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Stormwater management in urbanised areas in Poland. Analysis and assessment of current legislation

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Abstract. The issue of stormwater has an interdisciplinary dimension, but the work focuses on its legal and environmental aspects. The article analyses and evaluates Polish legal regulations in the field of stormwater management in urbanised areas. These regulations focus particularly on two different areas. The first is the discharge of stormwater into waters or the ground. The second concerns the reduction of natural land retention (the "rain tax"). These activities are always considered a form of water use that incurs a fee determined in accordance with the provisions of the Water Law. In both areas, both practice and legal doctrine raise interpretative doubts that stem from the applicable normative solutions. These doubts particularly concern the determination of entities obliged to take specific actions or the scope of application of the fee for reducing natural land retention. This, in turn, translates into difficulties in applying the law and non-uniformity of decisions made.

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1. Introduction

The issue of waters from atmospheric precipitation and snowmelt (hereinafter: "stormwater") has become increasingly important in many parts of the world in recent years. This is due, on the one hand, to the climate changes being observed and, on the other, to growing anthropogenic pressure manifesting in, among other things, unfavourable changes in land use, especially the increase in sealed surface area (Marszelewski & Piasecki, 2021). Urban areas are particularly at risk from the observed negative trends in precipitation. This is related to the unfavourable increase in surface runoff relative to infiltration, evaporation and surface retention. The result is that there is a steady rise in the amount of stormwater that usually drains from urban catchment areas via storm sewerage systems. In many cities where there is also a combined sewage system, stormwater is discharged to sewage treatment plants at significant cost (Piasecki, 2019; Rosiek, 2020; Boguniewicz-Zabłocka & Capodaglio, 2020). Moreover, in cities with such a combined sewage system, extreme rainfalls activate storm overflows (Sobieraj et al., 2022; Piasecki, 2022). As a result, a mixture of domestic sewage and stormwater is discharged directly to the receiving body, which is usually a river or lake. Another negative consequence of extreme weather conditions (short-term, heavy rains) is increasingly frequent flash floods in cities (Nowakowska et al., 2019). They often cause very significant material losses (Lyu et al., 2018; Piasecki et al., 2023; Siphambe et al., 2024).

In many countries, legislators have noticed this negative stormwater trend. Accordingly, they have changed the relevant legal regulations to improve provisions relating broadly to stormwater management. This article aims to provide a comprehensive presentation, analysis and discussion of Polish legal provisions regarding stormwater management in urban areas. Despite more than six years having passed since the entry into force of the basic regulation in this area – the Water Law Act of 2017 (*Note* 1) – this topic has so far primarily been analysed only fragmentarily, and usually from the perspective of a single issue or perceived legal or practical uncertainty. This may be largely due to the specificity of legal provisions relating to stormwater management. These provisions are usually very long and their application depends on specific legal or factual circumstances. Moreover, these provisions refer to both specialised and undefined concepts.

The doubts expressed in Polish legal science regarding the regulations regarding stormwater management justify the second goal of the work – to evaluate the normative regulation in force both in legal and environmental terms. The importance of proper stormwater management in the light of decreasing water resources is unquestionable, and the role of the law – which expresses the policy adopted in this regard – is particularly visible.

The article uses the formal dogmatic approach consisting in a presentation and analysis of the norms of Polish law. The analysis results in an assessment of the applicable legal regulations, which allowed conclusions regarding them to be formulated. The assessment was also made from the perspective of natural sciences, which justifies the claim that the research is interdisciplinary.

2. Water management in Polish law: key information

In 2024, twenty years passed since Poland joined the European Union. In that time, EU regulations in the field of broadly understood water management have become an integral part of Polish law. One particular example is the Water Framework Directive (*Note* 2). It is the basic legal act of the European Union in the field of water management. The directive significantly structures European water law, putting into effect the premise that ecological safety should be instituted in law (Korzeniowski, 2012). The provisions of the Water Framework Directive and other EU directives regarding numerous aspects relating to waters are implemented by the Act of 20 July 2017 – the Water Law. The material scope of this act (as well as the previous Water Law Act of 2001) corresponds to the substantive scope of the Water Framework Directive.

The Water Law is the most important and comprehensive normative regulation in the field of water management. It also includes solutions for stormwater. Although the Act does not define the concept of "water management", Art. 1 therein regulates water management according to the principle of sustainable development, in particular the development and protection of water resources, the use of water and the management of water resources. Pursuant to Art. 9, para 1 of the Water Law, water management should be conducted in compliance with the principle of the rational and comprehensive treatment of surface and groundwater resources, taking into account their quantity and quality. Moreover, water management takes into account the principle of common interests and requires cooperation between public administration, water users and representatives of local communities in order to provide maximum social benefits (Art. 9,

para 2). Finally, water management is based on the principle of cost recovery for water services (Art. 9, para 3) and should be carried out in accordance with the public interest, avoiding avoidable degradation of the ecological functions of waters and degradation of terrestrial ecosystems dependent on water (Art. 9, para 4) Most of the enumerated activities constitute the principles on which water management should be based, in accordance with which it should be carried out, or which it should take into account (Maciejewska, 2014).

The Water Law is part of environmental protection law, which is considered an independent branch of law. For this reason, the Water Law is related to other normative acts on environmental protection, such as the Act of April 27, 2001 – the Environmental Protection Law (*Note* 3). The latter lays down, among other things, principles regarding the protection of all features of the environment, such as the principles of prevention and precaution (Art. 6) and the "polluter pays" principle (Art. 7).

3. Regulations regarding stormwater in the Water Law of 2017

3.1. Introductory information

The Water Law defines rainwater or meltwater as water resulting from atmospheric precipitation (Art. 16, item 69). At the same time, stormwater may be considered municipal sewage, provided that it is mixed with domestic sewage and is discharged using appropriate devices (Art. 16, point 63 of the Water Law). Otherwise, if it is not mixed with domestic sewage, stormwater does not have the status of sewage. As a consequence, separate legal solutions should be applied depending on whether we are dealing with stormwater alone or stormwater mixed with domestic sewage. However, in some aspects, they are the same.

