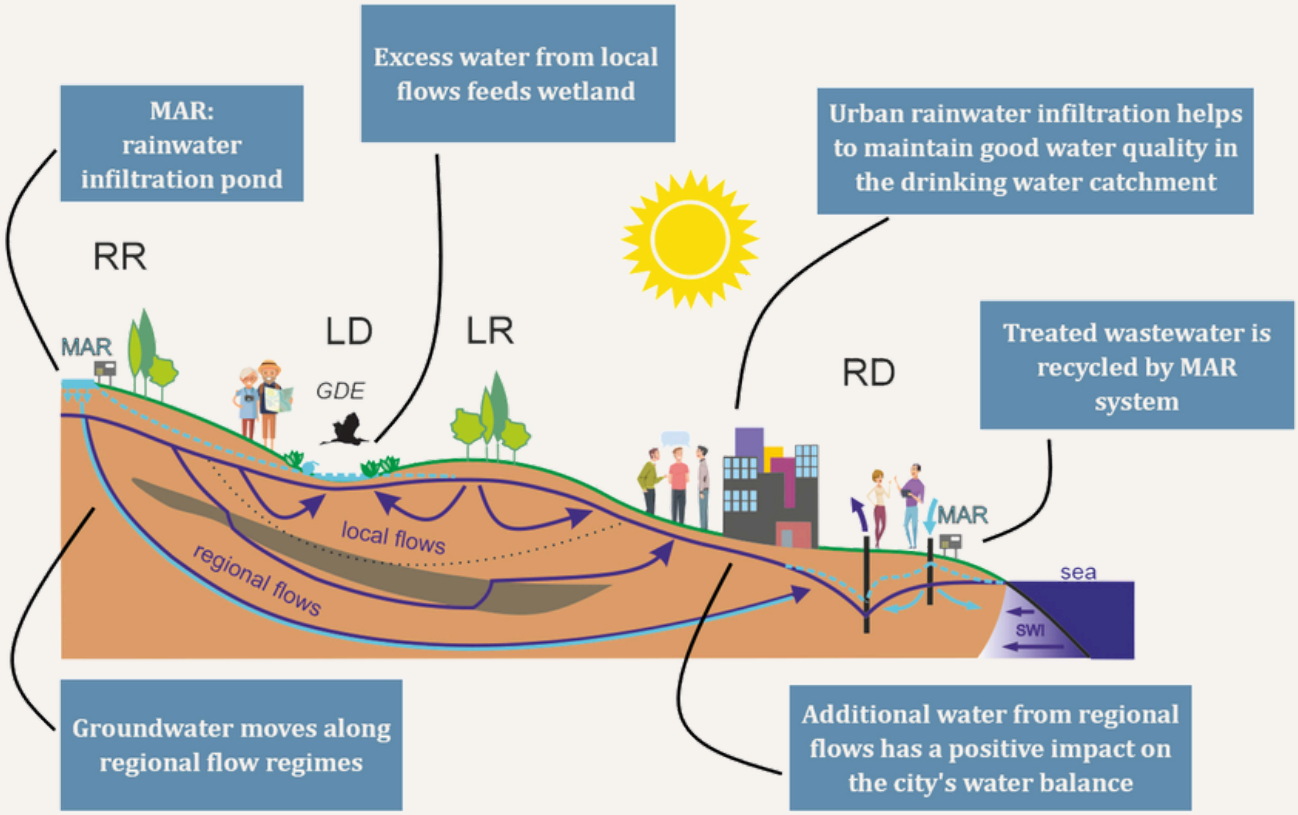
NaBa-MAR® –Nature-based Managed Aquifer Recharge

Invisible reservoir, visible results



⚠️ The problem

- Flash floods, rapid runoff, declining infiltration → water scarcity and flash-flood risk
- Falling groundwater levels
- Damage to groundwater-dependent ecosystems

🔧 How it works

1. Water capture & pre-treatment: rainwater and surface waters
2. Managed infiltration and/or injection: in areas identified by a hydrogeological diagnosis
3. Water recovery & landscape-scale impact

💡 The NaBa-MAR® innovation

- Connecting managed aquifer recharge with flow systems.
- Nature-based, landscape-scale.
- Water flows extend the impact beyond the intervention point.

✨ What makes it special?

- A technological solution built on natural processes
- In harmony with surface-water retention
- Grounded in science
- Cost-effective and nature-friendly

📍 Users & benefits

Environmental – social – economic gains

🏛️ Municipalities

🌿 Improve the water balance of urban green areas

→ Cost-efficient irrigation
→ Longer-lasting green spaces
→ Better quality of life

🌧️ Rainwater management

→ Lower sewer loads
→ Reduced flooding
→ Groundwater-level rise

🐸 Restore wetlands

🌾 Restoration of wetlands

→ Ecological balance
→ Natural carbon sequestration
→ Tourism value

🐝 Preserve biodiversity

→ Conservation targets
→ Protection of ecosystem services

🏭 Industrial companies

♻️ Reduce water footprint

→ Improved ESG ratings
→ Sustainability goals met
→ Stronger reputation

📊 Projects aligned with CSR/ESG reporting

→ Credible green image
→ Sustainability advantages
→ Competitive edge with customers

🚜 Agricultural stakeholders

💧 Replenishment of groundwater used for irrigation

→ Stable water supply
→ Lower drought risk
→ Sustainable agriculture

📉 Stabilize groundwater levels

→ → Higher yields
→ Healthier soils
→ Less irrigation

🤝 Maturity & collaboration

- Demonstration phase + board model; pilots underway
- Services: diagnosis, modelling, intervention design, monitoring strategy
- Next step: needs assessment → preliminary diagnosis → pilot → scaling

Contact

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