Restoration of water wells in the Miren-Kostanjevica Municipality, Slovenia

Year of issue

2025

Summary

The LivingFountains project, financed by the European Regional Development Fund and national funds, set out to restore and arrange 32 village water wells and ponds as cultural-heritage monuments in the Karst border area. At project closure, local press reported 34 wells and ponds restored across five cross-border municipalities, led by the Municipality of Miren–Kostanjevica; the three-year project involved 10 partners with a budget just over €825,000, and premiered the 42-minute documentary “Ujeta voda (Captured Water)” together with a public brochure/trail concept. In Šempeter-Vrtojba, four named wells were rehabilitated, Ulica 9. septembra, Krožna cesta, Zapučke, and Cesta na Čuklje ; and, with an additional €8,000 secured within the project, a fifth well at Cesta Prekomorskih brigad was also restored; the contractor was Remont d.o.o. (Ajdovščina).Today, interpretation continues via short themed trails in Miren Kras that tell the story of wells (štirne) and karst ponds (kali) around Kostanjevica na Krasu, Vojščica and Sela na Krasu, indicating ongoing local promotion and upkeep of these features.

Photo Gallery







Location

45.84416, 13.641

Project

NWRM

National ID

Slovenia_10

Sector

Hydromorphology

Installation Date

2014-10

Implementation status

Completed

Contact

REC

Overview

Location of the project

The restored sites are distributed across Miren–Kostanjevica Municipality (notably around Kostanjevica na Krasu, Vojščica, and Sela na Krasu) and also in the neighboring Municipality of Šempeter–Vrtojba.

Country

Slovenia

NUTS2 Code

Zahodna Slovenija

Sponge measures implemented in the case study

Basins

Objectives

32 water wells or ponds in the cross-border area were restored and material on cultural and historical value of water wells was developed. A publication on an educational trail from Doberdob to Sovodnje, Miren and to Preserje was conceived as a result of work of pupils of participating primary schools and a publication on cultural heritage of water wells was designed. Public events were organized at the location of water wells on both sides of the border and a Water Well Trail was designed to connect water wells in the cross-border environment.

Involved partners

Authority type	Authority name	Authority role	Comments	Authority responsibility
Other	Miren-Kostanjevica Municipality	Initiation of the measure	taking care of efficient and good quality project management and ensuring the project's recognizability	Responsible

Site Information

Climate Zone

Warm temperate moist

Temperature (°C)

13.00 °C

Elevation range

273

Vegetation class

The main vegetation type for the area is karst grassland and Mediterranean vegetation, like macchia.

WFD Ecological status

Unknown

WFD Chemical status

Unknown

Design and Implementation

Project scale

Micro

Project scale specifications

The project consists of site-specific restorations of traditional village water wells and small ponds concentrated within Miren–Kostanjevica Municipality (Slovenia), not a river-basin or region-wide programme. This matches the “Micro-scale” definition (localized interventions at specific sites).

Financing

Total cost

904699.12 €

Financing authorities

Authority name	Type of funding	Comments	Financing share

European Union	EU-funds: Rural development funds	—	85%
Slovenia	National funds	within the framework of the 2007-2013 Slovenia-Italy Cross-Border Cooperation Programme	—

Policy and Governance

Land ownership

Mixed ownership. The restored wells/ponds sit on a patchwork of municipal and private residential parcels.

Policy targets

Oher Societal Benefits

Increase Water Storage

Part of a wider plan

No

Public consultation

Yes

Consultation activities

Activity type	Comments
Information boards	are set in front of each of the restored water well in the cross-border area
Leaflets	with recognised markings are available in all tourist and information centres
Publication	on cultural heritage of water wells was designed
Events	were organized at the location of water wells on both sides of the border

Has contractual arrangements

No

Impacts and Monitoring

Monitoring System

Monitoring requirements

No project-level monitoring requirements were identified; municipal surface-water monitoring is performed by NLZOH on Vipava/Vrtojbica.

Monitoring parameters

In a 12 June 2019 municipal campaign on the Vipava River (with one station on Vrtojbica after the WWTP outfall), NLZOH collected four surface-water samples and analysed ammonium, oxygen demand, nitrates, detergents, and E. coli; enterococci exceeded guidance values in Vrtojbica, triggering a bathing-safety warning there. This monitoring is municipal surface-water control, not specific to the LivingFountains wells/ponds.

Maintenance

Maintenance requirements

No specific maintenance

Socio-economic Impacts

Direct benefits

Cultural heritage restored and made visible: local press at project closure reports 34 wells/ponds restored (vs. 32 planned).
Public interpretation & tourism use: creation of a themed trail/brochure and continued themed walks around wells (štirne) and karst ponds (kali) promoted by Miren Kras (tourism office).
Cross-border cooperation & local engagement: consortium led by Municipality of Miren–Kostanjevica with ~10 partners; subsequent local actions (e.g., new kal in Vojščica, 2023) show ongoing community stewardship of similar features.

Lessons Learned

Key lessons

Restoring traditional wells and karst ponds as cultural heritage can mobilize cross-border funding and partners while reconnecting communities with local water history. LivingFountains framed water features as heritage and education assets rather than only hydraulic works.

Delivery targets can shift upward with strong local participation: 34 sites were reported restored at closure vs. 32 planned, so scoping and documentation should clearly record final counts for transparency.

Long-term visibility matters as much as the works. Themed trails and a brochure keep sites used and interpreted after construction, sustaining benefits for education and tourism.

Execution on mixed public/private parcels requires early ownership checks and municipal contracting. Street-level tenders in Šempeter-Vrtojba show how naming exact wells/locations and procuring restoration through a contractor provided practical traction.

Post-project stewardship is local. While no formal maintenance plan was published for LivingFountains, later management of a new kal in the same municipality by the hunting club, with municipal/Forest Service support, illustrates a workable community model, one to formalize in future projects.

A clear monitoring gap remains. Public materials do not report quantified hydrological, water-quality, biodiversity, or climate metrics for the restored wells/ponds; future projects should budget baseline and follow-up monitoring to evidence biophysical outcomes.

Success factors

Success factor type	Success factor role	Comments
Other	Main factor	Clear, concrete scope with visible delivery. A target of 32 wells/ponds restored was set and 34 were reported at closure—easy for partners and the public to understand and track.
Other	Main factor	Pragmatic procurement with site specificity. Street-level tenders in Šempeter–Vrtojba listed exact wells/locations and delivered works through a named contractor—turning heritage aims into executable tasks.
Financing possibilities	Main factor	Strong cross-border consortium and funding. ERDF (Italy–Slovenia 2007–2013) + national co-funding with ~10 partners, led by the Municipality of Miren–Kostanjevica, provided budget, legitimacy, and reach.
Public participation	Secondary factor	Lasting interpretation and tourism integration. A themed trail + brochure and, later, Miren Kras “themed trails” keep the wells (štirne) and karst ponds (kali) active in education and soft tourism well beyond construction; a documentary (“Ujeta voda”) amplified outreach.

Sources

Sources

Reviving Water Wells and Ponds in Cross-Border Area

Primorske novice – Živi vodnjaki obnovljeni (LivingFountains restored)

Občina Miren–Kostanjevica – Projekti: Živi vodnjaki / LivingFountains

Zaklju?ek projekta livingFountains