The solutions adopted in the Water Law in the field of stormwater management relate to two broad areas in particular. The first involves the discharge of stormwater into waters or the ground directly by the user (e.g., property owner) without involving a water and sewage company. The second regards reducing natural field retention (the "rain tax"). In both cases, the legal regulations give rise to numerous ambiguities. At the same time, both activities are classified as ways of using water that incur a fee. These fees, alongside planning, water law consent, control and the water management information system, constitute the instrument of water resources management in Poland (Art. 11 of the Water Law). The instrument is referred to as an economic (monetary) or financial and legal instrument (Rotko, 2006). The payment for draining stormwater and reducing natural retention is covered by the fee for water services (Art. 268 para 1, point 3a and 269, para 1, point 1 of the Water Law). Fees for water services have been included among these economic instruments for water management since the entry into force of the Water Law of 2017. The fee for water services is a public law fee. It is not based on a contract for the provision of such services (Rakoczy, 2019). The source of the legal institution of water services is the Water Framework Directive. They are defined in Art. 2 para 38 of this act.

Moreover, the Water Law contains no provisions directly relating to the construction of water retention devices (including dry wells and rain gardens). Such deficiencies are signalled in the doctrine. Currently, water retention devices may be classified differently in legal terms and therefore included in or excluded from the catalogue of water devices. The term "water device" is general in the Water Law and includes devices or structures used to shape water resources or to exploit these resources (Art. 16, point 65 of the Water Law). The discrepancies and inconsistent qualification of water retention lengthen the procedures for issuing permits for their construction and the application of various formal requirements regarding similar investments. This hampers the undertaking of initiatives to increase water retention, which is one of the weaknesses of the Water Law (Sobota et al., 2022). The construction of water retention devices, apart from its important ecological role in retaining water in the environment, is very important in the aforementioned two areas of stormwater management regulated by the Water Law. Fees are charged both for stormwater drainage and for reducing natural retention, which will be discussed later in this work. The size of fees is influenced by the existence and capacity of water retention facilities.

According to the Water Law of 2017, which introduced a new system for financing water management in Poland, the Act's objective is to resolve the underfinancing of water management tasks. This objective is achieved by adopting axwater services system based on the principle of cost recovery for water services. Within the indicated scope, the Water Law is to fully implement the principle of recovering the cost of water services as expressed in Art. 9 of the Water Framework Directive (Sznajder, 2020). The system of fees is seen as incentivising efficient water consumption and as a partial means to achieve the objectives of the directive (Korzeniowski, 2011).

3.2. Rainwater drainage services and related fees

Handling stormwater by discharging it into either water bodies or watercourses (hereinafter, collectively "waters") or into water devices (without involving a water and sewage company) is classified as a water service. This applies to stormwater collected in open or closed storm sewage systems used to drain atmospheric precipitation or collected in collective sewer systems within the administrative boundaries of cities (Art. 35, para 3, point 7 of the Water Law). Despite their name, water services [usługi wodne] are a form (category) of water use. This is confirmed by their legal definition and the rules of legal interpretation (Rakoczy, 2018; Kruś, 2018). Water services consist in providing households, public entities and business entities use of water to an extent that exceeds other forms of water use, i.e. general, ordinary and special use (Art. 35, para 1 of the Water Law). They are a type of public utility service (Kruś, 2018) provided by Polish Waters (*Note* 4) for a fee. The discharge of stormwater collected in open or closed stormwater drainage systems or collective sewer systems within city limits to other waters requires payment of the above-mentioned water services fee. The fee is important to stormwater drainage network operators, who make business decisions that rely on it. The fee comprises a fixed part and a variable part (Art. 270, para 11 of the Water Law). The first is sometimes called a "resource" or "subscription" fee because it guarantees access to a certain amount of water resources (Mądry & Maśliński, 2018). The methods for calculating both fees are determined in the legal provisions and are presented below.

The amount of the fixed fee is the product of the unit fee rate, time expressed in days and (specified in the relevant permit) the maximum amount of water (expressed in m^3/s) discharged into the receiving body (usually a river or lake) (Art. 271, para 4, point 1 of the Water Law). The discharge duration specified in the fixed fee in the context of stormwater collected in open or closed stormwater drainage systems is the average annual number of stormwater discharges from stormwater overflows established in the permit (Art. 271, para 4a of the Water Law). The maximum fixed fee is PLN 5 (EUR ~1.16) per day per 1 m^3/s for the maximum amount of stormwater discharged into waters from open or closed stormwater drainage systems (used for draining atmospheric precipitation) specified in the permit (*Note* 5). The amount of the fixed fee is calculated in this way by Polish Waters and provided to the obligated entities in the form of annual information (Art. 271, para 1, point 3; Art. 239 of the Water Law).

In turn, the amount of the variable fee for the discharge into waters of stormwater collected in open or closed stormwater drainage systems used to drain atmospheric precipitation within the administrative boundaries of cities is the product of the unit fee rate, the amount of water discharged (expressed in m^3) and the time expressed in years. The size of the fee is also influenced by the existence of devices for storing water from sealed areas and their capacity (Art. 272, para 5 of the Water Law). However, in the case of discharge of stormwater from stormwater sewage overflows into waters, a variable fee is set for each overflow in an amount equivalent to 10% of the variable fee payable (determined in accordance with Art. 272 para 5 of the Water Law) for the settlement period in which the overflow was activated. The upper rate of the variable fee for discharge into waters of stormwater collected in open or closed stormwater drainage systems used to discharge atmospheric precipitation within the administrative boundaries of cities depends on the existence of devices for storing water from sealed areas or on their capacity. If there are no such devices, the maximum rate is PLN 1.5 (EUR ~0.35) per 1 m^3 per year. If the capacity of water retention devices exceeds 30% of the annual runoff from sealed areas, it is PLN 0.15 (EUR ~0.035) per 1 m^3 per year (Art. 274, point 5c) (*Note* 6). If retention is below 390%, intermediate values are taken into account, and the fee rate increases as a function of the decrease in capacity of water retention devices.

As indicated above, activities related to the discharge of stormwater into waters or water facilities have the status of water services. The admissibility of using water services depends on obtaining water law consent in the form of a water law permit (Art. 388 and Art. 389 of the Water Law). Such a permit is an administrative decision issued in connection with the "regulated use" of water. In legal terms, it is constitutive in nature, as it grants rights to entities using water services. However, it also imposes obligations (Sznajder, 2020). The purpose of the current permit system is to rationalise the use of water, reduce water pollution and ensure a suitable quality of water and of the ecosystems dependent on it. This is done by determining the methods of water use, in particular the amount of water abstracted and the amount of substances (sewage) introduced into waters and the ground (Kałużny, 2016).

