EUROSAI Working Group on Environmental Auditing

NEWSLETTER 2/2025

MESSAGE FROM THE CHAIR

Dear Colleagues,

It is with great pleasure that I present you with the second issue of the EUROSAI WGEA Newsletter 2025.

The focus of this issue is on *Climate-Water-Biodiversity Nexus* – a topic that was discussed during the 23rd EUROSAI WGEA Annual Meeting in Bratislava.

Environmental stability relies on the relationship between climate, water and biodiversity. The critical role of protecting those systems, especially biodiversity – gains importance in times of constant change, particularly concerning climate. Climate change, water shortage and biodiversity have been recognised as interrelated crises, and it is becoming increasingly apparent that they all are linked. While climate change is one of the main reasons for biodiversity loss, it also leads to water scarcity, rising temperatures, and increased frequency of extreme weather events. All these issues cause significant disturbances to ecosystems. In parallel, biodiversity decline can intensify climate change and compromise nature's ability to protect itself against severe weather.

Thus, safeguarding the nexus of climate-water-biodiversity is essential for building resilience and adapting effectively. It requires effective measures and policies to preserve natural resources and reach sustainable development goals. Coordinated global and local actions are essential. So is the role of environmental auditing – to ensure understanding of risks, guide actions, and strengthen accountability.

In this EWGEA Newsletter issue, you will read about how SAIs have addressed the topic so far.

We gladly welcome the articles by SAIs of Belgium, France, Greece, Malta, the Netherlands, Serbia, Slovakia, and Poland.

Let me also take this opportunity to appreciate all of you – SAI experts who have contributed to EWGEA sessions and newsletters this year. I am honoured to chair a group of professionals who actively share knowledge and expertise, and care about protecting the Earth.

I am certain that the content presented in this issue will inspire reflections and broaden our perspective on the topic.

Finally, I would like to wish you all a wonderful and joyful New Year 2026 filled with success!

Have a good read!

Yours sincerely,

Mariusz Haładyj

President
Supreme Audit Office of Poland (NIK)
EWGEA Chair

EUROSAI WGEA ACTIVITIES

The year 2025 has been marked by numerous challenges, meaningful engagements, fruitful meetings, and dedicated involvement of all EUROSAI WGEA members in sharing knowledge and expertise. Our group was represented at the Annual Seminar of the International Board of Auditors for NATO, the Working Session of the French Court of Audit on *Measuring environmental performance in the public sector,* 10th ASOSAI WGEA Seminar on Environmental Auditing and the 10th Working Meeting of ASOSAI WGEA on *Solid Waste Management Audit*, and the 23rd INTOSAI WGEA Assembly on *Auditing Our Blue Planet*. We have also continued the series of thematic seminars organised by the group. The Forest Seminar was held to mark International Day of Forests. EEA and FU Berlin experts gave insights into the latest scientific achievements, whereas ECA and SAI Poland auditors elaborated on the recent forest-related audit findings.

The Spring Session, hosted by SAI Poland in Warsaw, was dedicated to *Climate change adaptation and mitigation policies as a challenge for agriculture.* Farming is undoubtedly affected by climate change and unstable weather conditions. Consequently, so is food security. Effective strategies and policies are crucial to help farmers cope with changing conditions and build resilience. SAIs of Croatia, Hungary, Italy, Norway, Poland, UK and ECA shared their audit findings and insights on this essential topic. The challenges faced by countries and SAIs were also discussed.

Climate-Water-Biodiversity Nexus: risks, relations & challenges was the topic of the 23rd EWGEA Annual Meeting, which was hosted by the Supreme Audit Office of Slovak Republic in Bratislava. The Meeting gathered 88 delegates representing the European Court of Auditors, INTOSAI & AFROSAI WGEA and SAIs of 29 EUROSAI WGEA Members. Keynote speakers from Climate Coalition, Slovak Ministry of Environment and Slovak Academy of Sciences highlighted critical issues, whereas representatives of SAIs shared their audit findings. SAIs of Belgium, Czechia, Finland, France, Greece, Malta, Moldova, the Netherlands, Poland, Portugal, Serbia, Slovakia and Tanzania contributed to the session. Strengthening climate change management, ensuring environmental monitoring, sea level rise and coastal flood risk, and ecological transition were among the discussed topics. Participants also exchanged experiences during three workshops moderated by SAIs Slovakia, Poland, and Estonia & Hungary. In the course of the meeting, measures to protect ecosystems and the relationships between them were discussed. Their crucial role in building environmental resilience was underlined. So was the role of environmental audits – evaluating the effectiveness of actions and identifying risks. This issue summarises conclusions of the 23rd EWGEA Annual Meeting.

SAI Poland, EUROSAI WGEA Chair has initiated the international cooperative audit on the adaptation of forest management to climate change. The kick-off meeting was held in NIK's headquarters in Warsaw, on 4th December. SAIs of Albania, Bulgaria, Croatia, Hungary, Latvia, Lithuania, Montenegro, Portugal. Romania, Slovak Republic, Slovenia and Türkiye expressed their interest in joining the initiative. The aim of the audit is to investigate the resilience of forest management to climate change in the respective countries.

