

## Teagasc Notes for week ending Friday 2<sup>nd</sup> July 2021

### Teagasc Notes (Cathal Somers, Teagasc Waterford ASSAP advisor)

The Agricultural Sustainability Support and Advisory programme (ASSAP) is a free and confidential advisory service aimed at improving water quality. There are 7 priority areas for action (PAA's) in Waterford at present. ASSAP advisors are working hard on visiting farms with the agreement of the farmers in the Tay (Kilrossanty), Clodiagh (Rathgormack), Colligan Brickly (Dungarvan), Glenaboy (Tallow) and Cushcam (Dungarvan). The remaining two, John's (south of Waterford city) and Dunhill, will see farm visits before the end of this year.

ASSAP advisors work in collaboration with the Local Authority Waters Programme (LAWPRO). LAWPRO catchment scientists focus on assessing the water quality in tributaries and rivers which are showing evidence of impact from agriculture and are in need of some improvement. LAWPRO provide information to ASSAP advisors, this allows advisors to make more informed decisions when advising farmers in their local area.

Working with farmers to bring about water quality improvements through one to one farm visits has been well received. Farmers are recognising the fact that losses of nutrients to waters are also a financial loss to themselves. More important, is the recognisable shift in mind-set from farming according to a one size fits all approach to an awareness that each farm is unique and the water coming from it is a precious resource that requires careful land, farmyard and nutrient management to protect and improve its water quality status.

In broad terms, the PAA's in Waterford are generally more vulnerable to nitrate (nitrogen) losses down through the soil to groundwater due to the more free draining soils we have in the south east of the country.

However, phosphorus and sediment losses have also been identified in a number of areas as an issue due to the more moderate to poorly draining soils in certain parts of a PAA. This type of loss generally occurs through overland flow across land flowing into open drains and rivers causing water quality issues.

A typical farm visit involves walking the farm with a farmer, discussing the management of the farm and if potential issues are identified, coming up with preventative measures to avoid losses from the farm. During the visit the ASSAP advisor will update the farmer on issues found in their local area, water quality status of the river, soil type on the farm and what nutrient losses need to be targeted. The farmer plays an important role as the knowledge of his/her own farm is vital to identify where nutrient losses can be reduced by careful management. Together a short list of achievable actions are then agreed where the ASSAP advisor helps a farmer come up with tailor made solutions (plan) for their specific farm which will help improve water quality going forward.

The loss of nutrients is often as a result of always doing what was done before, we now know that soil type, soil fertility (P/K/pH) and crop requirements are important management factors to consider in order to reduce losses. Small changes such as better timing of fertiliser and slurry application on the farm in line with crop requirements, growth conditions and weather forecast can go a long way to reducing losses.

Some common land management improvements include allowing targeted drain/stream margins to vegetate (riparian margin) and take up nutrients, acting like a filter to reduce losses via overland flow. Ensuring buffer zones near water are adhered to and fencing bovines out of streams and rivers. On the tillage side of the house, growing catch crops (or green cover) over winter will mop up nutrients, improve soil structure and reduce sediment losses to the water. Avoid late reseeding as the grass may not establish well enough in time for winter and can lead to both nutrient and sediment loss. Common farmyard management improvements include adequate collection and storage of slurry, farmyard manure and effluent, together with ensuring good management and separation of clean water around the yard.

Current advice would be to identify areas on the farm where clover content is good in the sward, as clover can fix a considerable amount of nitrogen from the air this will allow you to reduce your chemical amount nitrogen application rate.

Recently we have noticed an increasing desire amongst farmers to understand more about their role in relation to water quality, so they can implement changes on their farms. Your local ASSAP advisors will hold a number of farmers meetings over the next few months in the Johns, Glenaboy and Dunhill PAA's to inform farmers about the free and confidential advisory service helping farmers to improve water quality in their local area.