The water permit specifies, among other things, the purpose and scope of water use, the conditions for exercising this right, the obligations necessary

to protect environmental resources and economic interests, and the amount of stormwater discharged into waters or the ground, including the maximum amount of m^3/s and the average amount of m^3/s per year, and the actual and reduced area of the catchment area drained by each outlet (Art. 403, para 1 and para 2, point 3 of the Water Law). A water permit is issued at the request of the interested entity. The application must be accompanied by a water law report prepared in accordance with the requirements specified in the law (Art. 407 of the Water Law). Under the framework constituting the basis for issuing a permit for the discharge to waters or water devices of stormwater collected in open or closed stormwater drainage systems used to discharge atmospheric precipitation or into collective sewer systems within the administrative boundaries of cities, a range of information must be provided. It includes maximum and average amount of stormwater discharged, duration of discharge of such water, information as to whether it is collected in a collective sewer system, and the average annual number of discharges from individual stormwater drainage overflows (Art. 409, para 6 and para 6a of the Water Law).

If water is used without the required water permit, the competent authority of Polish Waters imposes an administrative fine. The basis for setting the amount of a fine imposed in connection with the discharge of stormwater collected in open or closed storm sewer systems used to discharge atmospheric precipitation or collective sewer systems within the administrative boundaries of cities into waters is 500% of the variable fee (Art. 472aa, para 1, 2 and 3 point 3 of the Water Law).

Another issue related to the above comments concerns the place of stormwater drainage and related restrictions. Thus, stormwater from storm sewer overflows may be discharged into waters or the ground. However, it is necessary for the relevant authority of Polish Waters to issue a decision that such admission does not conflict with environmental objectives for waters or quality requirements for waters (Art. 80 of the Water Law). Environmental objectives for groundwater are intended to achieve and maintain good status of groundwaters, including good quantitative status and good chemical status. In the case of surface waters, in turn, environmental objectives similarly consist in achieving and maintaining good status of surface waters, including at least good ecological status or at least good ecological potential and good chemical status. Environmental goals also include preventing the deterioration of groundwater and surface water (Art. 55–57 and 59 of the Water Law). It is also permissible to discharge stormwater into surface waters or into the ground at a distance of less than 1 km from the boundaries of bathing areas, occasional bathing areas, public waterside beaches, and into lakes and their tributaries (if the time of inflow of these waters to the lake is shorter than 24 hours), provided that the competent authority determines that such approval does not conflict with environmental objectives for water or quality requirements for water (Art. 76, para 1, points 1 and 2 of the Water Law).

However, for urbanised and non-urbanised areas alike, it is prohibited to discharge stormwater that has been collected in open or closed stormwater drainage systems used to discharge atmospheric precipitation directly into groundwaters or water devices. In the case of water devices, the ban depends on the permissible value of pollutants (considered particularly harmful to the aquatic environment) contained in the stormwater (Art. 75a of the Water Law).

3.3. Reducing natural retention (the "rain tax")

A fee is levied for reducing natural retention when the activities of the obligated entity cause a certain amount of water not to be retained. From the point of view of the Water Law, this public fee (Rakoczy, 2019) applies to properties with an area exceeding 3,500 m^2 on which building works or structures permanently fixed to the ground have been executed that reduce natural land retention by excluding more than 70% of the biologically active surface of the property in areas not included in open or closed sewage systems. Such action – unlike the discharge of stormwater – is classified as special use of water (Art. 34, point 4 of the Water Law). Therefore, this case does not constitute a water service. However, in accordance with Art. 269, para 1, point 1 of the Water Law, a fee for water services is charged for reducing natural land retention. Hence, it is rightly pointed out that the wording is misleading (Sznajder, 2020). Retention fees are a relatively new solution, as they were first introduced in the Water Law of 2017. Previously, they did not have an appropriate equivalent. As a result, the obligation to pay only covers building works or structures executed after January 1, 2018 (i.e., from the entry into force of the Water Law of 2017). This adheres to the principle that the law does not apply retroactively (Rakoczy, 2019).

The size of the fee for reducing natural land retention depends on the size of the sealed area and

the use of retention compensation (i.e., any means by which retention losses are offset). The sealed area is understood as a built-up area excluded from the biologically active area (Art. 270, para 7 of the Water Law). It is determined as the product of the unit fee rate, expressed in m^2 of the amount of biologically active area lost, and the time expressed in years (Art. 272, para 8 of the Water Law). The impact of retention compensation on the amount of upper unit rates of fees for reducing natural retention ranges from PLN 1 (EUR ~0.23) per 1 m^2 per year in the absence of devices for storing water from sealed surfaces permanently fixed to the ground to 0.10 PLN (EUR ~0.023) per 1 m^2 per year if there are devices for storing water from sealed surfaces with a capacity exceeding 30% of the annual runoff from the sealed surfaces (Art. 274, point 6 of the Water Law) (*Note* 7).

Any entity that has a specified relationship with real estate or a building, including ownership rights, and that has caused natural retention to be reduced (Art. 298, para 2 of the Water Law) is obliged to pay the retention fee. The fee amount is calculated and the fee collected by a commune (gmina) body (*Note* 8)– the commune head, mayor or city president (Art. 272 para 22 of the Water Law), i.e. by a different entity than the one that calculates the fee for stormwater discharge.

Activities that reduce natural retention similarly require a water law permit (Art. 389 point 2 of the Water Law). This permit includes in particular: a determination of the total area of the property of area exceeding 3,500 m^2 (including the area covered by building structures or works and the biologically active area), a description of building structures or works reducing the natural field retention, the natural field retention capacity expressed in m^3, the amount of stormwater and meltwater, and the average amount of stormwater and meltwater discharged to water retention devices from sealed areas (expressed in m^3 per year) (Art. 403, points 17–20 of the Water Law). The data in question – those necessary to calculate the fee for reducing natural retention – are provided in the water law framework constituting an appendix to the application for issuing a water law permit (Art. 409, para 7 of the Water Law). The records of data necessary to determine the fee are maintained by Polish Waters. They are updated annually and contain information on area and type of sealed surface, rainwater or meltwater collection system, and the amount of retention as a percentage of water runoff volume (Art. 302, para 1 of the Water Law).

In addition to the above, it is worth pointing out that supervision over the issue of natural retention in the context of water protection is manifested in the need to obtain a water law assessment for investments or activities that may affect the achievement of environmental objectives planned for individual water bodies or watercourses. In such a case, construction works and facilities that reduce natural land retention must be subject to an assessment (Art. 425 of the Water Law). It is indicated that water law assessments play the same role as environmental impact assessments and are characterised by a similar juridical structure (Rakoczy, 2018).