So we are ready for 2026! The Spring Session 2026, hosted by SAI Spain, will take place in Madrid, on 21-24 April, so please save the date. The working topic of this session will be *Geospatial data, remote sensing and artificial intelligence in environmental auditing*. The 24th Annual Meeting will be hosted by SAI Hungary. We will keep you posted on the upcoming events and initiatives, so stay tuned!

■ Aneta Modzelewska, Public Audit Expert, EUROSAI WGEA Secretariat Leader, Supreme Audit Office of Poland

COASTAL PROTECTION IN FLANDERS

Despite having a coastline of only 67 km, Flanders is among the most vulnerable regions in Europe to sea flooding, partly due to rising sea levels. The Flemish Government is responsible for ensuring effective coastal protection through sea defences, which include dykes, beaches, dunes, and—specifically for ports—quays, storm walls, locks, and weirs. In light of climate change and rising sea levels, maintaining and strengthening these defences is a critical responsibility.

In this context, the Court of Audit examined two key policy plans: the Coastal Safety Master Plan and the Coastal Vision. It first assessed which objectives and sub-projects of the Coastal Safety Master Plan had been achieved and at what cost. It then evaluated how the Coastal Vision builds upon the Master Plan and to what extent it addresses future challenges such as climate change and increasing flood risks.

The current Coastal Safety Master Plan, which has a time horizon extending to 2050, aims to enhance the safety level of sea defences to protect the coastline against a 1-in-1,000-year storm— an extremely severe storm that statistically has a 1 in 1,000 chance of occurring in a given year. Beyond this basic protection, the plan also seeks to strike a sustainable balance among the various users of the coastal zone and emphasizes public communication and stakeholder engagement.

The study underpinning the Coastal Safety Master Plan began in 2007. A safety assessment revealed that over one-third of the Flemish coast was inadequately protected. Initially, the plan was scheduled for completion by 2015. However, the timeline has been repeatedly adjusted due to delays in preparatory work (such as studies, permits, and stakeholder management) and limitations in regular budget allocations. As a result, ten years after the original deadline, the most vulnerable sections of the coastline remain insufficiently protected, and the Flemish coast is still not safeguarded against a 1-in-1,000-year storm. Moreover, there is no assurance that adequate investment funding will be available annually for the continued implementation and maintenance of the plan. By the end of 2024, the responsible agency estimated that the measures would not be completed before 2029.

In 2009, the Flemish Government initiated the development of a long-term vision for coastal protection extending to 2100. This process faced significant challenges, including uncertainty, public concern, and a lack of stakeholder support. Eventually, between late 2021 and spring 2023, possible alternatives for coastal protection were explored in consultation with stakeholders from various sectors, including ports, tourism, nature conservation, and fisheries. This led to the creation of a draft strategic policy plan—Coastal Vision—in 2024, which proposed preferred alternatives or combinations of alternatives for each beach zone and coastal port. However, as of November 2025, following a public consultation in 2024, the Flemish Government had yet to approve the plan. Consequently, the long-term vision initiated in 2009 has still not been translated into an approved strategic policy framework with concrete, actionable measures.

The publication of the Court of Audit's audit report is planned for the first quarter of 2026.

■ Daphne Vanrysselberghe, Senior auditor, SAI Belgium

PRESENTATION OF THE NEW ANNUAL REPORT ON THE ECOLOGICAL TRANSITION

France publishes its first annual report on the ecological transition

The French Court of Accounts (SAI France) has released its first annual report on the ecological transition. The report provides an independent overview of France's progress in meeting its climate and environmental commitments, assessing both the results achieved and the financial and governance frameworks that support them. It mobilizes all national and regional chambers of the SAI and examines policies through the six priorities of the EU environmental taxonomy.

Methods

The report on the ecological transition mobilizes all chambers of the French SAI network, both national and regional. Interviews and questionnaires were conducted with central government administrations, selected public agencies, local authorities, and representatives of civil society. The analysis covers the six pillars of the European taxonomy (climate change mitigation, adaptation, biodiversity, water, waste, and pollution) through four key perspectives described below.

Commitments

France's international and European commitments on the ecological transition require annual monitoring of their implementation, outcomes, and costs, particularly their impact on public finances. The French SAI aims to contribute to this ongoing assessment. This first annual report on the ecological transition is part of that effort.

Results

Policies supporting the transition are already producing positive results, though these remain fragile and sometimes insufficient. Notable progress has been achieved, for example, in reducing certain air pollutants and greenhouse gas (GHG) emissions, which fell by more than 30% in France between 1990 and 2023. However, 2024 data indicate that these efforts are no longer enough to meet France's climate targets. They must therefore be intensified to stay on track.

