



Working together for a climate-conscious catchment management

A LIFE LOGOS 4 WATERS project
Publication for the general public

Water is valuable. Let's manage it responsibly!

PROJECT DETAILS

Project name: „Integrated practical application of innovative water management methods at the catchment level with municipal coordination”

Implementation period: October 1, 2021 – December 31, 2025

Lead partner: Ministry of Public Administration and Regional Development

EU financial contribution: € 2,070,703

National contribution: € 1,694,212

Partners



CONTACT INFORMATION

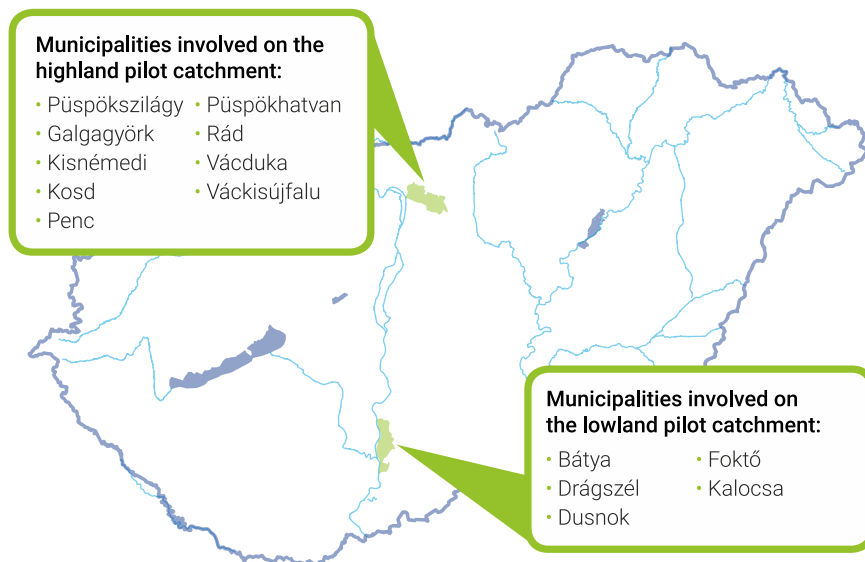
Website: <https://lifelogos4waters.bm.hu/en>

Contact: life@ktm.gov.hu



WHAT IS THIS PUBLICATION?

It summarizes the results, experiences, and lessons learned from the LIFE LOGOS 4 WATERS project in an easy-to-understand format. **Its goal is to show how nature-based solutions can contribute to the development of urban water management and adaptation to climate change.** The publication provides an insight into the interventions that have been implemented and good practices in cooperation between local authorities.



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LIFE20 CCA/HU/001604

WELCOME AND INTRODUCTION



Dear Reader,

Climate change has a serious impact on our everyday lives. We are faced with the challenges of both water scarcity and flooding. The LIFE LOGOS 4 WATERS project was created to find solutions to these challenges together. The programme pioneered a combination of climate adaptation, catchment level thinking, and nature-based solutions, thereby contributing to the perception of water not as a problem but as a value and resource in the lives of local communities. From a strategic point of view, a key result of the project is the spread of watershed-level cooperation: municipalities did not think in isolation, but jointly, in interdependent solutions, recognizing that water-related problems and opportunities do not stop at administrative boundaries. This regional thinking helps local communities respond more effectively to the challenges of climate change.

The project was implemented with the support of the LIFE Programme, one of the European Union's oldest and most successful instruments for achieving environmental and climate goals. It plays a key role in supporting innovative solutions that can be adapted to other areas of Europe, as well as in sharing experience, knowledge, and best practices. The LOGOS 4 WATERS project was implemented in this spirit, aiming to set an example in the field of climate adaptation and cooperation at both the national and international levels.

I would like to take this opportunity to thank all our partners, experts, and local government officials for their cooperative and dedicated work, without which this project could not have been a success. I am confident that the results and experiences of our joint efforts will serve as inspiration for other municipalities and regions, and will help Hungary to be better prepared to face the challenges of climate change.

I wish you an informative read!

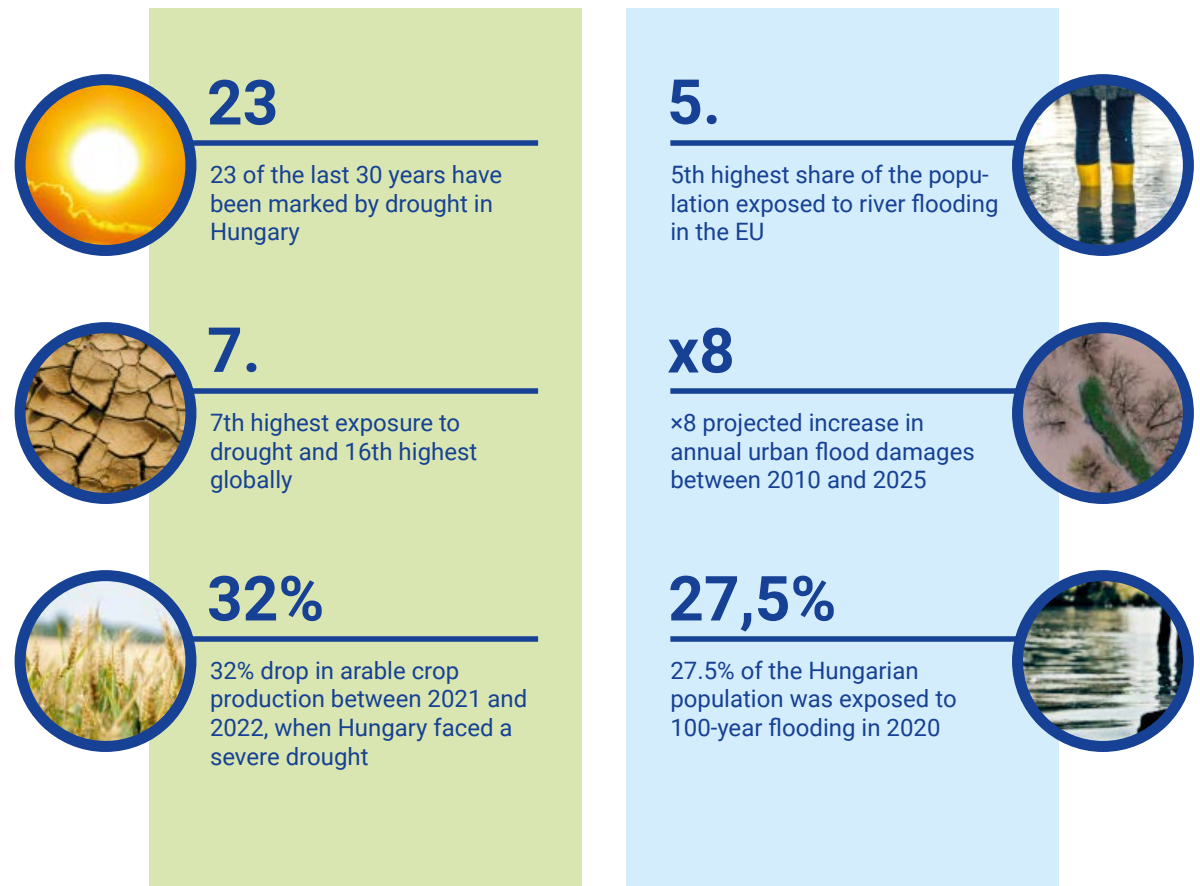
Dr. Miklós Dukai
State secretary for municipalities