4. Act on collective water supply and collective sewage disposal

As indicated earlier, the applicable normative regulations, due to the definition of sewage adopted in the Water Law, distinguish stormwater alone from stormwater mixed with sewage. These assumptions are compatibly reflected in the Act of June 7, 2001 on collective water supply and collective sewage disposal (*Note* 9). In the previous legal status, stormwater was classified as sewage in both the Water Law and the Supply Act. In the latter act, stormwater ceased to be classified as sewage from August 24, 2017 (Michalski, 2022) following the removal of this category from the provision defining wastewater. The literature indicates that the change in the definition of sewage in the Supply Act results from a correction of the approach to rainwater (and meltwater) that now treats it as a valuable resource not requiring waste disposal (Flaga-Martynek & Citko, 2022).

The Supply Act specifies the principles and conditions of the collective supply of water intended for human consumption and collective sewage disposal. This includes, among others, principles for creating conditions to ensure continuity of supply, appropriate water quality, and reliable sewage disposal and treatment; and the procedure for approving tariffs – prices and fee rates (Art. 1 of the Supply Act). To clarify the above, the current wording of the definition of municipal sewage in this act means domestic sewage, or a mixture of domestic sewage and either industrial sewage or stormwater, in each case discharged through devices used to execute the commune's own sewerage and municipal sewage treatment tasks (Art. 2, point 10 of the Supply Act). As you can see, the above description does not cover stormwater on its own, but only in a mixture. Similarly, stormwater alone was not included in the terms "domestic sewage" and "industrial sewage" prepared for the purposes

of the Supply Act. As a consequence, stormwater does not fall within the scope of municipal sewage and was thus excluded from the scope of the Act and the regulations contained therein. This led to a completely new situation in which, in addition to water used for human consumption and sewage, stormwater is – from a legal point of view – a new type of substance. At the same time, while appropriate normative regulations apply to the methods of dealing with drinking water and sewage, in the context of stormwater there are no normative statements by the legislator (Rakoczy, 2023).

Regardless of the above-mentioned exclusion, certain assumptions regarding stormwater management result from Art. 9 para 1 of the Supply Act. This provision, firstly, prohibits the introduction of domestic and industrial sewage into sewage devices intended for the discharge of stormwater. This case relates only to the storm sewage system, as both sewage and stormwater can be discharged into the combined sewerage system. Rainwater drainage devices also include open ditches into which domestic or, more often, industrial sewage is illegally discharged (Filipek, 2022). Secondly, Art. 9 of the Supply Act introduces a ban on feeding rainwater, snowmelt or drainage water into the sanitary sewerage system. Such activities are common. In relation to entities engaging in them, amnesties are declared or campaigns are held to detect illegal connections. This state of affairs does not result from the intentional actions of perpetrators, but rather from a pre-existing situation or one that was previously tolerated (Filipek, 2022).

5. Discussion

The analysis of the doctrine and practice allows us to conclude that the most controversial aspect of stormwater management is the issue of fees for discharging "rainwater". This relates to remuneration for the service of discharging stormwater from the property to a stormwater system or combined sewerage system. The service is provided by the entity operating these systems. These are usually water supply and sewerage companies or municipalities (Czeszak, 2023). The problem with fees for discharging stormwater results from the aforementioned exclusion of stormwater from the definition of sewage, i.e. its exclusion from the regime of the Supply Act and from the rules determining – and the scope of application of – tariffs for collective water supply and collective sewage disposal contained in its provisions. In other words, it is currently not possible to include rates for the discharge of stormwater into stormwater sewerage systems in the tariffs, because the receipt of stormwater is not classed as sewage collection. As a result, stormwater – which is no longer counted as sewage – should be dealt with as a separate and independent subject of legal relations. At the same time, the Polish legislator has not adopted any regulations indicating, for example: which entity is obliged to receive such water and on what terms this should be done; whether it is a public or private law regime; nor whether the fee due for such activities is of a public or private law nature – as remuneration for the provision of services (Rakoczy, 2023). Different understandings of the fee for stormwater disposal have resulted in individual municipalities applying different solutions for such services. Some take the attitude that the fee only burdens the budget of the commune, and those communes thus do not burden property owners with it. Others communes, however, "transfer" this obligation to property owners – people and entities located within their territory. This is done either through a specific interpretation of general legal provisions or by recognising that the independent competence to establish the rules and fees for stormwater disposal is vested – under a civil law contract – in enterprises providing such services (Drozd, 2023).

This state of affairs therefore requires that it be determined whether, despite changes in normative regulations, stormwater water disposal services still constitute a relationship governed by public law, possibly on a different normative basis than in the previous legal status, or whether the relationship is now one of civil law. In the first case, fees for such services are determined within the administrative and legal model. In the second case, a civil law model would apply (Milczarek, 2023). These contradictory possible solutions broadly comprise the dichotomy at the heart of most of the assessments and views expressed in jurisprudence and legal science regarding the doubts that have arisen. Such doubts – as indicated in one judgement – are held by municipal governments throughout Poland (judgement of the Court of Appeal in Białystok of February 19, 2021, VII Ga 463/20).

The arguments in favour of continuing to include stormwater drainage services in the public law regime are based on the possibility of interpreting this state of affairs as resulting from the applicable legal provisions, i.e. the Supply Act, i.e. the Act of March 8, 1990 on municipal self-government (*Note* 10) and the Act of December 20, 1996 on municipal management (*Note* 11). Thus, the entity responsible for collecting stormwater is the commune, because meeting the collective needs of the community is

one of its tasks, and such tasks include: matters of waterworks and water supply, sewage systems, and municipal sewage disposal and treatment (Art. 7, para 1, point 3 of the Municipality Act). As part of their municipal management, municipalities perform public utility tasks intended to meet the collective needs of the population on an ongoing and uninterrupted basis by providing generally available services (Art. 1 of the Commune Act). Therefore, the commune council should, by way of a resolution, determine the prices for the use of devices used to discharge stormwater. This results from the general duty to determine prices and fees for public utility services and for the use of public utility facilities and equipment as specified in Art. 4 para 1 point 2 of the Commune Act. At the same time, Art. 3 para 1 of the Supply Act states that collective water supply and collective sewage disposal is the commune's own responsibility (Milczarek, 2023; Rakoczy, 2023; Drozd, 2023).