Reaching the objective of a 55% reduction in GHG emissions by 2030 and achieving carbon neutrality by 2050 requires consideration of the broader concept of the carbon footprint, including "imported" emissions — those generated during the production of goods consumed in France but manufactured abroad. These imported emissions have increased since 1990, and no reduction targets have yet been defined for them.

Governance and capacity

In response to environmental challenges, local authorities and public administrations are mobilized, supported by an interministerial structure that should now be further strengthened.

Since 2022, the government has relied on the General Secretariat for Ecological Planning (SGPE), attached to the Prime Minister, to establish a coherent and comprehensive roadmap for the low-carbon transition, to facilitate interministerial coordination and to monitor progress achieved.

Since 2020, the State budget has been analyzed through the lens of its environmental impact. This analysis, useful and gradually refined, is presented annually in a report appended to the draft finance bill. However, this classification of expenditures does not yet provide a medium-term financial trajectory for implementing the ecological transition, nor does it allow for assessing the gap between planned and actual resources. An environmental assessment of local authorities budgets has been implemented since last year's budget.

Financing

The multiannual strategy for financing the ecological transition (Spafte) aims to guide investment in support of the transition. It identifies an additional investment need of around €110 billion in 2030 compared with 2021. These financial requirements must be more precisely assessed, and the use of various financing instruments better defined.

Two key aspects must guide the targeting of public financial support: the profitability of green investments and the capacity of households and businesses to undertake them.

- Florian Mante, Conseiller référendaire en service extraordinaire, SAI France

EVALUATING RECOURSE MANAGEMENT POLICIES IN TIMES OF WATER SCARCITY

Addressing water supply needs, especially of urban regions, proves not to be an easy task. Water resource management is one of the greatest challenges due to the phenomenon of water scarcity, which is constantly worsening as a result of climate change. In Greece, despite the existence of water reserves, their uneven distribution in space and time, combined with increasing demand and rapid tourist development, makes sustainable water management in all sectors imperative. In this context, meeting the water supply needs of island regions by installing desalination units was the reason for including a thematic audit in the 2021 annual audit program of the Hellenic Court of Audit, which was completed in the same year with the publication of Special Report 5/221. The purpose of the audit was to investigate the performance of desalination units in 7 Greek islands and island groups under normal operating conditions, especially during the years 2019-2020, and the existence or absence of the necessary safeguards to ensure the best possible results. Furthermore, one of the factors that significantly affect water availability is the losses that occur in the transmission and distribution networks. In this context, a performance audit has been included in the 2025 current annual audit program of the Court, which will focus on losses from water supply and irrigation networks, both internal and external. The aim of this audit will be both to identify malfunctions and to highlight good practices in the management of these networks.

Regarding desalination units the audit conducted by the Hellenic Court of Audit revealed that some of the auditees do not implement reliable measurement systems and, as a result, do not have a clear picture of desalinated water produced by the units under their responsibility. The lack of automated telemetry and remote monitoring systems for the operation of desalination units undermines the reliability of the data that must be ensured by the competent water supply operator. In addition, the issue of extensive water losses from distribution networks has not been addressed, resulting in the loss of valuable quantities of water. The exact rates are either unknown, particularly in cases where there is insufficient knowledge of the quantities of water fed into the network concerned, or are calculated entirely on an approximate basis, also due to insufficient knowledge of the amount of water produced and supplied to the network from other water sources, or remain at high levels. It has also been shown that, while the quality parameters of the water leaving the desalination units are monitored, the mechanisms for monitoring the suitability of the water supplied to the end consumer are not fully implemented. This is because this water is not supplied to consumers directly from the unit outlet, but either passes through distribution networks or, in some areas, through transport tanks and is then stored in domestic tanks.

Water losses from distribution networks are either real (leaks in transmission and distribution pipes, overflowing storage tanks, leaks in consumer connections) or apparent (such as errors in measuring water consumption or illegal connections). Assessing the effectiveness of measures taken to reduce losses in water management in distribution networks, the main questions that need to be answered are

whether the auditees have sufficient knowledge of the characteristics and condition of the networks under their responsibility, whether they implement effective network monitoring, control and maintenance programs, whether the operators are taking the necessary steps to repair and upgrade the networks and whether they take adequate measures to identify, analyze and limit apparent water losses. In particular, it shall be examined whether apparent losses are measured, by what method and at what rate, whether it is ensured that the measuring devices are functioning correctly so as not to underestimate consumption, whether unusual consumption is detected and what measures are taken to detect and eliminate illegal connections.

Water scarcity may be a burning issue for today's living. The identification of factors that lead to its emergence can be a complex task for scientists and possibly an ever harder for auditors. The evaluation (in terms of economy, efficiency and effectiveness) of any policies adopted by the authorities to address it shall be, instead, the common denominator of environmental audits conducted by SAIs.

