

Living next to MHP: Five years of community monitoring reveal worsening water crisis in Ukraine's Vinnytsia region



MHP facilities in Vinnytsia region, Ukraine.

Ecoaction – CEE Bankwatch Network's member group in Ukraine – has been monitoring water quality issues affecting rural communities in the Vinnytsia region for the past five years. We recently conducted the fifth round of water testing in the villages of Olianytsia, Zaozerne and Kleban', where residents are seeking solutions to the environmental and social impacts of mass poultry production by the agricultural giant MHP. Access to safe drinking water remains a pressing issue for the local population and, as the results of our monitoring show, water quality and quantity continue to decline.

Nitrate pollution of water bodies, mainly associated with agricultural sources, has been a long-standing challenge. Efforts to address nitrate pollution in the EU began in the early 1990s with the adoption of the EU Nitrates Directive. Although Ukraine is not yet an EU Member State, European standards and improved environmental governance have been promoted by a number of international institutions,

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including multilateral development banks. These efforts aim to smooth Ukraine's integration into the EU market and ensure the sustainable development of the country's agricultural sector.

MHP's industrial poultry farm in Vinnytsia has received significant financial support from the European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation (IFC). The rapid development of this facility – the largest factory farm of its kind in both Ukraine and Europe – has raised numerous concerns among local residents, activists and non-governmental organisations.

Despite ongoing compliance investigations into their previous investments in MHP, both the EBRD and the IFC continue to approve new loans for their client. Two key questions remain: will the concerns of local communities finally be addressed, and will sustainable solutions for these investment projects be put in place?

Steady increase in nitrate pollution

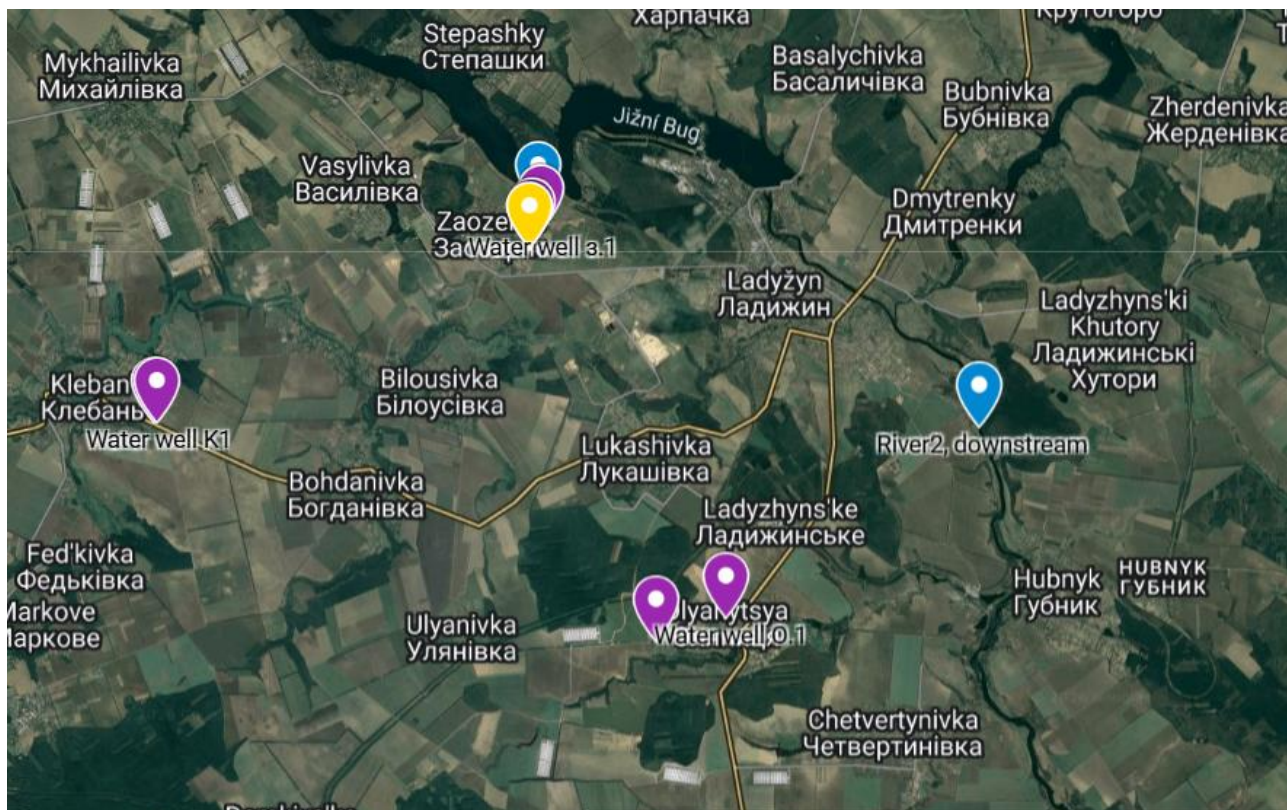
During the spring 2026 testing round in the Vinnytsia region, nitrate levels exceeded safety standards in all seven wells tested, as well as in the local water supply. Our monitoring is the result of a long-term, community-led effort in the villages of Zaozerne, Olianytsia and Kleban'. Since testing first began in 2021, Ecoaction has analysed water samples from these villages on five separate occasions. Most samples from the latest round of testing indicate a marked increase in pollution compared to previous years.