Water is not the enemy, but an ally – if we give it space

Hungary’s hydrographic conditions are unique: our rivers carry a lot of water, yet we often struggle with water shortages. This is because water leaves the country quickly due to its natural flow. **In recent centuries, the main goal of water management has been flood protection and the rapid drainage of water.**

Periods of drought are becoming more frequent, while sudden, heavy rainfall also occurs. One of the main challenges of water management is not the absolute amount of water, but its spatial and temporal distribution, as well as the vulnerability of surface and groundwater resources. **This situation is further complicated** by climate change, the effects of which we are all already feeling.

The impact of climate change on hungarian water resources



A change in mindset is needed. The solution is not to drain water, but to retain it. If we keep precipitation and surface water **in place**, slow down their runoff, and use them locally, more water will remain in the soil and the risk of sudden flooding will also be reduced. Water is thus not a problem, but an opportunity.

This is the thinking behind the LIFE LOGOS 4 WATERS project. During the four-year programme, local governments, experts, and local communities worked together to implement natural water retention solutions in flat and hilly areas. Joint, catchment-level cooperation **strengthens the adaptability of settlements**, improves the state of our environment, and contributes to a more livable and safer environment.

It is gratifying that this approach is now spreading nationwide: more and more programmes, subsidies, and municipal developments are helping to keep water in the landscape—for the benefit of nature and people.



Project objectives and main directions

The aim of the LIFE LOGOS 4 WATERS project is to make water retention and climate change adaptation part of everyday municipal operations. The programme helped municipalities to see water not as a problem but as an asset, and to find solutions to water shortages, droughts, and flash floods by relying on natural processes.

<p>Nature-based solutions:</p> <p>promoting small-scale water management interventions based on natural processes to complement a technical approach.</p>	<p>More water in the landscape:</p> <p>retaining and utilizing water locally and creating natural aquatic habitats through the use of natural water retention solutions (e.g., rehabilitation of oxbow lakes, log dams, reservoirs, stream meandering).</p>	<p>More resilient communities:</p> <p>increasing the preparedness of local governments and communities to deal with extreme weather events such as droughts, heat waves, flash floods, and floods.</p>
<p>Municipal cooperation at the catchment level:</p> <p>encouraging cooperation between municipalities to jointly address water-related problems and challenges.</p>	<p>The main objectives of the project</p>	<p>Expanding professional knowledge:</p> <p>training, sensitizing, and preparing designers, authorities, water management experts, and university students for the practical implementation of integrated, sustainable water management.</p>
<p>Raising public awareness:</p> <p>promoting the idea that “water is a value” to ensure everyone understands the importance of water retention.</p>		<p>Building a professional network:</p> <p>connecting government, local authorities, water experts and civil society organizations for long-term cooperation.</p>

Two sample areas – different challenges

The terrain greatly determines how water behaves in the landscape, which is why the LIFE LOGOS 4 WATERS project demonstrated how natural water retention solutions can be applied in accordance with local conditions in two sample areas with different characteristics. The aim was to develop **practical examples that could be applied to landscape types facing different challenges.**

- **Flatland sample area:** where the main challenges are the uneven distribution of water between water-scarce and water-surplus periods, and falling groundwater levels.
- **Hilly sample area:** where damage caused by water running off sloping areas and soil erosion were problems.

Complex developments based on local conditions were implemented at both sites, which can be adapted to other areas with similar conditions.

Municipal cooperation at the small catchment level

The most important innovation of the LIFE LOGOS 4 WATERS project was that it approached **municipal climate adaptation at the small catchment level**, i.e., through regional cooperation. Often, the source of a problem occurring in a municipality is not actually to be found in that municipality, but at another point in the catchment area. The participating municipalities worked together to develop solutions that would serve the interests of the entire region, not just a single municipality. The joint work was facilitated by the **Multi-Stakeholder Catchment Forums** operating in the two pilot areas, where municipalities, water management experts, representatives of authorities, and local actors worked together to find the best solutions.

The nationwide dissemination of this approach among local governments was supported by a **water catchment support programme, an online decision support system, methodological guidelines, and knowledge-sharing and informational events.** Alongside these, a **national professional network** was also established, connecting government, local government, water management and civil society actors around the common goals of sustainable water management.