- Nikolaos Gardelakis, Judge Rapporteur, SAI Greece

EUROSAI WORKING GROUP ON ENVIRONMENTAL AUDITING DISCUSSED LINKS BETWEEN CLIMATE, WATER AND BIODIVERSITY

The EUROSAI Working Group on Environmental Auditing (WGEA) held its annual meeting on 7–9 October 2025 in Bratislava, focusing on the interconnections between climate, water, and biodiversity – their risks, relationships, and challenges.

Following the plenary sessions, participants engaged in three thematic workshops. One of them – "Auditing the Protection of Natural Waters (Wetlands and Groundwater)" – was jointly moderated by representatives of the National Audit Office of Estonia and the State Audit Office of Hungary.

During the discussions, participants highlighted that water is a vital issue affecting all areas of life. It lies at the heart of sustainable development and is essential for socio-economic progress, energy and food production, healthy ecosystems, and human survival. It was noted that many previous audits had already touched upon water-related aspects. Representatives from nine supreme audit institutions shared their experiences and ongoing preparations for related audits.

The discussions also covered the importance of wetlands, waterbodies, and groundwater, international and EU objectives in the water sector, as well as related risks, challenges, and good practices. Special attention was given to the EU Nature Restoration Regulation.

Workshop participants proposed several potential topics for future auditing activities related to natural waters and wetlands:

- Study on restoration targets for wetlands
- Audit on water quality (groundwater, drinking water)
- Study on the role of wetlands as carbon sinks
- Assessment of groundwater use for households (e.g. quality of pipelines).

■ Tuuli Rasso, Auditor, SAI Estonia & Júlia Szappanos, Audit Manager, SAI Hungary

GLOBAL COOPERATION, LOCAL COMMITMENT: AUDITING CLIMATE CHANGE ADAPTATION ACTION IN MALTA

Faced with more frequent extreme weather events and climate change risks, the National Audit Office (NAO) of Malta joined the Global Cooperative Audit on Climate Change Adaptation Action. Such contribution was both timely and strategic in view of Malta's geographical specificities as well as the current work being undertaken by our colleagues through SAIs worldwide.

For this global audit, the NAO Malta mainly focused on Adaptation to the hazards caused by flooding incidents as well as sea level rise as a slow-onset event. Our performance audit report, titled *Climate Change Adaptation – Evaluating Malta's efforts relating to flooding and sea level rise* (accessible here), published in June 2025, assessed the comprehensiveness of vulnerability and risk assessments, the relevance of the governance framework, the existence and implementation of sectoral plans, the robustness of monitoring mechanisms, and the estimated costs of both inaction and adaptation to climate change.

The enactment of the 2024 Climate Action Act was pivotal for Malta, establishing the Climate Action Authority and the expert-driven National Climate Action Council to guide strategic decisions. Ministries now engage more effectively through designated high-level Coordinators to ensure better cross-governmental engagement, while EU-funded projects have helped strengthen the operational framework.

Our review also highlighted that the Maltese Government's first comprehensive economy-wide climate Vulnerability and Risk Assessment (VRA), despite the delays experienced primarily due to data gaps, represents the first comprehensive analysis of the interplay between climate impacts and socioeconomic realities in the country. This will serve as an essential foundation for the Climate Action Authority in developing the forthcoming National Adaptation Plan. Additionally, Government will incorporate updated population figures in the next cycle of the Flood Risk Management Plan, allowing for more accurate identification of vulnerable communities and better-targeted flood prevention measures. These improvements reflect a more data-driven and inclusive approach to climate planning, directly addressing gaps identified during this performance audit.

The NAO's audit recommends strengthening adaptation planning through hazard-specific and sector-specific measures, supported by clear responsibilities, timelines, and key performance indicators, underpinned by reliable data. Addressing data and knowledge gaps will be vital to improving the quality of risk assessments, while the timely completion of future sectoral VRAs will better inform policy. More detailed adaptation plans with SMART performance measures, alongside the adoption of the National Strategic Framework for Coastal Protection and Adaptation, will further enhance resilience to flooding and sea level rise. While climate finance has increased, it may still fall short of

actual needs, highlighting the urgency for further analysis to bridge the funding gap. Such efforts are essential to ensure that future budgets better align with actual investment needs.

Encouragingly, this performance audit has elevated national awareness and fostered collaboration across sectors. One key insight: while sea level rise unfolds gradually, flooding demands immediate, coordinated action; especially through broader stakeholder engagement including from the private sector.

In conclusion, this international initiative marked a pivotal milestone for NAO Malta, offering a valuable opportunity to enhance our internal capabilities through targeted training while engaging meaningfully with peer organisations on climate-related matters. This experience has sharpened our ability to assess climate change adaptation action, thanks to expert guidance, interactive training, and tailored auditing tools. It also offered a dynamic platform for exchanging best practices, allowing our Office to stay attuned to emerging trends and innovative approaches in climate action. We are grateful to IDI and INTOSAI WGEA for their outstanding work. Moving forward, we remain committed to sharing insights, applying proven methods, and supporting continued collaboration. These efforts are vital to building a climate-resilient society, locally and globally.