Toxic levels threaten local water supply

Our monitoring initiative began in 2021 with the 'In Search of Clean Water' expedition. A team of activists, supported by local residents, tested the water quality in wells, boreholes and water bodies across 14 rural communities in 10 regions within the Dnipro and Southern Bug river basins. During that initial phase, these villages in the Vinnytsia region set a record for nitrate levels in well water; in almost half of the 16 wells tested then, levels exceeded the safe limit – in some cases by as much as three times.

Since then, we have made this region the focus of our water monitoring efforts. Village wells are often the main source of water for drinking and cooking. Water contaminated with nitrates cannot be distinguished by smell, colour or taste. Families may use this water for years without realising the risk of acute poisoning or long-term health issues, such as circulatory and metabolic disorders, thyroid diseases, and increased cancer risks. For pregnant women and infants, these nitrate levels pose a particularly grave, and sometimes, fatal risk.

Figure 1. Locations of water sampling points in the Vinnytsia region, 2026.



In 2022, following the outbreak of the full-scale war, we were forced to postpone water testing. When we returned in 2023, new analyses revealed a further deterioration in quality. In 10 out of the 14 wells we tested, nitrate levels exceeded safety limits; 6 of these exceeded the 50 mg/l threshold by at least two times. In the most contaminated well, levels reached as high as 190 mg/l.

During our next monitoring exercise in April 2024, we reduced testing to eight wells that had previously shown the worst results or were most actively used by residents. Exceedances were recorded in five of these wells. Notably, all samples except one showed higher nitrate levels than in the previous year, although in most cases the increase was relatively minor.

The analysis carried out in June 2025 covered six wells, five of which again showed levels exceeding the legal limit. Some of the figures were shocking: in one of the wells in Olianytsya, the nitrate concentration reached 555 mg/l – 11 times higher than the maximum safety limit and four times the level recorded in 2024. Another well in Zaozerne reached an unprecedented 274.5 mg/l, almost doubling its 2024 reading.

By March 2026, the situation had deteriorated further. A seventh well was added to the monitoring pool, but the results were unanimous: all seven wells revealed dangerous nitrate levels. The most alarming figures once again originated from the same well in Olianytsya, where nitrate concentrations spiked to a new high of 585 mg/l.