Knowledge sharing and awareness raising

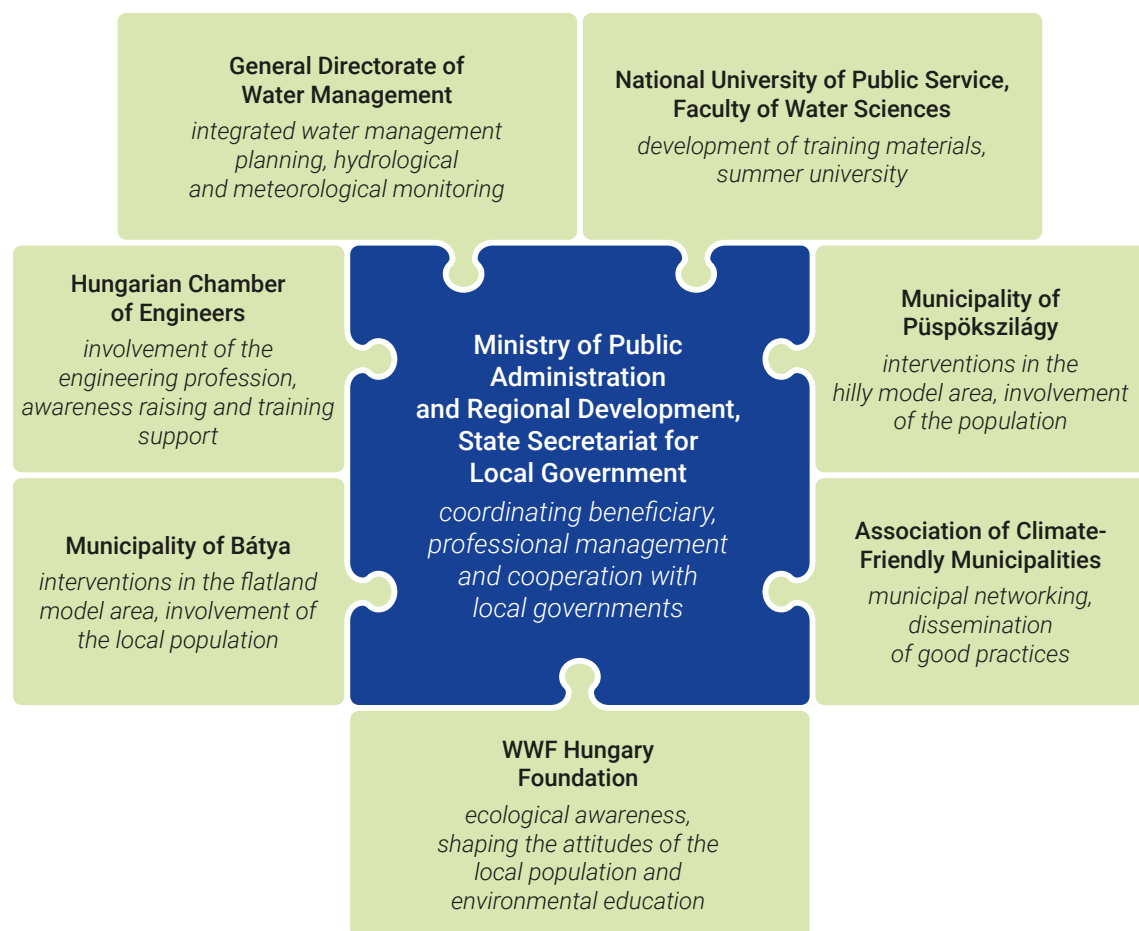
The project placed great emphasis on sharing knowledge and experience. During the programme, **training materials** were prepared for municipal officials, water management experts, and engineers. **A university course** was launched for future water engineers, as well as an **environmental education programme** to support the work of elementary school teachers and the education of children. As part of the project, we drew attention to the importance of water conservation through **a nationwide awareness-raising campaign** and short films. Knowledge transfer was facilitated by a series of nationwide events, workshops, and professional forums, ensuring that practical examples of nature-based water conservation reached everyone. As a result of the project, the water conservation mindset was strengthened at multiple levels and among multiple target groups, and a social dialogue was launched on how to manage our water resources more efficiently.

Multi-level climate governance – project operation and partnership

Project partnership

The key to the success of the LIFE LOGOS 4 WATERS project was its multifaceted partnership operating at both national and local levels. The programme was coordinated by the Ministry of Public Administration and Regional Development, State Secretariat for Local Government, which ensured the professional management of the project and the effective cooperation of the partnership.

Eight partners participated in the project, working together to strengthen the practice and approach of nature-based water retention in Hungary.

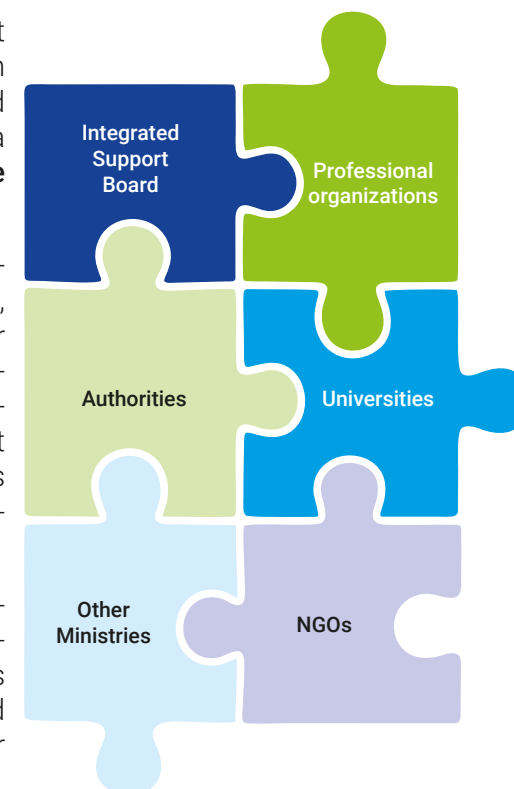


We must work together to find a place for water in the landscape: the LIFE LOGOS 4 WATERS project has made this cooperation tangible. The collaboration between government, local authorities, water management and civil society actors sets an example of how cooperation can provide real solutions to water management challenges.

When establishing the partnership, it was important **to involve as many relevant fields as possible** in the planning and implementation of nature-based water retention solutions. Therefore, we created a broader cooperation forum within the project, **the Integrated Support Board**.

The Board brought together professional organizations, authorities, universities, partner ministries, and civil society actors directly involved in water management, nature conservation, and urban development. The aim of its creation was to incorporate the knowledge and experience of different fields into the implementation of the project, thus ensuring a complex and professionally sound approach.

The Council’s work helped to ensure that the project’s results were developed from a more comprehensive perspective, taking into account the views of various fields of expertise, and that they would contribute to the development of sustainable water management in the long term.



*„Coordinating different professional perspectives not only enriches our joint work, but also makes it more credible.”
(Member of the Integrated Support Board)*

Cooperation and coordination at the catchment level

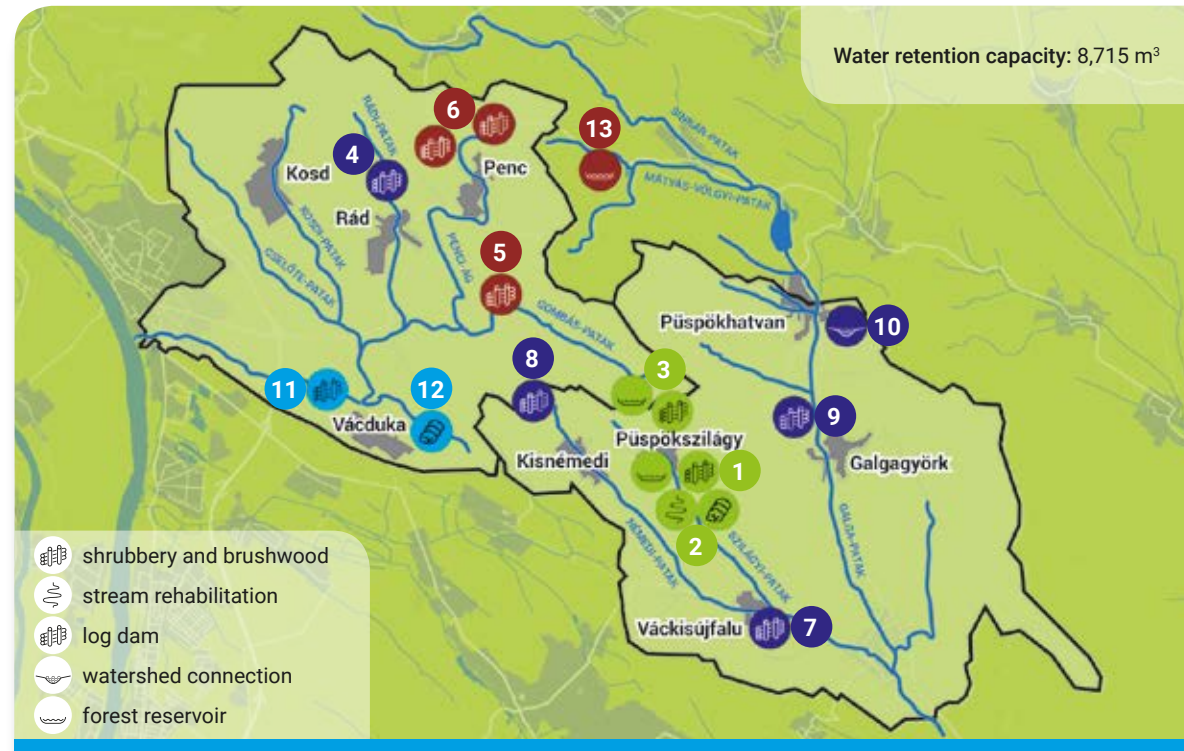
The two partner municipalities – Bática and Püspökszilágy – took on the role of local coordinators and brought together the cooperating municipalities in the area. Their task was to promote joint thinking, information flow, and coordination of interventions within the small catchment. The organizational framework for cooperation was provided by the **Multi-Stakeholder Catchment Forums**. These forums created dialogue between stakeholders in the watershed and provided an opportunity to ensure that developments were truly aligned with local needs and experiences.