- Maria Azzopardi, Manager, Performance Audit, SAI Malta

ADDRESSING WATER LOSSES AND ENHANCING INFRASTRUCTURE FOR A SUSTAINABLE FUTURE

Among the goals for sustainable development included in the 2030 Agenda of the United Nations Agenda, Goal 6 aims to ensure universal access to water and sanitation for all, through specific indicators. The United Nations World Water Development Report 2024 highlights that none of the targets of Goal 6 are on track for achievement. That's why the Audit Chamber for European and International Affairs of the Italian Corte dei conti has carried out a survey on this matter, which was completed in 2025.

It is estimated that the volume of water withdrawn for drinking purposes in Italy in 2022 exceeded 9 billion cubic metres per year, with a daily withdrawal of 25 million cubic metres. However, the volume supplied corresponded to half (4.6 billion cubic metres) of the withdrawal, due to losses in the purification process (1 billion cubic metres), but, above all, to the inefficiency of distribution, in which about 40% of the quantity fed into the network is wasted (3.4 billion cubic metres).

The Corte dei conti has therefore recommended the following measures.

Firstly, it is essential to complete the transition to integrated service management, which involves assigning water supply, purification and sewerage services to a single operator. In fact, inefficiencies have been identified due to the fragmentation of responsibilities in day-to-day management, as well as a lack of investment in infrastructure: investment capacity has only increased in areas contracted to a single operator.

It is also necessary to coordinate actions aimed at diversifying supply sources in order to meet the growing demand for water resources and the consequences of climate change, with particular attention to the agricultural sector, which is heavily affected by extreme water-related events.

Finally, it is crucial to ensure an adequate tariff system not only to cover operating costs but also to enable investments aimed at improving the infrastructure system and the service as a whole.

■ Giuseppe Maria Mezzapesa, Councillor, Italian Court of Auditors

DRINKING WATER UNDER PRESSURE

Drinking water consumption in the Netherlands is increasing. Demand is being driven by economic activity, population growth and climate change. Supply, however, can no longer be taken for granted. Since 2022, dozens of companies have had their applications for a water connection rejected. The National Institute for Public Health and the Environment (RIVM) warned that the Netherlands would need 102 million m^3 more drinking water in 2030 than in 2020 (RIVM, 2023). The Minister of Infrastructure and Water Management (I&W) is responsible for drinking water security and has taken several initiatives, including water saving measures, to secure an adequate supply.

The Minister of I&W has set a target for household drinking water consumption of 100 litres per person per day. The target for business consumers is a 20% reduction relative to 2016-2019. Households currently account for most drinking water consumption (72% in 2021). Household consumption has fallen in recent years, but business consumption has risen (see figure 1 and 2).

Audit conclusion: Meeting reduction targets is doubtful

In our audit, we analysed the underpinnings of the minister's policy and the plausibility that targets will be achieved. We found that it is doubtful that the minister's targets to reduce household and business drinking water consumption will be met. The urgency for reducing drinking water use among consumers is low and a modest price increase will likely not reduce consumption. The minister is currently studying technical measures but compulsory implementation will be a long process. Efficiency measures are making slow progress. Drinking water savings are difficult to achieve among households and the minister does not know which measures will be effective for business users. Furthermore, no information is available on the consequences of drinking water shortages.

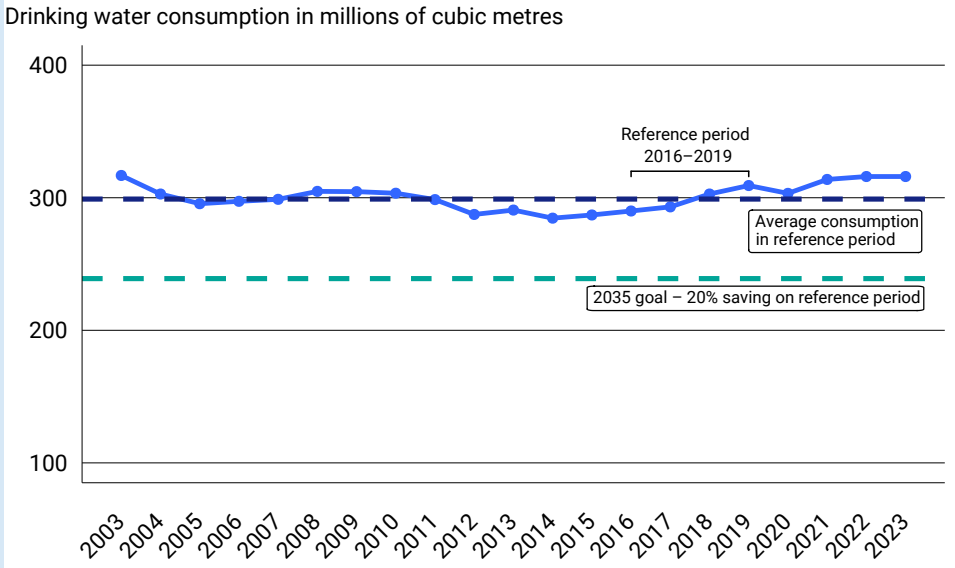
Recommendations

The NCA recommends that the minister facilitate a change in behaviour by making citizens and businesses more aware of the urgency of a drinking water shortage. He should also deepen his understanding of how businesses use drinking water. It would then be clear which measures will be effective. The minister should further gain more information on the potential consequences of drinking water shortages and so improve insight into, for instance, the consequences for housebuilding.