This stance was approved by certain courts in Poland (see: Flaga-Martynek & Citko, 2022; Milczarek, 2023; Rakoczy, 2023). The Provincial Administrative Court in Poznań (Fig.1) pointed out that, among other things, the exclusion of stormwater from the scope of the concept of "sewage" and consequent inability to further classify the service of discharging such water as an activity in the field of "collective sewage disposal" changed neither the essence of this service nor its public utility. Organised drainage of stormwater – being a "sewerage matter" under Art. 7 para 1 point 3 of the Municipality Act – remains the responsibility of the municipality (judgement of April 29, 2022, III SA/Po 1487/21). The Provincial Administrative Court in Bydgoszcz stated the same, emphasising the competence of the commune council to decide on the prices and fees for stormwater disposal services included in open or closed stormwater sewerage systems for the disposal of atmospheric precipitation provided by a municipal company (judgement of June 7, 2022, II SA/Bd 1018/21). The Supreme Administrative Court concluded that the disposal of stormwater is the commune's own public utility task, i.e. a service that meets collective needs and is provided on a continuous basis using public assets and in order to meet the needs of the collective, who have no choice of service provider. The size of the fee should be determined by municipal decision-making bodies by way of resolutions issued pursuant to Art. 4 para 1 point 2 of the Commune Act (judgement of November 22, 2022, III OSK 5837/21; Czeszak, 2023; see: Mądry & Grobelny, 2023). In turn, the Court of Appeal in Białystok (Fig.1) pointed out that there was no loophole in the current legal situation, and the changes introduced only excluded the possibility of charging fees based on the tariff for sewage. Bearing in mind that the catalogue of a commune's tasks is not a closed list, the purpose of discharging stormwater is to meet the needs of the community, which is consistent with the nature of the commune's own tasks. A rational approach to the problem involves the universal principle resulting from the Commune Act that indicates the method for determining prices and fees for municipal services of a public utility nature in the absence of a specific regulation. In the absence of an appropriate resolution of the commune council regarding fees, it should be assumed that the services of discharging stormwater and snowmelt water in the area of the commune are free of charge. The entity to which such services have been provided is not unjustly enriched, as it is not legally obliged to pay for the discharge of this type of water (judgement of February 19, 2021, VII Ga 463/20; Milczarek, 2023). It is indicated that the stance presented above and the related competence of municipalities to set fees for services in the field of stormwater and meltwater disposal are – alongside a range of court decisions – also confirmed by opinions issued by state authorities (Flaga-Martynek & Citko, 2022). The solutions including stormwater drainage services in the public law regime have been adopted in many Polish municipalities (Milczarek, 2023).

The second stance is based on the civil law model and assumes that the collection of stormwater is not the commune's own responsibility. As a consequence of this exclusion, the legal relationship between the entity receiving stormwater and the entity discharging these waters is a civil law, obligatory relationship. Therefore, as under the previous legislation, this is not a public law relationship (Rakoczy, 2023). In this approach, stormwater fees are still paid under the contract, but based on a contract for the provision of services, as described in the Civil Code (*Note* 12). The services consist in draining stormwaters. The parties to the contract are, first, the stormwater drainage operator (usually a water and sewage company, but, due to the exclusion of stormwater from the scope of sewage, this water can be collected by any legal entity) and, second, the party interested in stormwater drainage i.e., the recipient of the service (Milczarek, 2023, Rakoczy, 2023). In this approach, the fee is no longer based on provisions of public law (i.e., the Commune Act), but a contract. The fee results from Art. 735 in combination with Art. 750 of the Civil Code, which together regulate the issue of payment of remuneration for the provision of services, Art. 353^1 of the Civil Code, establishing the principle of freedom of contract, and Art. 450

Fig. 1. Location of courts in Poland that issued rulings regarding the legal qualification of stormwater drainage services
Source: OpenStreetMap (OpenStreetMap 2024)

of this act regarding unjust enrichment (Milczarek, 2023, Rakoczy, 2023). According to this stance, the remuneration should correspond in amount to the work performed and not result from a resolution or tariff. The remuneration must be equivalent to the service provided. This is because the contract for the provision of stormwater collection services is a mutual contract in which the remuneration is to be the equivalent of the collection service (Art. 487§2 of the Civil Code). The provision of stormwater collection is ongoing (Rakoczy, 2023).

This second stance is also reflected in some decisions of Polish courts (see: Flaga-Martynek & Citko, 2022; Milczarek, 2023; Rakoczy, 2023). Thus, the Provincial Administrative Court in Gliwice (Fig.1) stated that the collection of stormwater is not included in the catalogue of the commune's own tasks and that there is therefore no obligation to set fees for their provision. In such a case, the commune is not providing municipal services but acting like an "ordinary" entrepreneur, providing its services and collecting fees for them on a civil law basis. According to the Court, the commune's own tasks include only the disposal of sewage and not the disposal of stormwater that is not sewage. Even if these waters are collected using a combined sewage system in the absence of a separate storm sewage system in a given area, this does not make these waters sewage and does not lead to the obligation to collect them as its own task. As a result, the water company is not obliged to include fees for collecting stormwater in the tariff regulating fees for collective water supply and collective sewage disposal (judgement of April 14, 2021, III SAB/Gl 45/21). In turn, the Provincial Administrative Court in Gdańsk noted that the relevant part of the Municipality Act grants the competence to adopt resolutions on taxes and fees, but within the limits specified in Acts. This means that when adopting a resolution, the commune must act within the framework of applicable law and, consequently, cannot introduce taxes (fees) that are not provided for by statute. The commune does not have "non-statutory tax authority". Neither the Municipality Act nor the Commune Act contains grounds authorising the determination of a price for the service of "direct or indirect discharge of rainwater and meltwater into closed or open stormwater drainage systems under the control of the commune" (judgement of January 14, 2021, III SA/Gd 716/20). The Provincial Administrative Court in Opole (Fig.1) held a similar opinion, emphasising that the provisions of the Municipality Act cannot constitute the basis for specifying the rights or obligations of specific entities, including determining the amount of fees for the use of municipal public utility facilities, i.e., for example, for the use of closed or open stormwater sewer systems. As a result, the court invalidated the resolution of the commune council on setting the price for a stormwaters disposal service, indicating

to the lack of appropriate legal basis granting the commune the competence to issue it (judgement of May 27, 2021, I SA/Op 72/21). The Provincial Administrative Court in Olsztyn (Fig.1) also found invalid a resolution of the commune council regarding the price for the discharge of stormwater included in open or closed stormwater drainage systems used to discharge atmospheric precipitation. It was indicated that Art. 4 para 1 point 2 of the Commune Act does not establish a new right to introduce new public levies. This provision only determines the competences of the decision-making body in the matter of setting prices and fees for municipal services (judgement of October 7, 2021, I SA/Ol 478/21).