The operation of the Forums showed that water management issues **can be addressed effectively when decisions are based on local knowledge, resources, and cooperation.**


Small interventions, big impact – water management in hilly areas

The cooperation implemented in the Szilágyi and Gombás stream catchment area involves nine settlements, covering a total area of approximately 210 km². The varied surface and hydrogeological conditions of the hilly landscape offer an ideal opportunity to test natural water retention solutions. In recent years, the region has been increasingly affected by droughts and flash floods, making it necessary to slow down water runoff and retain precipitation locally. **The municipalities have jointly developed measures at the catchment level that serve the purposes of flood protection, water conservation, and nature restoration.**

Interventions at the catchment



1. Püspökszilágy – Lower Valley of the Szilágyi Stream



A log dam and habitat restoration were implemented on the previously straightened section of the stream: the microclimate was improved by planting native trees, shrubs and herbaceous plants, and the log dam helps to retain water and restore natural water flow. The area's community role has also been strengthened, as it is connected to the nature trail and the indoor exhibition, so the intervention also serves awareness-raising purposes. The protection of the stream is also aided by a 100-meter-long Benjes hedge, which prevents sediment from the surrounding land from entering the stream bed.

- 2. Püspökszilágy – Kiskövesi side branch**
A complex water retention and erosion protection system has been built in the valley, with a valley closure dam, log dams, Benjes weirs and afforestation, which together slow down the runoff and protect the stream bed. The system can retain nearly 1,100 m³ of water.
- 3. Püspökszilágy – Upper section of the Gombás stream**
Two stone-filled, double-row log dams were built to ensure natural water passage, and a water flow measuring camera was also installed to monitor the stream's runoff conditions.
- 4. On the border of Kosd-Rád – Rádi Creek**
In Kosd, a leaky woody dam was built on the Rádi Creek. The log dam slows the flow of water and helps retain sediment, thereby reducing the risk of flash floods in Rád.
- 5. Penc – Szirota**
Two single-row log dams were built on the Penc branch of the Gombás stream in the Szirota area to slow down the flow of water and help improve the natural condition of the riverbed.
- 6. Penc – Brick House**
Two log dams were also built on the other branch of the stream to slow down water movement, improve water retention, and reduce soil erosion.
- 7. Väckisújfalu**
Two 20-meter-long leaky dams were built to help retain water, and a rest area was also created for visitors.
- 8. Kisémedi – Némedi Stream**
A log dam was built on the stream, which also slows down the flow and helps prevent the riverbed from being washed out during heavy rainfall.
- 9. Galgagyörk – Putri Creek**
An arched leaky log dam was built in the Natura 2000 area, which slows down the water flow, retains sediment, and protects the environment around the culvert, supplemented by a small rest area.
- 10. Püspökhatvan – Takács Hill**
The aim of the interventions carried out in Püspökhatvan is to reduce inland flooding and sediment transport caused by rainwater coming down from the hill. Five smaller log dams and rows of piles were built in the upper section of the catchment area, in areas subject to periodic water erosion.
- 11. Vácduka – ditch**
The ditch in Vácduka was cleaned up to reduce erosion and silting during heavy rainfall. The log dams built in the upper section retain water and sediment, while dredging the lower section helps maintain the ditch's capacity. These simple, nature-based interventions contribute to the long-term water safety of the area.
- 12. Vácduka – Benedek Elek Primary School**
A 100-meter-long Benjes hedge was planted near the Benedek Elek Primary School in Vácduka. This natural barrier slows down the flow of water from the road and surrounding areas and retains sediment. This reduces the risk of flooding and silt accumulation in the vicinity of the school.
- 13- Penc – Barina**
An earthen valley closure dam was planned in the Barina stream valley to improve the water management of the area and mitigate the effects of drought by retaining rainwater. The project was not implemented due to high costs, but the local government plans to build it in the future based on the completed plans.

Results and impacts

During the project, **21 log dams and numerous smaller interventions (eg: Benjes-hedges, afforestation)** have been carried out in the hilly catchment area, which together have created a storage capacity of approximately **8,700 m³** that retains water, promotes continuous infiltration, and does not hinder biodiversity movement. The interventions directly affect 6,000 local residents and indirectly improve water management security in several settlements in the entire catchment area, where 12,000 people live and two high-risk facilities of national importance operate.

As a result of the interventions, flood risk and runoff intensity have been reduced, groundwater recharge has improved, and the ecological value of green spaces has increased. Through the demonstration elements, the model area will continue to function as a place for education and awareness-raising in the long term, promoting the wider dissemination of natural water retention solutions.

