

From Dry Taps to Safe Water in Prokuplje

A SMALL SERBIAN CITY IS TURNING AGEING INFRASTRUCTURE AND WATER LOSSES INTO AN OPPORTUNITY FOR TRANSFORMATION WITH ITS CLEAR PLAN FOR SAFE, RELIABLE DRINKING WATER.



Prokuplje, Serbia



Prokuplje, Serbia



38,000



Category of Climate Action:

- Water supply & sanitation
- Climate adaptation & resilience
- Urban infrastructure

An unreliable water system

Growing climate pressures are testing the limits of Prokuplje's ageing water system. Hot and dry summers are driving up demand just as the city's old asbestos pipelines reach the end of their life. Around 40% of water is lost before it reaches households — not only wasting a scarce resource, but also creating risks of contamination as leaks draw pollutants into the network. This combination of water loss and unsafe materials has raised serious public health concerns.

For residents, the impacts are personal and immediate. When a water main fails, whole neighbourhoods are cut off, sometimes for days. Schools and kindergartens have had to manage without running water, leaving families anxious and children vulnerable. “It's a big issue for families,” one city official explained. “You can't plan your day when you don't know if the taps will run.”

Years of leaks have allowed water to seep beneath the streets, softening the ground and causing sections of the road to collapse. This erosion has left potholes and uneven surfaces that push pedestrians closer to traffic.



Finding the tools to modernise an old system

City leaders in Prokuplje had long recognised the urgency of modernising the system, but they needed the technical studies, design, and financing pathway to unlock change. They had already tried to improve the water system, but early project proposals lacked the technical evidence needed to secure financing. Without hydraulic models, investment plans, or cost-benefit analysis, their applications were not successful.

Prokuplje needed a stronger evidence base and a more viable project, with tools that would allow it to build on its work and move forward with confidence.



Mapping every leak, modelling every fix

The EIB-Gap Fund worked with Prokuplje to provide exactly the foundation it needed. The process began with a digital model of the entire water supply network, mapping every pumping station and pinpointing where the losses were greatest. This gave the first clear picture of how the system worked. But also where it was failing.

Building on that, consultants prepared designs for urgent improvements: installing modern sensors to monitor water flow in real time, and replacing outdated pumps and about 11 km of damaged asbestos pipelines. For the first time, the city had concrete engineering solutions on the table.



A financial analysis then set out a phased €2.25 million investment plan aligned with Serbia's national priorities and EU drinking-water standards. It turned the technical studies into a clear financing pathway, showing not just what needed to be done, but how to pay for it.

At every step, the local water utility was deeply involved. Consultants from the Gap Fund team visited the city multiple times, mapping assets and holding biweekly meetings online. Staff who had spent years firefighting breakdowns gained new methods and insights. Even seasoned engineers learned how sections could be cut, reinforced, or modernised to make the system more efficient.

With a clear technical and financial package in hand, Prokuplje is now able to resubmit its project to the Ministry of Public Investment with confidence. Not as a vague aspiration, but as a robust, investment-ready project.



I would like to express my great gratitude to the Gap Fund for the support shown and the preparation of expert documentation for the replacement of outdated asbestos pipes in our water supply system. I want to encourage all local governments that have similar problems to turn to the Gap fund, because their knowledge and experience will be significant in overcoming such problems.

— Miroslav Antović, Mayor of Prokuplje



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Turning a crumbling network into a plan for renewal

The studies confirmed the seriousness of the problems – 40% water losses, health risks from asbestos, and an overstretched system – but they also provided a clear roadmap to address them.

For residents, successful implementation will mean safe, reliable water, even in the summer peak. Families will no longer have to send children to school without running taps. Streets will be safer and more pleasant without constant roadworks and potholes. Health risks will be reduced as contaminated pipelines are replaced.

For the city, the benefits are just as important: lower operating costs, reduced emissions, and a system resilient to hotter summers and greater climate stress.

Ready to rebuild

Prokuplje's next step is to finalise the documentation and submit it to the Ministry of Public Investment for approval. The Ministry has been closely involved throughout, giving city leaders confidence in the process. Once approved, financing is expected through Serbia's national Municipal Infrastructure Programme, supported by the European Investment Bank.

Implementation of the €2.25 million project will be phased over 3-4 years, ensuring continuous service for residents while works are carried out.



We feel confident moving ahead. The Ministry knows the project well and recognises its strength, which puts us in a strong position for approval and financing.

— Milena Petrović,
City Project Coordinator