Figure 2. Comparison of nitrate concentrations in selected wells (2021–2026).¹

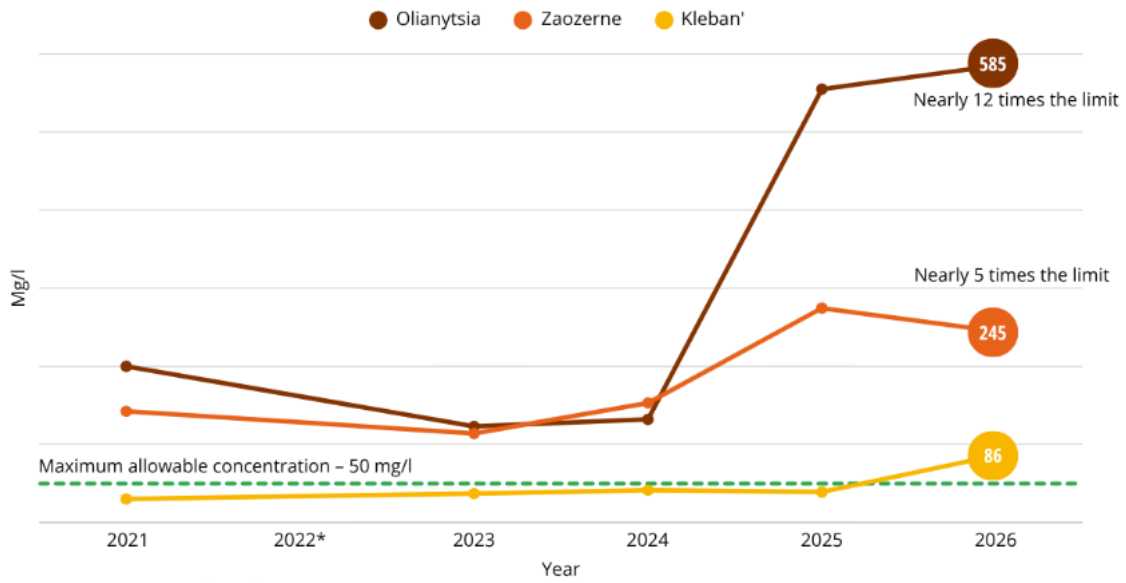
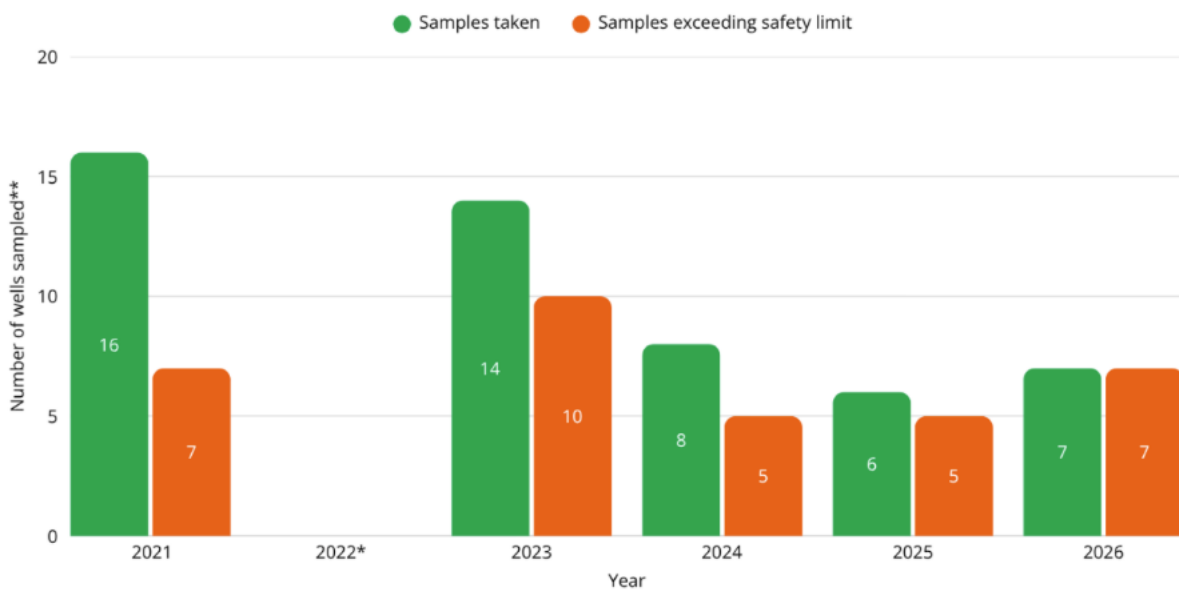


Figure 3. Number of wells analysed in the Vinnytsia region (2021–2026).