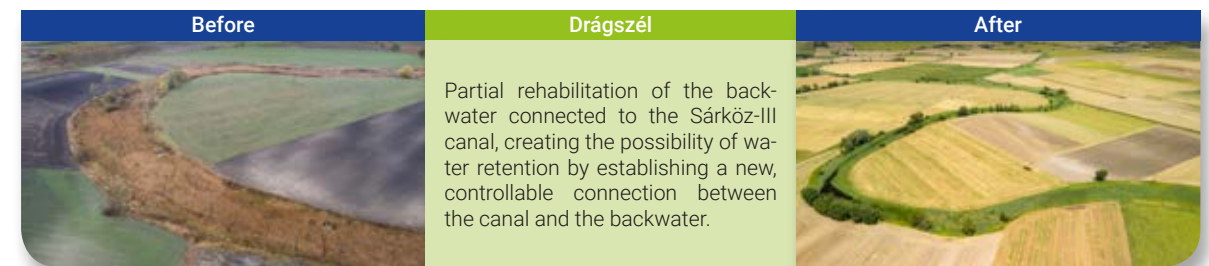
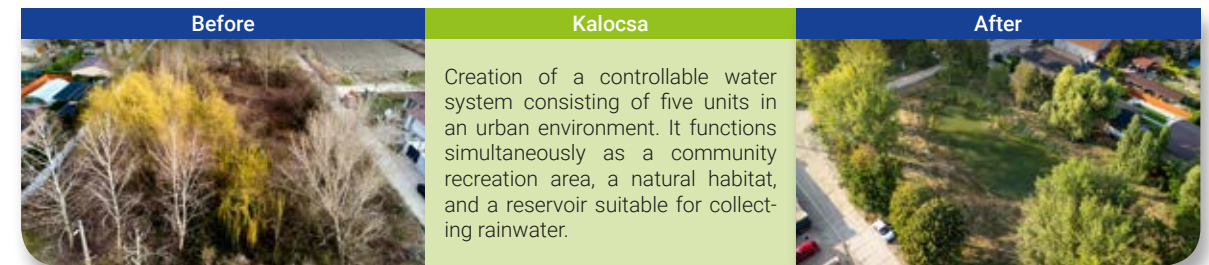
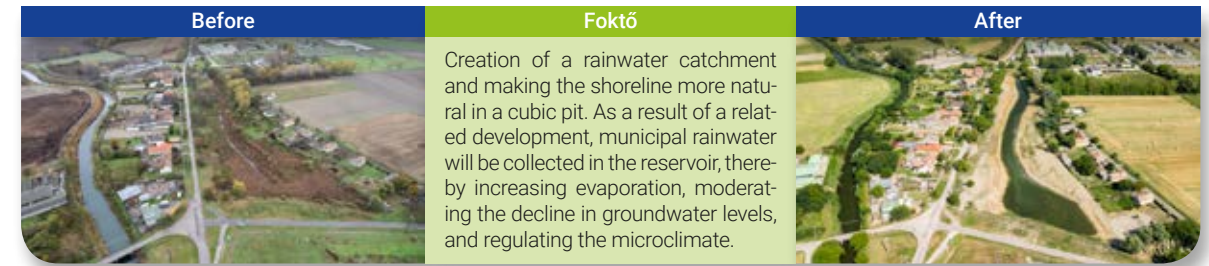
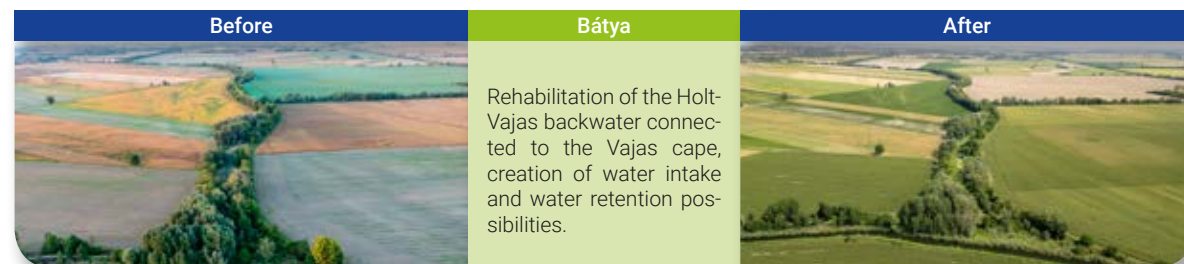
Püspökszilágy began applying nature-based water retention solutions with the LIFE-MICACC project and has since continued this approach in several domestic and international initiatives. In recognition of their work, the municipality was included in the URBACT 116 European Good Practices in 2024.

Water brings life back to the landscape – flatland water retention

The flatland model area is located between the Danube and Tisza rivers, in the Kalocsai-Sárköz, a low-lying area that was once flooded. The river regulation works carried out in the 19th century fundamentally changed the landscape: the former bends of the Danube became backwaters, natural flooding ceased, leading to the gradual drying out of the soil and a drop in the groundwater level. Today, the area's water system is mainly defined by the Danube Valley Main Canal, the Sárköz-I Main Canal, and the Csorna-Foktői Canal.

The effects of climate change – periods of drought and sudden heavy rainfall – are posing an increasing challenge, which is why the municipalities concerned have begun to work together at the catchment level. As part of the **LIFE LOGOS 4 WATERS project**, they are implementing a **series of interlinked interventions** aimed at retaining precipitation locally, promoting water infiltration and conserving soil water resources. **The aim is to improve the natural water cycle, mitigate the decline in groundwater levels, and create new wetlands to make the landscape more resilient and livable.**

Interventions at several points in the catchment area



Results and impacts

Thanks to the interventions carried out at five locations in the flatland model area, **the water retention capacity of the landscape has increased significantly**: the rehabilitation of oxbow lakes, the creation of a rainwater reservoir and the construction of urban green-blue infrastructure systems together enable nearly 40,000 m³ of water to be retained locally.



Water retention has created **new near-natural habitats**, protecting biodiversity and improving the ecological condition of the landscape. In addition, joint catchment area planning has **strengthened cooperation between participating municipalities, and near-natural water management has become part of local decision-making**. Overall, the interventions have a positive impact on the daily lives of 21,438 residents and increase the region's long-term resilience to the negative effects of climate change.

Measuring the effects of interventions – Monitoring activity

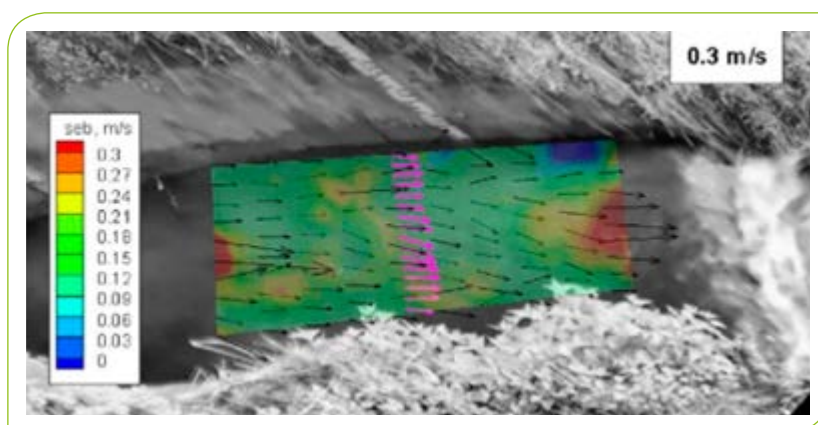
A modern monitoring system is essential for objectively measuring the effects of the project and for decision-making at the catchment level. Continuous meteorological, hydrological, and subsurface data collection not only ensures the monitoring of interventions, but also provides a quantifiable basis for their subsequent application in other areas. The Budapest University of Technology and Economics (BME) and Eötvös Loránd University collaborated with the General Directorate of Water Management (GDWM) in the professional establishment and development of monitoring.

