conservation on farms
Water conservation on farms
Recycle and conserve clean, unused water & Divert to ditch or watercourse

- Carry out visual checks along your private pipework on the farm to detect leaks regularly. Inspect the ground above your pipes for visible signs of leaks such as unusually damp ground, lusher than expected vegetation (sign of recent leak) or reduced community / rush vegetation (consequence of a long-term leak).

- Regularly check all water meters (including remote ones) to identify possible leaks. You can carry out ‘night flow’ tests by taking readings over a set period of time when water usage should be low, and all water using appliances have been switched off. If the night usage is unusually high or the counter is still running when everything is turned off, you may have a leak. To keep track of potential leaks, you can complete these flow tests on a regular basis.

- If you suspect you may have a leak on your pipework, you can shut off sections of your network to assess the change in flow. Wet drains after a period without rain can indicate blockages or water from a leak may be flowing into them.

- Overflowing drinking troughs and incorrectly set or damaged ball-valves can waste significant amounts of water. Adjust the ball valves to lower the float or replace faulty parts. Drain troughs when they are not being used during the winter to avoid frost damage. You can cover the unused trough or turn upside down for frost protection.

- Remember to fix dripping taps and hosepipes around the farm promptly by replacing washers and fix overflows to avoid water wastage.

- Do not leave taps and hosepipes unattended when running or fit automatic shut-off valves. The higher the water pressure, the more water is wasted when a leak develops. Where possible, use control valves at strategic points across your water network.

- You can use dry-cleaning techniques, such as scrapers and brushes to remove solid waste from yards and pens before hosing. You can also use a small amount of water (e.g. one bucket) to pre-soak waste before cleaning.

- On dairy farms, clean plate cooling water can be diverted to a tank and used for parlour washing.

- Rainwater harvested from roofs of farm buildings can be used for a variety of activities, e.g. washing down yards. Consider the level of rain water quality required for specific water uses on the farm (e.g. plant nurseries and field irrigation) and the surfaces and contamination risks before you consider installing appropriate rain water harvesting, treatment (filtration and UV) and storage systems.

- Water your crops efficiently by irrigating at the right time of day to meet crops needs and reduce losses through evaporation; use the correct pump/pipe size, do not irrigate when it is windy and consider irrigating at night to reduce evaporation losses further.

Water protection on farms
Reduce volume of soiled water & Avoid diffuse water pollution

- Reduce or eliminate livestock access to surface waters to avoid contamination and damage to the water environment caused by pollution matter containing animal faeces, nutrients and soil. Destroyed bankside vegetation can also contribute to flooding.

- Sheep, cattle (particularly when lambing or calving) and pigs are a significant source of Cryptosporidium, a parasite that is transmitted via faecal-oral route and can cause severe diarrhoea in humans and animals (Cryptosporidiosis). The risk of Cryptosporidium contamination of water is very high when animals have direct access to water.

- Fence off watercourses in fields regularly used by livestock. Construct crossings for livestock on regularly used watercourses.

- Provide alternative drinking arrangements such as pasture pumps and troughs for livestock.

- Avoid risk of soiled water runoffs to surface waters when placing troughs. Keep troughs 20m away from boreholes and wells, avoid placing them near fissured limestone and prevent poaching.

- Keep soiled water that has been in contact with livestock faeces & urine, silage effluent, chemical fertilisers and washings (from vegetables, milking parlour, mushroom houses and farm equipment) to a minimum.

- Collect organic fertilisers such as slurry, farmyard manure (FYM), spent mushroom compost, sewage sludge, industrial sludge and soiled water. Store securely in leak-proof and structurally sound facilities to avoid run-off or seepage into surface waters or groundwater. Store FYM not less than 50m from any waterbody and 300m from any public water supply scheme (see Farmer’s Handbook for Rural Environment Protection Scheme (REPS); Department of Agriculture and Food).

- Spread chemical fertiliser, pesticides, livestock manure, other organic fertilisers and soiled water in accordance with the relevant regulations. Avoid land spreading during prohibited periods, unsuitable weather conditions (e.g. waterlogged, flooded and frozen land) and keep within overall maximum fertilisation rates for nitrogen and phosphorus.

- Make sure pesticide/fertiliser stores are secure and located more than 10m away from watercourses and/or drains. Do not apply herbicides, pesticides and chemical fertilisers within 1.5m of waterbodies/watercourse.

- During crop production, establish buffer zones alongside all watercourses.