¹ Figures 2–4 are based on Ecoaction monitoring data sampled between 2021 and 2026.

Water quality issues go beyond private wells

While our community monitoring initiative focuses primarily on water wells, samples were also collected from boreholes, local water pipelines, and surface water to gain a better understanding of water conditions in the region.

Water from deeper boreholes generally contains significantly lower nitrate levels. However, these sources still require close monitoring. For example, testing of one of the water pipelines in Olianytsia between 2021 and 2025 showed nitrate concentrations of approximately 35 to 40 mg/l. While this is technically within the limit for well water, it remains relatively high for a centralised water supply.

Even more alarming were the 2026 results from Zaozerne. Laboratory analysis of the public water supply revealed nitrate levels of 95 mg/l, which is nearly double the safety limit. This suggests that nitrate contamination is no longer confined to the surface and is likely reaching deeper aquifers.

Analysis of local ponds and rivers, particularly the Southern Bug, further highlights the environmental toll. Testing frequently revealed insufficient dissolved oxygen and excessive chemical oxygen demand. These parameters indicate that the water bodies are struggling to break down an excess of nutrients such as ammonium, nitrates, nitrites and phosphates.

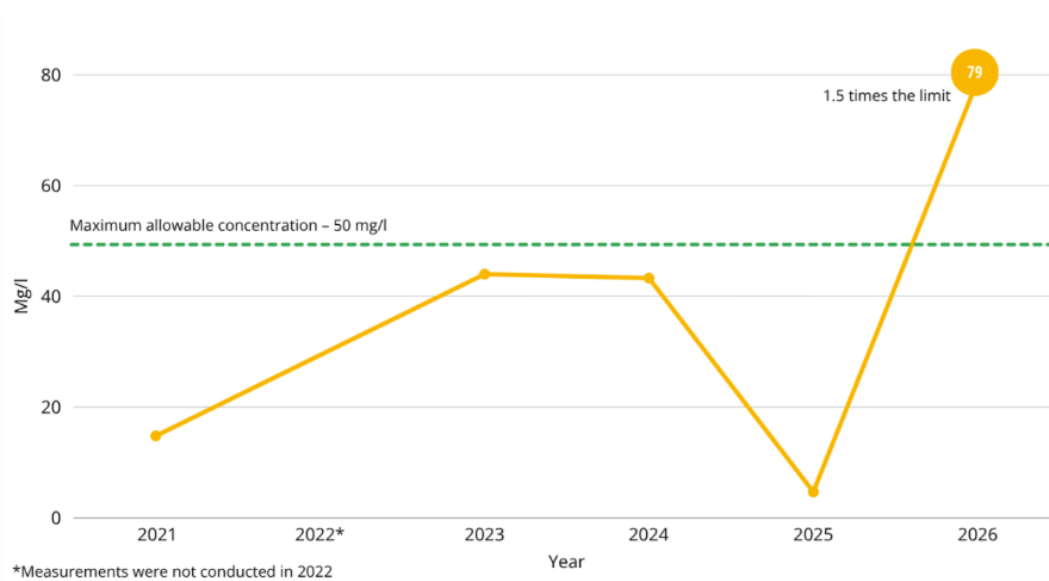
While nutrient concentrations in surface water are typically lower than in groundwater, a sharp spike in ammonium was recorded in spring 2024. During this period, concentrations were 20 to 30 times higher than the norm. Although surface water bodies can recover more quickly than groundwater due to aeration and flow, these seasonal spikes and consistently low oxygen levels confirm a systemic over-saturation of nutrients in the ecosystem.

Local monitoring highlights regional crisis

While this study covers a limited number of wells across three villages, it underscores the necessity of regular and comprehensive water testing. Water quality can vary significantly from village to village.

