

Lake Karla Reservoir Reconstruction — Avoided-Cost Water Storage & Agricultural Supply (Thessaly, Greece)

PES & Nature-Based Solutions · Good practice · Greece

Quality score: 53/100

Evidence strength: Observational / pre–post

Summary

Greece rebuilt Lake Karla -- drained in 1962 for farmland -- into a 38 km² reservoir storing up to 200 million m³ of water, now irrigating ~8,000 ha of cropland, supplying 10 hm³/yr to Volos, at a documented cost of about EUR245 million.

Key dimensions

Dimension	Score
Carbon — sequestration / storage, evidenced	0/3
Biodiversity — conservation / improvement, evidenced	2/3
Water & soil — retention, infiltration, erosion control	3/3
Fire resilience — risk reduction, evidenced	0/3
Governance, certification & transferability	3/3

Evaluated by C-NAPSE

Data sources

C-NAPSE web research — accessed 2026-08-09

Hellenic Ministry of Environment & Energy / Thessaly Region Land Reclamation & Water Management Authority, co-funded by the EU Operational Programme 'Environment' (2000-2006) — accessed 2026-08-09

ScienceDirect -- Combining conflicting, economic, and environmental pressures: Evaluation of the restored Lake Karla — accessed 2026-08-09

MDPI Sustainability -- A Large-Scale Nature-Based Solution in Agriculture: The Lake Karla Case — accessed 2026-08-09

PubMed / Environmental Management -- Re-establishing a sustainable wetland at former Lake Karla, Greece — accessed 2026-08-09

Cite this — Evidoria. *Lake Karla Reservoir Reconstruction — Avoided-Cost Water Storage & Agricultural Supply (Thessaly, Greece)*. Persistent ID: 86ad9f7c-8c60-472e-9f6c-1ba477ad2534.