

NRW technical clarification for the Senedd Economy, Trade and Rural Affairs Committee

Review of Control of Agricultural Pollution (Wales) Regulations 2021 (CoAPR)

11 November 2021. For any further points of clarification please contact Mark Squire, Sustainable Water Manager NRW.

Welsh Government (WG) consulted on the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (Wales) Regulations 2010 in 2015 and the Nitrate Pollution Prevention Regulations 2013 (NVZ) during 2016 and introduced The Water Resources (Control of Agricultural Pollution) (Wales) Regulations (CoAPR) on 1st April 2021 with transitional periods in place until 2024.

The introduction of the CoAPR revoked the NVZ regulations immediately and will over time revoke all measures within the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (Wales) Regulations 2010.

CoAPR includes the following measures summarised as:

- set conditions when any fertilising materials may be spread.
- require slurry and silage effluent to be contained
- state the capacity and construction requirements for the storage of organic manures and silage
- set controls for nitrate applications from organic and inorganic fertilising materials
- set limits for total nitrogen loading at farm and field level,
- require a written nitrogen plan and record the amount spread.

Compliance with the CoAPR measures would result in a reduction in a range of pollutants, including nitrates, phosphorous, ammonia and nitrous oxide which impact upon water quality, air quality, climate change and biodiversity.

Nitrates Directive Review of designations

NRW's review, as then required by the Nitrates Directive, was conducted using the published methodologies for surface, ground and eutrophic waters, and recommended designating 8% of the surface area of Wales as a minimum area.

NRW's review was in response to the Nitrates Directive requirements only and did not consider other drivers, such as waterbodies failing to achieve Water Framework Directive (WFD) good status, SAC designated rivers failing their Phosphates (P) targets, sensitive sites exceeding ammonia thresholds etc as these are not included within the methodology.

The former NVZ designation known as the Great Spring was not re-designated in 2013 following a comprehensive inspection programme which identified and carried out enforcement on numerous illegal and environmentally damaging practices relating to organic manure storage and spreading.

NRW understands that Scotland has not re-designated significant areas of NVZ. The publicised methodology takes account of the long-term response to particularly groundwater to measures to reduce nitrate.

It is important to note that establishing reliable trends in nitrate concentrations is difficult over periods of less than 20-30 years because shorter-term variations may reflect climatic variations rather than land management practices

Water quality monitoring is undertaken by NRW for several drivers, the Nitrate Directive being one of them, but other nutrients and substances are monitored for other purposes across Wales.

Slurry separation is used to increase capacity in the slurry store by removal of approximately 20 % of the solid material. The resulting liquid is defined as slurry under the CoAPR and will be subject to the no spreading period when all the measures fully commenced. Use of the solid fraction for animal bedding is subject to other regulations.

Landspreading measures

CoAPR require a field inspection be carried out to ensure conditions are suitable for landspreading the fertilising materials.

Landspreading of any fertilising materials should only take place when soil and weather conditions are appropriate, and when the nutrients contained are required and can be utilised by the crop.

No spread periods and restrictions immediately afterwards

Under the CoAPR Regulation 21 there are restrictions on the volume of slurry that may be applied immediately after the no spreading period for organic manures with high readily available nitrogen.

Also pursuant to CoAPR, farmers are required to comply with other measures including, for example, spreading conditions and crop requirements .

Alternative Measures

Pursuant to the requirements of the regulation 44 " to reduce or prevent water pollution from agricultural sources", Regulation 45 of CoAPR provides the opportunity for anyone to come forward within 18 months of the regulations coming into force with an alternative suite of measures to deliver the outcomes required by these regulations.

NRW understands that any such alternative measures accepted and implemented by WG would also be regulatory not voluntary.

Voluntary measures such as the Codes of Good Agricultural Practice (COGAP), that have been in place for decades, have failed to deliver improved water quality in practice. The CoAPR brings several of the COGAP recommendations within regulation.

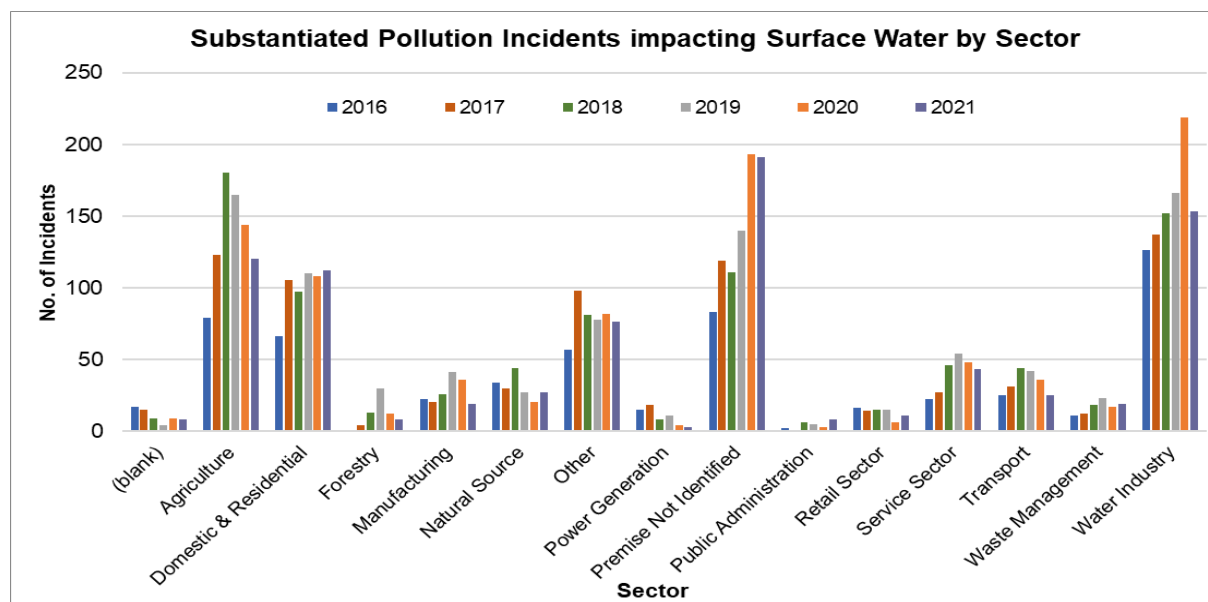
The Wales Land Management Forum Subgroup for Agricultural Pollution commissioned the Water Standard which is still under development and in practice would be a voluntary approach.