Each of the discussed stances includes services that entail remuneration (a fee) for stormwater disposal under a different legal regime. Advocating for one precludes acceptance of the opposing view. Such a situation introduces uncertainty regarding the interpretation and application of the law. It is not known whether the approach used on a case-by-case basis will prove to be correct or not. At the same time, this problem, although important from a normative perspective, has in a sense a more "technical" or "formal" dimension. The problem does not necessarily result from difficulties related to the assumptions and methods of implementing the legal regime. The literature indicates that the doubts that have arisen seem to be the result not so much of the legislator's intentional action, but of the failure to consider all the effects of changes introduced in the definition of the concept of "wastewater" (Flaga-Martynek & Citko, 2022). According to the authors, the second approach (the one based on the civil law model) is correct, that the relationship is one of civil law and that remuneration for stormwater collection is subject to civil law. Creating a coherent whole, this approach does not require an interpretation of the general provisions of the Municipal Act and the Commune Act to justify that – despite unmixed stormwater being excluded from the definition of sewage – its collection is still the commune's own task, and therefore the determination of fees in this respect is carried out within the framework of public law.

Regardless of the above, doubts are also raised regarding the second aspect of stormwater management presented in the article – the reduction of natural field retention as a result of building works and structures. These reservations are important because they concern how the provision of Art. 269 para 1 point 1 of the Water Law is formulated. This translates into the scope of its application and, consequently, whether it is subject (or not) to the obligation to pay a fee. According to this provision, a fee for water services is paid for "reducing natural land retention as a result of building works or structures permanently fixed to the ground on a property with an area exceeding 3,500 m^2, that reduce this retention by excluding more than 70% of the area of the property from biologically active surfaces in areas not covered by open or closed sewage systems".

The literature indicates that the essential problem in interpreting this legal standard concerns the connection between the assessment criteria used within the standard (effect, cause and area) and identifying what these relationships are (Rakoczy, 2019). The first criterion – effect – refers to the concept of "reducing natural retention", which has not been legally defined. Accepting the hydrological definition of this term leads to the conclusion that it is about reducing the natural retention of water on the property. In this context, there is no temporal criterion (i.e., the time for which the water is retained), so any retaining of the water (even for a moment) means this criterion is fulfilled (Rakoczy, 2019). The authors also draw attention to the lack of an objective criterion distinguishing substrate type. The infiltration process on clay differs from that on sand. The causal criterion covers only the execution of buildings or building works. This means that the obligation to pay a fee for water services will not arise in the event of a reduction for reasons other than those mentioned above. At the same time, the Polish legislator used the imperfective noun wykonywanie, rather than the perfective wykonanie. Due to this difference, the obligation to pay a retention fee covers only works or facilities that are in progress, and not those that have been completed. It no longer applies when works have been completed that result in a building that excludes more than 70% of the biologically active surface on a plot with an area of over 3,500 m^2 (Rakoczy, 2019). A certain contradiction should be noted here. In most cases, local retention is reduced after the building project is completed. During construction, when earthworks are being carried out (including excavations), local infiltration and retention may be greater than before the project began and are almost always greater than after completion. The completion of the project, i.e. the creation of the new building and accompanying infrastructure (including sidewalks, parking lots), results in an increase in the sealed area and thus a reduction in retention. However, according to the Act, the retention fee applies only to the period during which works or construction works were being performed. The obligation to pay ceases when such works are completed (Rakoczy, 2019). In

practice, this fee is also collected after the project is completed, which seems to be inconsistent with the above-mentioned provision of the Act.

The third criterion – called "area" – combines three elements: the area of the property, the area where the works or building is to be executed and the requirement that the property be located in an area not covered by open or closed sewerage systems. The above-quoted article 269 para 1 point 1 of the Water Law applies only to properties whose area is larger than 3,500 m^2 and 70% of the "biologically active area" is excluded as a result of the above-mentioned works. The value of 70% applies to the area of the property in the context of biologically active area. The term "biologically active surface" is not defined in legal regulations. The last element, related to the sewerage systems, also narrows the scope of application of Art. 269 para 1 point 1 of the Water Law. The obligation to pay a retention fee will not arise if the property is located in an area covered by open or closed sewerage systems (Rakoczy, 2019). In addition to the above and despite previous comments on the causal criterion, it is worth pointing out another noticed doubt (resulting from Art. 270, para 7 of the Water Law). It involves the need to decide whether the fee for reducing natural land retention applies only to works and structures, the execution of which results in "one-off" reduction of retention excluding more than 70% of the property's area, or whether the reduction of retention may take place in stages. The latter case concerns situations when 70% of the property is exceeded after taking into account the existing infrastructure. The Water Law, as indicated in the literature, does not decide on the application of the 70% threshold also when the reduction of natural land retention takes place in stages and therefore not as "one-off" event (Grabarczyk, 2018). Difficulties in interpretation resulting from the Polish legislator's use of undefined concepts and lack of references to other normative acts in the context of constructing the retention fee are also emphasised by other representatives of the doctrine (Sznajder, 2020).

As indicated earlier, only those entities that, as a result of carrying out construction works and structures, have led to a reduction in natural retention are obliged to pay the retention fee. This applies only to owners, perpetual usufructuaries and holders (Art. 298 point 2 of the Water Law). These entities are obliged to pay the retention fee only if it is they who have caused a reduction in natural retention to occur, which particularly excludes contractors. As a consequence, the obligation to pay a fee for reducing natural land retention is further significantly limited due to the scope of entities to which it applies. It is right to point out that the scope of this obligation is very narrow. The legislator made this fee dependent on circumstances that themselves narrow its scope (Rakoczy, 2019).

Another difficulty is related to determining the amount of the fee for reducing natural land retention. As indicated earlier, it depends on, among other things, the presence of devices for retaining water from sealed surfaces. In this case, too, the legal provisions do not specify what a "water retention device" is. This state of affairs, again, may lead to serious problems and many practical controversies (Mądry & Maśliński, 2018). Practical difficulties also arise in interpreting the concepts of "open or closed sewers", which are important from the perspective of the fee for reducing natural retention. It is not always clear what can be classified as a given type of sewerage system, which creates disputes, including before administrative courts (Szudarek, 2023).