The most modern element of the network is **camera-based water flow measurement technology**, which enables cost-effective and continuous data traffic even in sections that are difficult to measure. The method is being promoted in Hungary with the help of a **public guide** developed by BME, which allows civil communities to participate in data collection, thereby increasing the spatial coverage of observations.

Measurement network established in sample areas:

- **Hilly areas:** A two-camera water flow measurement system, a hydrometeorological station, and a rain gauge monitor hydrographic data. During the project, continuous data collection took place from all installed systems, in the GDWM and BME systems. These will continue to be available at both organizations during the maintenance period.

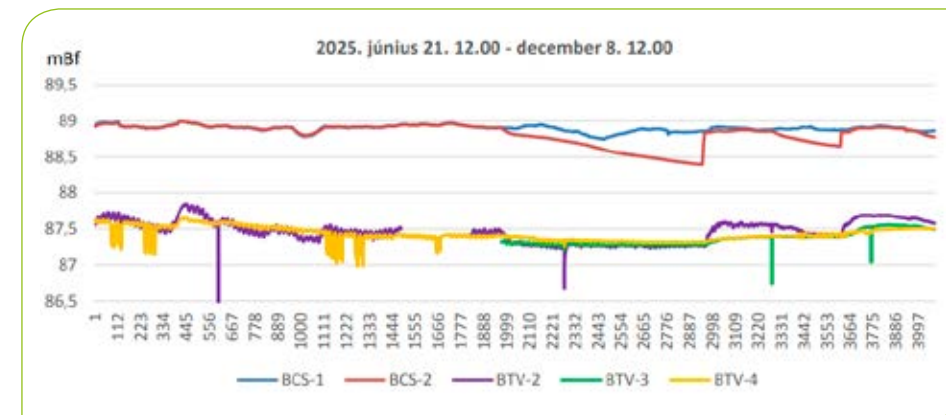
Example of LSPIV-based surface flow velocity measurement results for an upstream cross-section.



Source: Video-based water flow measurement station for small watercourses, BME 2024.

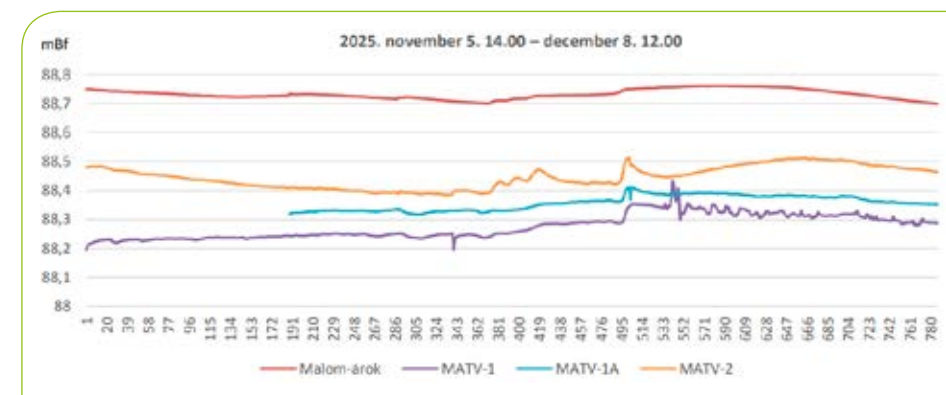
- **Flat areas:** Recording instruments installed at surface and subsurface measuring points and regular sampling provide the data background. Data reading was continuous during the project, carried out by ÖkoSzenna Kft. During the maintenance period, the municipality will collect the data on a monthly basis.

The graph below shows water level data for 4080 hours, or 170 days, from measurements taken in the Holt-Vajas backwater intervention area.



Source: Final monitoring report - ÖkoSzenna Kft., 2025.

The graph below shows water level data from 790 hours, or 33 days, of measurements taken in the Drágszél Malom-árok intervention area.



Source: Final monitoring report - ÖkoSzenna Kft., 2025.

Support for integrated planning

These tools make it much easier for decision-makers to interpret locally available information and to estimate and monitor the effects of various nature-based water retention solutions in advance. The documents produced in the project (ITVT and ITVT Master Plan) represent an important step in integrating the water retention approach into urban development processes.

¹ ITVT: Integrated Municipal Water Management Plan – A basic water management document that meets the environmental, social and societal needs of the municipality in relation to water and water conditions, presenting sustainable water management tasks and their foundations in a uniform, operable system that supports the economy and the environment.

² ITVT Master Plan: It builds on the existing or planned Integrated Municipal Water Management Plans of municipalities located in the common catchment area, adopting their logic and evaluation criteria, but applying a catchment-level approach.

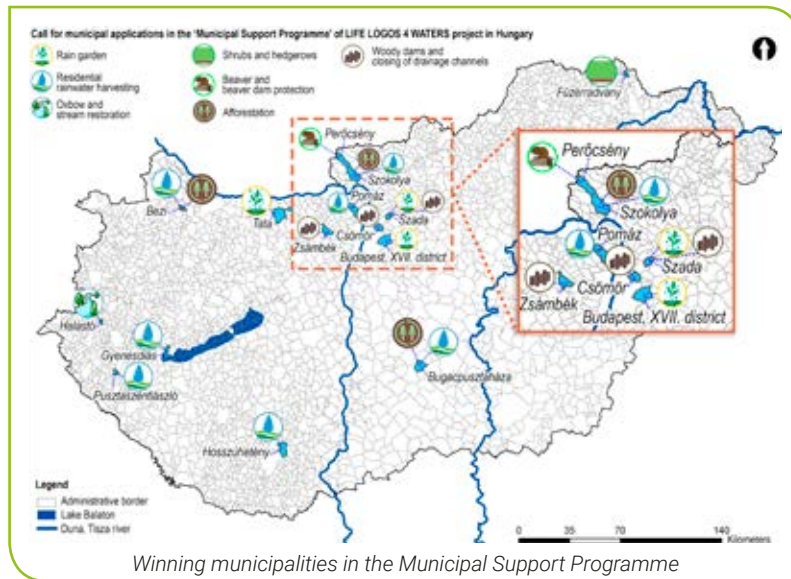
Funding programmes for local governments

The **aim of the project** was not only to implement specific water retention measures, but also to integrate **water retention, nature-based solutions and long-term cooperation into local government thinking**. This was facilitated by two complementary grant programmes, which received a total of around **300 applications** from all over the country. The Municipal Support Programme supported local, small-scale developments, while the Catchment Support Programme encouraged cross-municipal, joint watershed-level cooperation. Together, the two programmes contributed to the widespread adoption and application of water retention practices, contributing to the resilience and sustainable water management of our communities.