For the full report in English, see: https://english.rekenkamer.nl/documents/2025/05/13/drinking-water-under-pressure

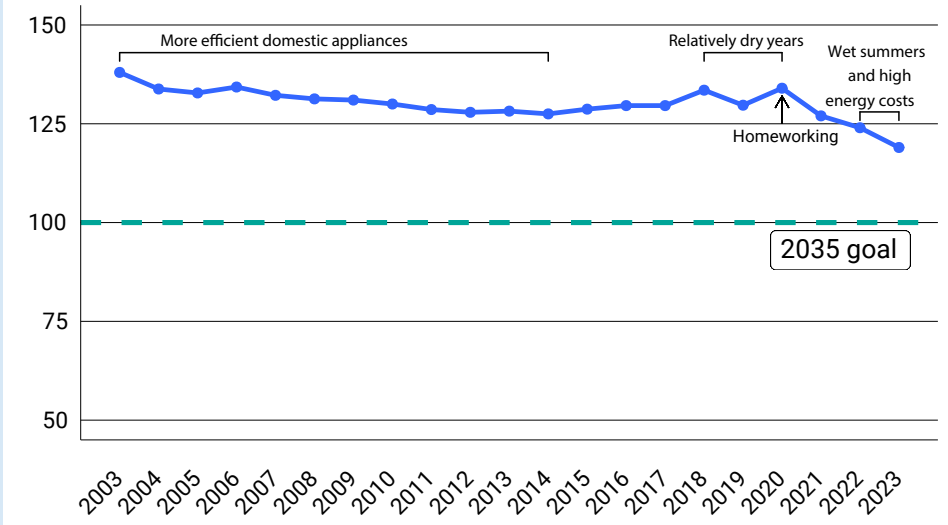
■ Marieke van der Hoek, Researcher, SAI Netherlands

Business drinking water consumption in millions of cubic metres per annum 2003-2023



Source: Statistics Netherlands and Vewin

Household drinking water consumption in litres per person per day 2003-2023



Source: CBS and Vewin

STATE NATURE MONITORING IN POLAND: AUDIT RESULTS AND RECOMMENDATIONS

Introduction

Monitoring the state of nature is a cornerstone of biodiversity conservation and a legal obligation under European Union directives, including the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC). In Poland, this obligation is embedded in the national Nature Conservation Act (Article 112), which stipulates that nature monitoring involves observing and assessing the condition and changes in biodiversity components, including habitat types and species of Community interest, with particular attention to priority habitats and species, as well as evaluating the effectiveness of conservation measures. Poland's State Environmental Monitoring (SEM) program is designed to collect data on species and habitats, enabling informed policy decisions and compliance with EU reporting requirements. However, a recent audit by the Supreme Audit Office (NIK) revealed systemic weaknesses that undermine the effectiveness of this program.

Audit Findings

The audit, covering the period 2013–2023, identified significant shortcomings in planning, implementation, and oversight:

- **Incomplete Monitoring Scope**
  Despite rising expenditures – from PLN 49.5 million in 2013 to PLN 109.5 million in 2023 – the monitoring program failed to cover all species and habitats required by national law. Between 2013 and 2018, 27% of bird species and 24% of other fauna listed by the European Commission were omitted. In 2019–2023, gaps persisted, with 23% of birds and 42% of other species unmonitored.
- **Deficient Planning and Methodology**
  The Chief Inspectorate for Environmental Protection (GIOŚ) did not prepare detailed schedules or measurable objectives. Monitoring plans lacked clear indicators and timelines, limiting accountability and progress tracking.
- **Weak Oversight and Contract Management**
  Contracts with external contractors contained loopholes, and penalties for delays or non-compliance were rarely enforced, resulting in financial losses exceeding PLN 1 million. Moreover, some data accepted by GIOŚ did not meet methodological standards.
- **Reporting Delays and EU Compliance Risks**
  Poland failed to submit timely and complete reports to the European Commission, exposing to risk its ability to demonstrate compliance with conservation obligations.

- **Financial Control Issues**
  The National Fund for Environmental Protection and Water Management (NFOŚiGW) lacked sufficient data to verify the proper use of advance payments.

Consequences

These deficiencies compromise Poland's ability to protect biodiversity effectively and expose the country to reputational and financial risks, including potential EU procedures. Incomplete data also inhibit scientific research and policy-making, weakening the foundation for sustainable development.