Resources

The additional resources required by NRW to deliver CoAPR will be dependent of the level of inspection frequency required by WG. NRW has undertaken calculations and provided WG with indicative figures. Discussions are continuing.

Reported pollution numbers

NRW records reported incidents on the Wales Incident Recorded System (WIRS). The data below is from this system.

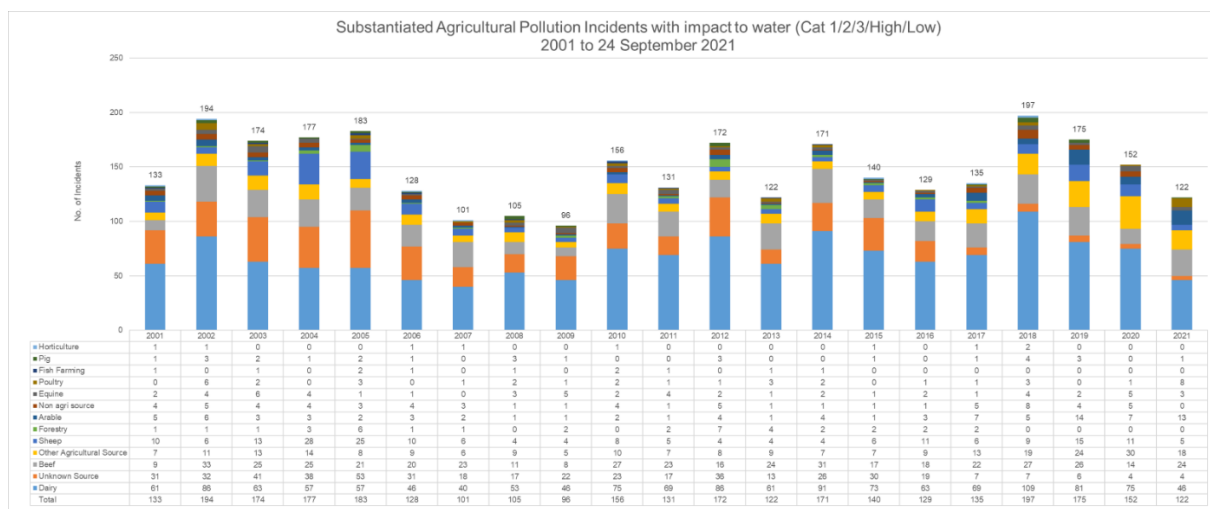


The graph shows the reported and substantiated pollution incidents impacting on surface waters by sector from 2016 until 24th September 2021. The data indicates that the agricultural sector and Water Industry are the biggest contributors to the reported and substantiated pollutions reported to NRW.

A large number of the incidents are classed as Premise Not Identified, this is where the pollution incident has been confirmed by NRW staff, but the source not identified.

Due to the transient nature of some pollution incidents, delays in reporting and other circumstances beyond NRW's control it is not always possible to identify the pollution source. These reports would remain unsubstantiated and do not appear in the graph above.

Water companies are responsible for the self-reporting of pollution incidents to NRW and recorded on WIRS. The majority of water industry incidents are self-reported including those with potential to pollute but may not result in environmental impact. This potential inflation of reported incidents by the water industry should be considered in any comparisons of sector causes.



The graph shows the reported and substantiated agricultural sector pollution incidents to water from 2001 until September 2021. This data is sourced from one of NRW's predecessor organisations, Environment Agency Wales National Incident Recorded System (NIRS) and from NRW's Wales Incident Recorded System (WIRS).

During 2001, 2020 and 2021 data may not be truly representative due to external factors (Foot and Mouth Disease Outbreak and Covid). Data indicates that the majority of the pollution incidents occur from the dairy sector. Since 2018 the data indicates a slight decrease in the number of reported and substantiated agricultural sector pollution incidents.

NRW do not currently have the data to indicate what number of CoAPR related agricultural incidents occurred within the previously designated NVZ areas.

The number of reported and substantiated pollution incidents arise from several sources and causes. However, the vast number of pollution incidents remain unreported as they may not cause a visual impact or be perceived as a pollution incident. The reported pollution incidents tend to be point source incidents where the unreported tend to be diffuse.