Taking into account the above, the authors propose a change in how the obligation to pay a retention fee is formulated. It is necessary to introduce appropriate legal definitions in order to avoid the raised doubts, to clearly define the group of entities obliged to pay the fee and to determine the time frame for its payment. In this last case, there is no doubt that the fee should relate to the condition continuing after the completion ("execution") of works.

Concluding with comments on the retention fee, it is worth mentioning the Bill on projects to counteract the effects of drought (*Note* 13). However, the Bill was withdrawn from further legislative work, so it currently has no legal significance. It is not known whether the Polish legislator will decide to return to it. The Bill contained a revision to the applicable normative regulations that included, regarding stormwater, the preparation and implementation of projects to counter the effects of drought, including a revision of the applicable normative regulations in the field of stormwater. It is especially worth noting that it defined the terms "rainwater and meltwater management" and "biologically active area". The first meant ensuring conditions for the infiltration of stormwater into the ground and its surface or underground retention. A biologically active area is defined as an area ensuring natural plant vegetation and retention of stormwater, an area covered with surface water, or 50% of the area of terraces and flat roofs and other surfaces ensuring natural plant vegetation, with an area of not less than 10 m^2 (Art. 43, point 2 of the Bill). The Bill also provided for an amendment to the Water Law, including in the scope of activities classified as

special use of water in the form of reducing natural land retention. It was deemed that the executing of building works or structures permanently fixed to the land on a property of area exceeding 600 m^2 and reducing retention by excluding more than 50% of the property's area from the biologically active surface would qualify as such an activity (Art. 48, point 2 of the Bill). Clearly, by changing the value in the area criterion, the Polish legislator intended to significantly extend the obligation to pay the retention fee. It is indicated that the aim was to persuade and motivate as many property owners using water services as possible to retain as much stormwater as possible (Urbaniak, 2022). In the authors' opinion, this intention has merit. Regardless of the change in question, this amendment did not comprehensively solve all reported difficulties with the fee that it concerned.

However, the idea of an Act that focuses on projects aimed at countering the effects of drought and that specifies stormwater retention activities is, in the authors' opinion, appropriate. It would complement existing regulations. Within existing regulations, provisions relating to counteracting the effects of drought are included in the Water Law (Art. 183 et seq.). Such activities are carried out in accordance with the separately legislatively adopted document named Plan to Counteract the Effects of Drought. The Plan includes, among other things, an analysis of the expansion of water resources and proposals for necessary changes in the use of water resources and changes in natural and artificial retention (Art. 184 of the Water Law).

The literature draws attention to yet another, mentioned problem resulting from the uncertainty of applicable legal regulations relating to water retention devices. These are difficulties in managing stormwater in urbanised areas that result from inconsistent practices regarding the classification of and permits for the construction of dry wells and rain gardens. These are devices (structures) that undoubtedly contribute to the effective use of stormwater. The resulting discrepancies concern in particular whether these devices require a building permit or not, and whether they constitute "water devices" (within the meaning of the Water Law) requiring an additional water permit (Sobota et al., 2022). Due to the lack of dedicated legal regulations regarding the creation of dry wells and rain gardens, their classification is inconsistent. This translates into differing formal requirements being applied. The discrepancies concern both the decisions of administrative bodies and court decisions. The waiting time for appropriate decisions is also emphasised. Depending on the entity resolving the case and the number of instances, it may be an average of up to 36 months (Sobota et al., 2022). For this reason, it is proposed that the Polish legislator consider introducing legal definitions of the concepts of dry wells and rain gardens and that it specify the formal requirements relating to them (water permit or water notification depending on the scale of the projects). This will shorten the duration of administrative procedures in this area. Moreover, investors will be able to more precisely estimate the time and costs of implementing such projects. In a broader sense, citizens' confidence in the applicable law will increase (Sobota et al., 2022).

6. Conclusions

The Water Law Act of 2017 currently in force in Poland recognises the issue of stormwater and appreciates its importance. This is a different approach than in the previous legal status under the Water Law of 2001. At that time, stormwater was treated as sewage. Despite the positive changes in stormwater management, individual provisions of the Water Law regarding these waters raise concerns and doubts about how they should be interpreted. The work focused on two main problem areas related to remuneration for stormwater discharge (from real estate to stormwater or combined sewers) and reductions in natural field retention as a r esult of construction projects. It has been shown that both areas are subject to significant divergences in how the legal provisions are interpreted. This is reflected in different stances and judgements among Polish courts. The legal doctrine also indicates the observed doubts. This may leave citizens, entrepreneurs and foreign investors confused. This legal uncertainty is particularly important from the point of view of planned investments (by the private sector) in devices and solutions enabling the use, storage and infiltration of stormwater. One of the main criteria for implementing the mentioned investments is their profitability, which is currently difficult to estimate. Moreover, this uncertainty is further increased by announcements of future changes to the law. It should be noted that, in terms of the legal framework for stormwater management, there is currently a certain paradox and some inconsistency. On the one hand, there are imprecise legal regulations that generate some uncertainty, and on the other hand, various types of authorities (state and local government) are taking numerous actions to promote sustainable rainwater management. The latter case applies primarily to various programmes promoting increased local retention and infiltration of rainwater (Kociuba & Wajs, 2021). The matters discussed above are complex and multi-