Recommendations

NIK issued several recommendations to address these systemic issues:

- **Scope of SEM**
  Ensure all species and habitats required under EU directives and national law are included in monitoring programs.

2. **Improve Planning and Accountability**

Ensuring proper planning and implementation of nature monitoring, to the full extent specified in Article 112, paragraph 2 of the national Nature Conservation Act.

3. **Strengthen Oversight and Enforcement**
   Strengthening oversight of nature monitoring planning by regulating the exchange of information between public administration bodies keeping registers and lists containing data on the monitoring of species and natural habitats.

4. **Enhance Reporting and Transparency**
   Establishing a procedure for processing reports for the years 2019–2024 under Article 12 of the Birds Directive and Article 17, paragraph 1 of the Habitats Directive in a manner that ensures their timely and reliable preparation.

5. **Ensure Financial Integrity**
   Reliable outsourcing of nature monitoring tasks to external contractors and reliable oversight of their performance.

Conclusion

Effective nature monitoring is not merely a technical exercise—it is a strategic tool for safeguarding biodiversity and meeting international commitments. Implementing NIK's recommendations will require coordinated action by environmental authorities, scientific institutions, and funding bodies. Failure to act risks further degradation of ecosystems and potential sanctions from the European Union.

■ Małgorzata Ochorok-Jedynak, Senior Public Audit Expert, Supreme Audit Office of Poland

PERFORMANCE AUDIT OF PUBLICLY OWNED IRRIGATION SYSTEMS IN THE REPUBLIC OF SERBIA

The State Audit Institution of the Republic of Serbia conducted performance audit on the management of publicly owned irrigation systems, for the period 2021–2024. The audit assessed whether competent authorities and public water management enterprises efficiently manage publicly owned irrigation systems to meet the objectives of Serbia's Water Management Strategy until 2034 and support stable, sustainable agricultural production.

Serbia currently irrigates only about two percent of its arable land, which is a very low percentage compared to many European countries (for example, Greece irrigates around 70% of its arable land, the Netherlands about 50%, while Italy, Spain, and Portugal each exceed 30%, according to FAO statistics). Even countries with less extensive irrigation, such as Austria with around 7% and Slovakia with about 4%, still have higher coverage than Serbia. To ensure sustainable agricultural production and strengthen resilience to climate change, the Water Management Strategy of the Republic of Serbia sets the goal of expanding irrigation to 250,000–350,000 hectares by 2034. However, despite 33 irrigation projects launched since 2017 and more than 58 million euros invested between 2021 and 2024, progress remains limited.

The pumping station is not operational due to the lack of electricity.

The audit found that although some improvements were made, such as increased water availability on certain agricultural lands and partial upgrades to irrigation infrastructure, the overall expansion of irrigated areas remains far below targets. Only 74,500 hectares were irrigated in 2024, compared to the planned 160,000 hectares. A major factor behind this shortfall is the delay in constructing, reconstructing, and rehabilitating irrigation systems. In many cases, technical acceptance was incomplete, usage permits were not obtained, or supporting infrastructure such as electricity connections was missing. Planning weaknesses also hindered progress. Key public policy documents were not adopted or harmonized on time, including the Action Plan for the Water Management Strategy and the Irrigation Programme. The Irrigation Strategy, supported by a 1.2-million-euro grant, remains in draft form. Additionally, regulations defining irrigation water quality have not been established, creating risks for soil protection, crop yields, and public health. The audit further revealed that the Republic Water Directorate has not yet established a unified Water Information System, resulting in incomplete and unreliable data on irrigation facilities. Public water management enterprises also lack comprehensive records, as many canals and pumping stations have not been entered into the official registry. Moreover, some irrigation systems have not been formally transferred to public enterprises due to poor physical condition or missing documentation.

The State Audit Institution concluded that ineffective management and delays in planning threaten Serbia's ability to achieve its irrigation objectives for 2034. To address these issues, the audit recommended the adoption of planning documents, accelerated implementation of infrastructure projects, and the establishment of complete and reliable records of irrigation systems.

- Đurđa Kovačević, Audit Team Leader, SAI Serbia

THE AUDIT OF SELECTED SLOVAK WATER UTILITY COMPANIES

Strengthening water resilience and improving water infrastructure are key preconditions for achieving the United Nations Sustainable Development Goal 6, aimed at ensuring the availability and sustainable management of water and sanitation for all by 2030. This goal includes specific targets focusing on universal access to safe drinking water and sanitation, improved water quality through pollution reduction, increased wastewater treatment and reuse, and expanded international cooperation on water and sanitation initiatives. Meeting these objectives is inherently dependent on the systematic renewal, development, and efficient management of water infrastructure.

