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IMPROVING THE ECOLOGICAL HEALTH OF GALATI COUNTY THROUGH WATER INFRASTRUCTURE IMPROVEMENTS

By Luke Carothers

GALATI COUNTY is situated on the eastern side of Romania, and, although the region's population is relatively small with just 536,000 residents living in the 4,466 km² area, the region has been continuously inhabited by human populations since the neolithic era. The region's capital city—Galati—was settled sometime between the sixth and fifth centuries BCE as an important meeting place on the Danube River. However, despite this long history, much of current Galati County has not been developed in terms of wastewater treatment facilities and drinking water distribution networks.

Plans were announced for a massive improvement to Galati County's water and sewage infrastructure. United States-based Hill International was selected to provide project management services and works supervision for the project. In addition to providing project management services, Hill International will also handle project publicity, sludge management strategies, implementation of a GIS system, and industrial wastewater management. Bodgan Mocanu, Hill International's Technical Director, notes the environmental and social impact of this project on the people living in Galati County. According to Mocanu, this sort of development was previously unheard of in the region, where most water improvement projects were local, small-budget projects. In the past, much of the region's development was focused on the industrial sector, and, as a result, the region remains Romania's leading steel producer.

Political changes have made a definite impact on how infrastructure projects were and are developed in Galati County and the rest of Romania. Mocanu notes that prior to 1990, there was substantial political motivation to develop the region from an industrial perspective. After the disbanding of the USSR, there was an immediate need, according to Mocanu, to begin developing the region in a way that directly benefited the people living there. The first step in this process was updating the water infrastructure that was already in place and connecting it with other systems to form the basis of county infrastructure. Funding for these projects was only increased when Romania joined the European Union (EU) in 2007.

Romania's inclusion in the EU meant political pressure and financial support to comply with Directives that are meant to improve the lives of people living under its jurisdiction. The water infrastructure project in Galati County addresses the EU Directives regarding drinking water quality, urban wastewater treatment, and the safe evacuation of sludge.



The project involved not only procuring the necessary equipment to complete the improvements, but also in ensuring that the project met the funding requirements laid out by the EU. This first phase also included a public awareness campaign, which Hill International helped develop to inform the region's population about the proposed construction works.

The Galati Water Improvement project is focused on addressing the current state of the systems in place and updating them according to need. In some parts of the county, such as Cosmesti and Serbestii Vechi, this means rehabilitating their raw water pumping and chlorination stations. In other places, such as Liesti and Movileni, new drinking water treatment plants are being constructed. Still other places such as Slobozia Conachi existing water distribution networks are being extended. However, this represents just a fraction of the upgrades that are being constructed during this project.

As the second phase of the project continues, Mocanu points out that rural communities will see increased benefits. Mocanu notes that, while there are developed areas of the county, many small communities have never had centralized waste management systems. More still, the more rural of these communities have never had a centralized drinking water system, relying on local sources for their drinking water. On top of receiving centralized drinking water and waste management systems, these communities will also benefit economically from the second phase of the project. Resources generated from the project will support industries such as agriculture through features like activated mud.

According to Mocanu, the emphasis on creating a water infrastructure network that spans the entire county is crucial to serving the numerous pockets of rural populations dotted throughout the area. While much of Galati County is rural, the area does contain two municipalities—Galati and Tecuci. Unlike the other communities in the region, these two municipalities had comparatively more water infrastructure, but, as Mocanu points out, there was still a need to further develop these cities and introduce a greater level of environmental sustainability.



Green development is at the heart of this project. Updating previous water infrastructure projects that were intended to support the industrial sector to meet modern standards represents a watershed moment for the region. Mocanu explains that, prior to this project, there was no vision of what an ecological status even meant for this region. Now, with monitoring systems and infrastructure in place, the region has taken an important first step in its ecological development and control.

This is especially important when Galati County's impact on surrounding counties. The Siret River, which flows through the county from North to South before joining the Danube River, is not only an important county for Galati, but also many surrounding counties. Many of the older sewer and wastewater systems were designed to flow directed into the Siret, which had significant negative ramifications for the industries that relied upon the water such as transportation and fishing. The Siret River is also a significant source of drinking water for much of Eastern Romania. As such, the improvements in Galati County have a wider impact on the health and economic status of a large swath of Romanian citizens. The ecological health of the Siret River is set to improve by 60 or 70 percent according to Mocanu. Prior to this project, Mocanu says "the ecological health of the county wasn't even considered." This project not only drastically improves the ecological health of Galati County, but it also provides an avenue for additional ecological funding through the EU.

Mocanu also points out that, in addition to improving quality of life, these improvements open up Galati County to the larger world. Galati County is a hotbed of discovery when it comes to the ancient and medieval worlds as well as being home to numerous beautiful historical structures. Mocanu believes that tourism in this region has been largely hindered by the lack of access to waste facilities and clean drinking water. Now, with more standardized access to these facilities, Galati is poised to open itself as a tourist destination in Eastern Europe.

Improvements are scheduled to continue for the next few years, with an anticipated completion date in August 2024. These improvements will continue to improve the lives of the people living in Galati County, and will positively impact the ecological health of the region and that of its neighbors.

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