Support for municipal developments

The **Municipal Support Programme** provided an opportunity for municipalities to implement their own water retention and climate adaptation ideas tailored to local needs. The emphasis was not only on specific interventions, but also on strengthening local knowledge: how to retain precipitation locally, reduce inland flooding, and prepare for climate extremes with simple, low-cost solutions.

There was great interest in the programme: 86 applications were received, including from county-level cities and districts of the capital. Fifteen municipalities received non-repayable grants from the €100,000 budget. Although these were small-scale “mini projects,” they clearly demonstrated that even with relatively limited resources, it is possible to launch effective, impressive, and long-term sustainable water retention developments. In many places, these initiatives laid the foundation for subsequent larger developments and the acceptance of nature-based solutions, which became part of local practice.



What solutions did we support? – Types of “mini projects” implemented

The 15 winning municipalities implemented a wide variety of solutions tailored to local conditions. The projects had a common goal: **to retain precipitation locally, improve the microclimate, and raise awareness among the population and involve them** in climate adaptation:



Encouraging municipal cooperation at the catchment level

As part of the project, a new grant scheme not previously used in Hungary was launched: the **Catchment Support Programme**. What was new about this was that municipalities did not seek solutions to the challenges of climate change and water management individually, but jointly, at the catchment level. **The emphasis was on nature-based, sustainable solutions, as well as cooperation, long-term planning, and strategy development.**

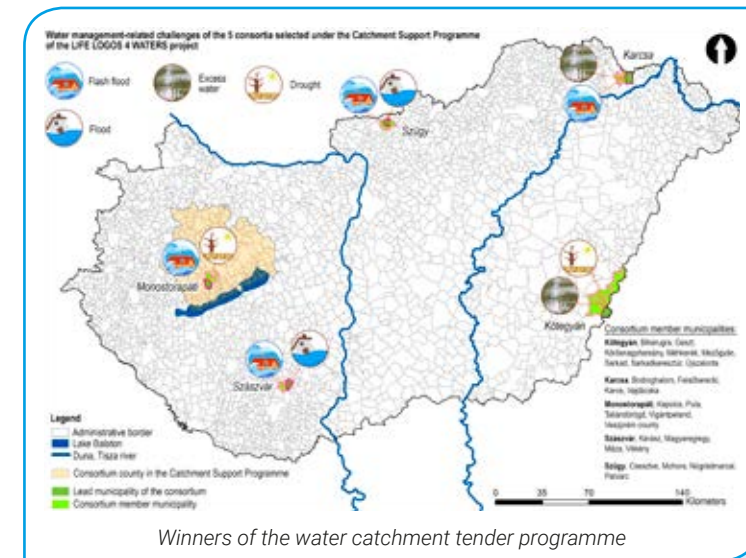
National interest – record number of applicants

The two-round competition received an outstanding number of applications in the first round:

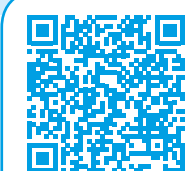
- 39 municipal consortia applied,
- with the participation of more than 200 municipalities (195 municipalities and 5 counties),
- from nearly 50 districts, from all parts of the country.

This clearly shows that water retention and climate adaptation are common issues, in which municipalities are increasingly relying on the power of **cooperation**.

The programme supported **five river basin consortia**. The winning municipalities received **expert assistance** to develop integrated, nature-based solutions for their own catchments that will help address local water management issues in the long term.



Municipal Support Programme



Water catchment tender programme

New approach, nationwide impact

One of the most important lessons learned from the Catchment Grant Programme was that **catchment-level thinking and joint planning by local governments create significant value in and of themselves**. Although the programme did not result in any concrete implementation, the cooperation that developed and the planning and development practices based on **nature-based solutions (“know-how”)** became an example at the national level. The impact of this has already been felt in the domestic support system: the KEHOP Plusz programme supports projects in which several municipalities can jointly implement small-scale green-blue infrastructure developments.

Another major achievement of the programme is that it has **strengthened the culture of cooperation** between local governments, water management experts, civil society organizations, and researchers. **The knowledge and network of contacts developed through joint work will help to maintain a catchment-level approach in the long term** and contribute to nature-based water management playing an increasingly important role in future developments.

Dealing with the effects of climate change is no longer just a technical issue, but an everyday task for local decision-makers. Therefore, a key objective of the project was **to support local governments with knowledge, tools, databases, and methodologies** that would enable them to make informed and well-considered decisions in the areas of water retention and climate adaptation.

Integrated Municipal Decision Support Platform (IÖDP)

One of the most important professional achievements of the project is the so-called Integrated Municipal Decision Support Platform, an online interface where domestic and international databases, tools, guidelines, and best practices are available in one place.

The aim of the platform is to enable local governments to:

- up-to-date **data**,
- easy-to-use **planning tools**
- and reliable **professional background materials** when making decisions.

The tools available on the platform are organized into **six main topics**:

climate protection	urban development	nature-based solutions
ecosystems	water management	green infrastructure

Multi-level governance: local–regional–national coordination

Responses to climate change are effective when **coordinated planning is implemented at all levels**. The project therefore sought to link local knowledge and needs with regional and national policies.

- **Local level:**
municipal decisions and residents' needs
- **Regional (catchment) level:**
joint planning and coordination between multiple municipalities
- **National level:**
professional background, regulatory frameworks, support systems

The platform also directly contributes to making it easier for municipalities to coordinate their own plans with **SECAPs (Sustainable Energy and Climate Action Plans)** and other municipal regulations, strategies, and other planning documents.

Well-founded, data-driven decisions

With the help of the IÖDP, municipalities:

- better understand their own water management and climate risks and vulnerabilities,
- identify the most important points of intervention,
- and choose solutions that truly address local problems.

The platform is constantly expanding, making more and more useful tools available to local decision-makers.

Knowledge network and joint thinking

In addition to the developments, a national and local knowledge network was also established during the project. This included:

- **field trips** with the participation of local leaders and experts,
- **forums** where the partnership, locals, the regional water authority, and the licensing authority could think together (Multi-Stakeholder Catchment Forums and Integrated SupportBoard),
- **workshops and training courses** to facilitate the transfer of practical experience.

The cooperation provided an opportunity for planning to take place not only “at the table,” but also in the field, with the participation of experts and an **understanding of the real problems on the ground**.

IÖDP databases, tools

Source:

<https://lifelogos4waters.bm.hu/dontestamogato-platform/>

This knowledge base helps urban planners and local leaders to plan their long-term strategies, developments, and measures to reduce climate vulnerability on the basis of data.