In 2024, the Supreme Audit Office of the Slovak Republic (SAO SR) conducted an audit of selected Slovak water utility companies, focusing on the implementation of strategic goals related to the renewal and development of public water supply systems and public sewerage infrastructure in accordance with the national legislation, during the period 2021–2023. The audit also examined the role of the Regulatory Office for Network Industries (URSO), as the sectoral regulator and considered its responsibilities in strategic planning and oversight. This assessment followed previous SAO SR audits from 2019 and 2021, which had already identified deficiencies in the financing mechanisms and high investment debt of nine major utilities.

The audit highlighted several systemic and regulatory shortcomings. The implementation of sectoral legislation, particularly Act No. 442/2002 on Public Water Supply and Sewerage Systems, is unclear and lacks definitions of fundamental terms. Sectoral supervision and governance are fragmented across multiple ministries and other entities, with no single institution taking responsibility for activities in the public interest. Several conceptual and strategic documents only quantify the need for investments in infrastructure, without the real allocation of funds and applicable methodology. Of the estimated €5.66 billion needed for renewal and development of infrastructure by 2027, only €166 million was invested by the audited utilities, representing 7% of the financial requirements. Water losses ranged from 25–33%, while the average physical depreciation of infrastructure reached approximately 50%. Out of €470 million planned for renewal of audited utilities, only €78 million (17%) was actually implemented. In numerous cases, assets transferred from municipalities to water utilities entered into accounting records at a symbolic value of €1, which prevented the creation of special-purpose financial reserves. Despite insufficient resources for renewal, three of the audited utilities paid dividends and royalties to shareholders and other parties amounting to millions of euros.

In view of the findings, the SAO SR recommended that the Government of the Slovak Republic instruct the Ministry of Environment of the Slovak Republic to take measures and implement solutions, specifically, to consider the definition of the legal status of water utility companies in the commercial law, systematically analyse and evaluate the performance of water utilities, monitor mission fulfilment, report and inform regularly about key indicators, and actively use the results in the creation and development of regulatory policy. Following the audit, the National Council of the SR in 2025 approved an amendment to Act No. 442/2002 on Public Water Supply and Sewerage Systems, incorporating several SAO SR recommendations, including clearer definitions of key terms and the obligation to use the special-purpose financial reserves exclusively for infrastructure renewal. The regulator URSO introduced a new two-part tariff system for water and wastewater pricing, consisting of fixed and variable charges. The impact confirms that independent audits can contribute to legislative changes, ensuring transparency, enhancing accountability, and supporting the sustainability and resilience of Slovakia's water sector.

■ Andrea Boháčiková, Auditor, SAI Slovak Republic

WORKSHOP "AUDIT PLAN FOR BIODIVERSITY NEXUS AUDITS" – 23 EWGEA ANNUAL MEETING 2025

I was very pleased to have the opportunity to moderate the workshop "Audit Plan for Biodiversity NEXUS Audits" held as part of the 23rd EWGEA Annual Meeting on topic "Climate-Water-Biodiversity Nexus: risks, relations & challenges" in Bratislava, Slovakia, from 7–10 October 2025.

The specific aim of the workshop was to simulate among the participants the development of an audit plan focused on Biodiversity NEXUS. The motivation for the workshop was the concept of interlinkages between climate change, its impact on hydrological regimes, and the synergistic effects on biodiversity which was in line with the topic of the 23rd EWGEA Annual Meeting. Valuable advantage in designing the workshop program was the inspiration drawn from existing outputs by INTOSAI WGEA project "Climate and Biodiversity," particularly the "potential audit subjects" published in the "Snap Shots Nexus Area Climate & Biodiversity," which were used to formulate the workshop assignment.

The methodological basis served for the assignment was primarily the ISSAI 300 Performance Audit Standards, ISSAI 3000 Performance Audit Standards, and selected procedures from ISAM by IDI.

Workshop Process:

Participants began with a brainstorming session to recap the need to define the main components of planning a specific audit, such as the audit objective, subject matter (what to audit), audit scope, audit criteria, and selection of prospective auditees.

Participants were divided into two groups based on subject matter:

- **Invasive Species**
- **Climate Change Mitigation & Adaptation**

Each group developed preliminary versions of planning tools they were "RACI Analysis Template" and "Stakeholder Analysis Template." Herewith participants identified key stakeholders in the field as a basis for selecting future auditees.

Challenges and Outcomes:

The original intention was to proceed with the creation of an Audit Design Matrix too including the definition of specific criteria alongside with the audit objective/objectives. However, this proved unrealistic ambition within the given time frame. Nevertheless, the most valuable takeaway from the workshop was the stimulation of discussion around a complex approach to auditing and reinforcing the understanding of planning a comprehensive audit on a multifaceted topic. Since climate change and biodiversity are mutually influential, it is essential that governments and their competent institutions implement biodiversity protection and climate policy for achievement the targets in adaptation and mitigation in an integrated manner. Accordingly, audits of these policies by individual Supreme Audit Institutions should also be designed and conducted in a comprehensive and integrated way.

- Vladimír Maťuš, Audit Quality Manager, SAI Slovak Republic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