

Recording the pressures on the water resources: Who pollutes the waters in Macedonia?

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Summary

The existence of information system on water permits issued, the degree of water pollution and identification of pollutions sources should be the basis for the Ministry of Environment and Physical Planning (MoEPP) in pursuing a sustainable water policy. The degree of harmful impact cannot be determined in the absence of full records of users and water polluters, so each administrative measure adopted by the MoEPP is ad hoc. Anyone can discharge harmful and dangerous substances without a permit, can pollute and not be subject to sanctions for illegal actions. According to the State Statistical Office, the wastewater from industry and mining is discharged untreated directly into soil, sewage, watercourses, reservoirs or lakes. Even the public utilities discharge wastewater into natural watercourses without treatment. The percentage of permits issued for water use and for discharge is low. The existence of water permit records, a registry of harmful substances discharged into the waters and a Cadastre for their sources will enable the competent authorities to monitor whether the permit holders act in accordance with them, to identify the entities that illegally and without permission use or discharge into waters and to sanction and prevent such illegal practice of water degradation. It will also contribute to transparency and public participation in the decision-making process in relation to water.

Recommendations

- Implement measures for consistent implementation of the Law on Waters;
- Establish Water Ledger and Cadaster of pollutants and provide system for collection/ submission of data relevant for water management;
- Expand the manner of establishment and updating of the information system on waters, including the manner and format of maintaining and collecting incoming data on the Cadaster of pollutants, including their proper implementation;
- Prepare a software solution for collecting information of the water polluters that will establish and continuously maintain the information system on waters, especially for issuing permits and their monitoring;
- Enable access to system data for the inspection bodies;
- Enable free access to system data for the public, without special requests and procedures.



The existence of systematic information on water users and pollutants, on harmful emissions and their impact on waters and on the environment in general aims to ensure effectiveness and objectivity of the administrative and economic measures adopted. The review of data provides an opportunity for the authority to project the possible adverse impacts and their implications in terms of water quality and on the human life and health. The public has the right to know who, to what extent and in what way pollutes the environment in which they live and work and also has the right to participate in the adoption of decisions that affect the public.

Lack of updated and incomplete records

The Ministry of Environment and Physical Planning (MoEPP) does not have complete data on who, how and to what extent pollutes and uses the waters in Macedonia. Accurate records will enable the competent authority to have an insight into the water pressures, to determine the origin of the pollution and to assess whether the load on the resource is carried out on the basis of, and in accordance with, the permit. It will be also able to assess whether and to what extent the polluter and user pays principles are implemented and consequently it will enable that authority to design administrative measures in response to the pollution.

The MoEPP, through the Sector on Waters in the Directorate for Environment, records all requests and permits issued in the so-called Water Ledger, as a database of water use. In essence, it should be a complete and constantly updated register of permits issued and should also include other data relevant to water management decisions. With the amendments to the Law on Waters, the Water Ledger was transformed into the so-called Water Information System which will include not only the previous ones but also data from the geographical information system, that is, data on coordinates and cartographic representations of pressures on the resource. In practice, records are kept only for permits that have been issued (for catchments, and less frequently for wastewater discharges) and it is not constantly updated. Thus, the authority has a record of who holds a license but not who should also hold a license but does not at the moment. There is a record of who extracts water but also not where it discharges the water and the harmful substances after use. In this way, the pressure records do not give a realistic picture of the state of water resources and their quality, so it can lead to the issuance of a permit where it should not be issued in the first place. This state of obsolete and incomplete records is partly due to the non-existence of a bylaw that will regulate the manner of establishing and updating the Water Information System, the legal basis of which is the Law on Waters.

There is no Cadastre of pollutants and the industrial wastewater are discharged untreated

In order to determine the source and degree of pollution, the Law on Waters envisages the establishment of a Cadastre of Water Polluters. The Cadastre should include data on activities and facilities that pose, or may pose, a risk to the environment and the individual media, including industrial plants and public utility enterprises. In practice, there is no bylaw that prescribes the manner of establishing and maintaining the Cadastre. Pollution data originating from industrial plant operators are collected through questionnaires, and from a total of eighty municipal public utility companies, data on the amount of discharged water and pollution parameters were obtained from only three (Skopje, Berovo and Makedonski Brod). Consequently, there is no accurate and relevant data on the source of pollution, the parameters and the degree of pollution of the recipients with industrial and municipal wastewater.

The official data of the State Statistical Office that are collected using another methodology and for another purpose, and they show that the wastewater discharged from industry and mining has no treatment before it is discharged into the soil, sewage, watercourses, reservoirs or lakes. From a total untreated wastewater discharged from industry and mining in 2017, 0.3 percent was discharged into sewers and 99.7 percent into watercourses. The public utilities also discharge untreated sewage into natural watercourses. The sewerage system of the public utilities accepts not only the common sewerage water (urban and communal) but also untreated industrial waters discharged into the sewage. In terms of pollution, the waters from the public utilities that are discharged untreated include pollutants equal to the industrial waste waters.