Summer universities

The Faculty of Water Sciences of the National University of Public Service in Baja organized three international summer universities, where students acquired theoretical and practical knowledge of water management and climate adaptation, tried out modern measurement technologies, and experienced the functioning of nature-based water retention solutions during field trips, thus preparing them for future challenges with a holistic, sustainable approach.

Training materials on water retention

Another goal was to introduce nature-based water management and the integrated catchment approach to water authorities and the next generation of engineers. As part of this, e-learning materials were developed, a new course and specialized further training were launched at the National University of Public Service, and more than 200 engineers participated in training courses organized jointly with the Hungarian Chamber of Engineers. The aim of the programme is to ensure that natural water retention solutions can be confidently applied alongside traditional infrastructure, and the training material will soon be available in the national chamber system.



Dissemination events

Domestic events



The overall objective of the project was to raise awareness of natural water retention solutions and the catchment area approach among local authorities and professionals, which we achieved through climate workshops, conferences, field trips, and a series of events across the country. The events also provided opportunities for professional consultation and networking, offering direct support for planning at the municipal level.

International closing conference

The highlight of the project was the ClimAct2Adapt – Acting Together for Climate Resilience international conference held in Esztergom on October 8–9, 2025. The event focused on the relationship between climate adaptation, water management challenges, and nature-based solutions, and also served as the project's closing conference. Domestic and international experts, decision-makers, and representatives of civil society organizations learned about the results and discussed future collaborations. The conference presentations and professional materials are available online.



International study trips, professional conferences



During the four years of the project, we organized three European study trips for 30–40 people where partners, local governments, and experts could learn about solutions for hilly areas in the United Kingdom, France, and Romania.

Networking meetings

During the project, we exchanged experiences in water retention and climate adaptation projects and established new collaborations through three domestic and three international professional visits and networking meetings.

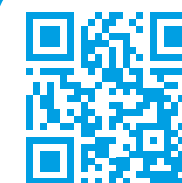


One of the key pillars of the project was widespread awareness raising, which was supported by carefully structured communication and information dissemination activities. Our materials were specifically designed to effectively promote public education and reach as wide an audience as possible. The effectiveness of this was confirmed by **representative national surveys** of 1,000 people conducted in 2022 and 2025, which showed a significant increase in awareness of natural water retention solutions. The success of the project is also demonstrated by the number of **press inquiries and appearances**, as well as the high reach and activity of followers on social media.

Three infographics were created to present natural water retention solutions, covering the relationship between wetlands and groundwater, biodiversity conservation, and small-scale solutions in hilly areas. The short films produced during the project are available on the “Every drop counts!” YouTube playlist, including **five interview films** in which local leaders and experts share their practical experiences.



We supported reaching the population with **online campaigns**, which were visually brought together by Csepi, the water drop character. In addition to our continuous social media presence, we launched an annual prize draw and created the **viztukor.hu microsite** with interactive games, 360° content, and virtually navigable sample areas.



The campaign was complemented by a **short film entitled Eltékozolt vizeink (Our Wasted Water)**, which presents the causes of water scarcity in Hungary, the situation of wetlands, and possible courses of action. The film debuted at a press event on World Wetlands Day, won the Blue Planet Award at the 2025 Planet Lens festival, and was also featured on MTVA.



Environmental education was also a key element in shaping attitudes. As part of this, a workbook entitled VízTükör (Water Mirror) was produced for 10-12 year olds, along with an accompanying teaching package that supports interactive, experience-based teaching with lesson plans, methodological guidelines, explanatory videos, and field guides. Interested teachers were able to familiarize themselves with the materials as part of a continuing education programme accredited by the Educational Authority.

Public involvement

During the project, we sought to actively involve local communities: we presented the developments at public **forums** and local **events**, provided opportunities for questions and exchange of experiences, and presented the importance of water conservation through playful, awareness-raising programmes, so that everyone from children to farmers could learn about the project's contribution to a greener, more livable community environment.



Adoption programme in Püspökszilágy

The “**Adopt a Water Guardian**” programme in Püspökszilágy was one of the most successful community initiatives of the project, where children and school communities symbolically adopted the log dams, learned about the functioning of the stream and its habitats in field programmes, and jointly experienced the importance of nature conservation and community roles, while strengthening local cohesion.

Presentations at international conferences



The project partners actively shared their experiences both domestically and internationally: they presented the project's goals, results, and the potential of nature-based water retention solutions at dozens of in-person and online professional conferences and events.

Model area demonstration center and educational trails

The central element of the Püspökszilágy model project was the creation of an **indoor educational center** and educational trail, where natural water retention solutions are presented through school programmes, professional workshops and interactive games (“**water amusement park**”), complemented by bilingual information boards for domestic and international visitors.



Educational trails have been created in Kalocsa and Dusnok, demonstrating the role of natural water retention solutions in local water management; in Kalocsa, an outdoor educational trail and **educational pavilion** are available for school groups, and in Dusnok, good practices of the settlement are presented.



SOME RESULTS IN NUMBERS

- **We presented the project at 100 events**
- 21 roadshows – more than 5500 km covered
- 2110 participants in the project events
- 3 domestic and 3 foreign networking meetings



- **286 municipalities participated in the application programmes**

- 5 training materials and 5 methodological guides
- More than 200 water construction engineers and water construction specialists participated in the 2 pilot trainings in the fall of 2025
- Nearly 90 local government and 30 water authority specialists took part in our online trainings
- 40 teachers completed the Water Mirror teacher training
- 1300 students participated in the Water Mirror class



- **6 informative, attitude-shaping short films**
- 4 social media campaigns
- 4 interactive online game on viztukor.hu
- 222 press appearances



- **250,000 viewers watched the film „Eltékozolt vizeink” (Wasted Waters) on Youtube**

- 3 million hits on our social media platforms
- Nearly 68 000 website visitors
- 5,500 players on the viztukor.hu website



- **34 nature-based interventions, nearly 46 900 m³ water retention capacity**

- 31 000 m² of new or rehabilitated water surface
- 6% increase in awareness of natural water retention solutions
- The project was included in the UN good practices
- The Püspökszilágy sample area was included in the good practices of the URBACT programme, alongside cities such as Paris or Barcelona



Project details:

LIFE LOGOS 4 WATERS project entitled "Integrated practical application of innovative water management methods at the catchment level with municipal coordination"

Contact details:

Website: <https://lifelogos4waters.bm.hu/en>

E-mail: life@ktm.gov.hu

Project partners:

Ministry of Public Administration and Regional Development
General Directorate of Water Management
National University of Public Service
Hungarian Chamber of Engineers
Municipality of Püspökszilágy
Municipality of Bátya
Association of Climate-Friendly Municipalities
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