For example, the well in Kleban' (Figure 1) remained just below the safety threshold for most of the study period and only exceeded the standard this year. In contrast, wells in the neighbouring villages of Zaozerne and Olianytsia were already recording levels hazardous to human health years ago.

Figure 4. Nitrate concentrations in a single well in Olianytsia (2021–2026).



Furthermore, water quality within a single well can fluctuate significantly from year to year. One particular well on the outskirts of Olianytsia exhibited particularly sharp variations in nitrate levels. The 2025 round of testing revealed a nitrate concentration of less than 5 mg/l, which is well within the safety limit, with figures from previous years higher but still within the limit. In 2026, however, the level had surged to a dangerous 79 mg/l.

These findings demonstrate that a positive test result is not a permanent guarantee of safety, reinforcing the need for consistent, long-term monitoring.

Protecting public health from nitrate pollution

To protect populations from nitrate pollution, the EU Nitrates Directive, established in 1991, sets out specific measures to improve water quality by preventing pollution from agricultural nitrate sources. The implementation of this Directive in Ukraine is one of the conditions for EU accession; more importantly, it offers a real opportunity to safeguard the health of local communities.

Nitrates typically enter water systems via agricultural sources. These compounds are found in fertilisers and livestock waste, which can ‘leach’ from fields due to the incorrect application of fertilisers or poorly constructed manure storage facilities.

A core component of the Directive is the Code of Good Agricultural Practice. This set of guidelines helps farmers optimise their fertiliser use, saving them money while preventing excess nutrients from entering water resources.

The Directive also mandates the identification of nitrate vulnerable zones. These are areas where nitrate levels already exceed safety standards or where the risk of pollution is high. Once identified, specific action programmes are adopted within these zones to actively reduce pollution levels.

This is precisely why consistent monitoring is essential, as it helps identify where the severe problems lie and pinpoints exactly where good agricultural practices must be implemented to protect the water table and public health.

Recommendations for the EBRD

In 2024, Bankwatch and Ecoaction – acting as advisors to complainants from the villages of Olianytsia, Zaozerne and Kleban' – received a link via the IFC's Compliance Advisor Ombudsman to an MHP web page intended to disclose relevant environmental information.

This page included water quality data from MHP facilities in the Vinnytsia region dating to 2019. However, this information had not been shared with complainants during the dedicated mediation process involving the company and local residents between 2019 and 2021, despite water access being a central issue in those discussions.

Additionally, the company's internal water testing data is severely limited. It covers only three wells near a single poultry facility (#22) and four near MHP's biogas plant. This represents only 2 of 24 MHP facilities operating across a 30-kilometre radius in the Vinnytsia region. A network of only seven sampling points is entirely unrepresentative of the scale of these operations.

Given these alarming five-year monitoring findings, and in light of the ongoing support provided by the EBRD to its client MHP to expand its operations, we urge the following actions:

- **Commission a cumulative impact assessment:** The EBRD, in cooperation with the client, should commission a comprehensive cumulative impact assessment of MHP's operations on water resources in the Vinnytsia region. This should lead to the development of a corporate-level action plan to implement best EU practice for the prevention of nitrate pollution.
- **Establish a community-led monitoring programme:** The EBRD, in close cooperation with the client, should develop a transparent programme for community-led water monitoring. A representative network of testing sites and consistent data collection are essential for understanding environmental trends and making evidence-based adjustments to corporate practices.
- **Implement remediation and safe infrastructure:** To address existing groundwater contamination, the EBRD, in close cooperation with the client, must develop remedial measures, including the provision of safe drinking water infrastructure. Access must be equitable; currently, many residents still rely on polluted wells because the cost of connecting to, or using, the existing pipeline remains a significant financial burden. Providing infrastructure without ensuring fair access forces the most vulnerable community members to continue consuming hazardous water.

For the full analysis and dataset, see: [Есоaction, П'ять років моніторингу води на Вінниччині показали стабільне зростання нітратного забруднення, April 27, 2026.](#)