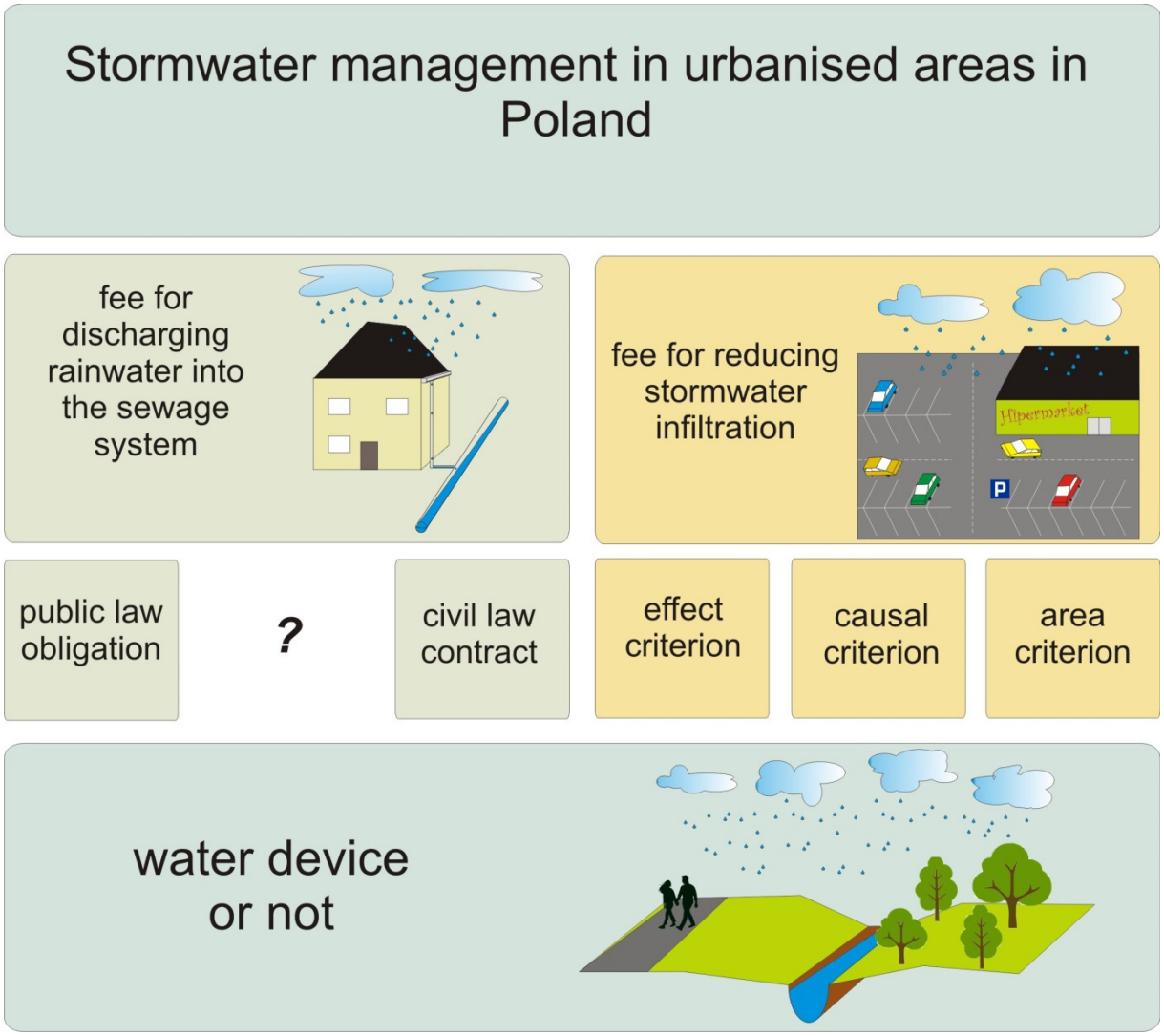

Fig. 2. Graphical summary of issues related to stormwater management in urban areas in Poland
Source: authors' own work

faceted. For this reason, a graphical summary of issues related to stormwater management in urban areas in Poland is presented in Fig. 2.

From the environmental and socio-economic point of view, actions aimed at generally slowing down the runoff of stormwaters from the urban catchment seem indispensable. The model of fastest possible draining of stormwater from the city that existed until recently has been made outdated by observed climate changes. The technical solutions that will be used for this purpose should depend only on local conditions. Appropriate legal regulations are extremely important in this respect, as they should create a convenient and transparent framework for the quickest possible implementation of investments that slow the outflow of rainwater from an urban catchment area.

In addition to the analysis of applicable normative regulations on stormwater management, the work also includes their assessment along with proposals for changes.

These changes should – in the authors' opinion – be considered by the Polish legislator. Amending the regulations in the indicated directions will both remove interpretation doubts and ensure their applied effectiveness in the two discussed problem areas.

Notes

1. Consolidated text, Journal of Laws 2023, item 1478, as amended, hereinafter: "Water Law".

2. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, Journal of Laws L 327 of 22/12/2000, pp. 1–73, consolidated version: 20/11/2014, hereinafter: "Water Framework Directive".
3. Consolidated text, Journal of Laws of 2021, item 54.
4. State Water Holding Polish Waters [Państwowe Gospodarstwo Wodne Wody Polskie] (hereinafter: "Polish Waters") is the state legal entity that contains the system of Polish water administration bodies. It consists of the National Water Management Board based in Warsaw, regional water management boards, catchment boards and water supervisory authorities. Polish Waters performs the tasks specified in the provisions of the Water Law. The authority of Polish Waters is the President of Polish Waters (Art. 239–241 of the Water Law).
5. Art. 274, point 5a of the Water Law. The Water Law determines the upper limit of fee rates. However, their amount at a given time is determined by an implementing act (e.g., a regulation). As of May 2024, this rate is PLN 2.50 (EUR ~0.58) – §6 of the Regulation of the Council of Ministers of October 26, 2023 on unit rates of fees for water services, Journal of Laws 2023, item 2471, hereinafter: "Regulation on fee rates".
6. As of May 2024, these rates are, respectively: PLN 0.75 (EUR ~0.17) if there are no devices and PLN 0.075 (EUR ~0.017) if the capacity of water retention devices exceeds 30% (§8 of the Regulation regarding fee rates).
7. In May 2024, these rates are respectively: PLN 0.50 (EUR ~0.12) if there are no water retention devices and PLN 0.05 (EUR ~0.012) if there are retention devices for water from sealed surfaces of capacity exceeding 30% of annual runoff – §9 of the Regulation on fee rates.
8. The commune is the basic and smallest unit of local government in Poland.
9. Consolidated text, Journal of Laws of 2021, item 537, as amended, hereinafter: "Supply Act".
10. Consolidated text, Journal of Laws of 2021, item 609, hereinafter: "Municipality Act".
11. Consolidated text, Journal of Laws of 2021, item 679, hereinafter: "Commune Act".
12. Act of April 23, 1964, consolidated text Journal of Laws 2023, item 1610, as amended, hereinafter referred to as: Civil Code.
13. Ministry of Maritime Economy and Inland Navigation, Project of August 12, 2020, No. UD101, https://legislatka.rcl.gov.pl/projekt/12337151/katalog/12709761#12709761, hereinafter referred to as: *Bill*.

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