The Law on Waters imposes an obligation for internal monitoring of the installation operators in accordance with the integrated environmental permits (water permits). Furthermore, the public utility companies are required to do internal monitoring of the intakes and discharges and to submit that data to the authority that will register them in the information system. This data is input data for managing the Cadastre of polluters. This obligation is not implemented in practice.

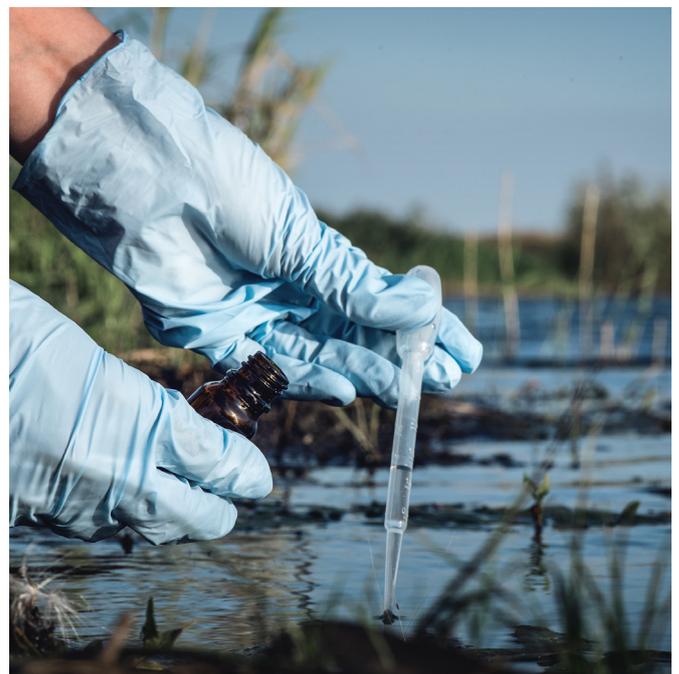
Such partial records and their keeping on a voluntary basis do not provide a complete overview of the burden on any water body in the country, and the data obtained on this basis are not sufficient and cannot be processed and analyzed in order to take appropriate measures. They cannot be properly presented to the public and are not available to the public. Furthermore, the public cannot be involved in the decision making process.

The Cadaster is not publically available

The Cadastre data is type of data that should be available to the public. The public access to data (form, scope and manner) is determined by the Law on Environment. The manner and form in which the Cadastre is kept does not allow for proper searching of data, they are not properly presented and there is no proper access them. This data is not publically available as well. In practice, the absence of complete data in the Cadastre and the absence of a regulation on the form and manner of keeping and collecting data is not in accordance with the laws. The Cadastre is not publicly available and the MoEPP provides relevant data and information to the public only if the data is requested and in accordance with the Law on Free Access to Information.

The public utilities also discharge wastewaters without a permit

The issue of inadequate records in the area of waters results in a practice where the entities do not submit request for permits (for use and for discharge in water) although, according to the Law, they should have done so within a certain period. There is established practice that the country is tolerating and not sanctioning the entities that use water and discharge wastewater without a permit. The impunity of harmful discharges without prior treatment is evident, so anyone can discharge harmful and dangerous substances without a permit, can pollute without paying for remediation of the resource of to be subject to a sanction for its illegal actions.



To illustrate, the public enterprises in 12 municipalities have not obtained a water use permit, and 8 public enterprises have not submitted a permit application all. Out of a total of 36 public enterprises that provide services for collection and drainage and/ or treatment of wastewater, only four public enterprises from Strumica, Berovo, Makedonski Brod and Kochani have a discharge permit. The lack of a permit does not prevent the municipalities and their utility companies from invoicing the water service that they illegally capture and distribute or they illegally discharge and pollute the environment. Even more absurd is the situation in which the citizens in the areas of municipalities that have permits and treatment plants pay higher bills for water services compared to those who do not have a permit at all. This is contrary to the principle of full return of costs, that is, that the polluter/ user pays, as a basic principle established by the Law on Waters.

Solution for this situation

The first step towards resolving these absurd situations is the establishment of accurate, relevant and comprehensive database for Water Ledger and a Cadaster of water polluters. Cross referencing the data in the information system will provide an overview of the illegal practices and the possibility of sanctioning them and it will enable sustainability of the water resources management and transparency of the process. Indicatively, the budget for establishing an accurate, relevant and comprehensive database is estimated at 381,750 euros, which should cover the items for collecting data on water polluters and for developing a software solution for information system/ pollutants Cadastre and its regular maintenance.

References

- Puleska B., Popovski N. (2020). Issues in water resources management: How to use and protect water. Institute for Communication Studies, Skopje.
- State Audit Office (2019). Final report of the performance audit: Effectiveness of policies, measures and activities in granting the water right “.
- State statistical office (2019). Environmental statistics 2019.



Please read more on this topic in the policy paper

„Challenges of water resource management:
How to use and protect water”.