# Urriðaholt — Iceland's First Neighbourhood-Scale Sustainable Drainage, With Measured Swale Performance in a Cold Climate

PES & Nature-Based Solutions · Good practice · Iceland

Quality score: 33/100

Evidence strength: Cautionary / limited


### *Summary*

Garðabær's ~100 ha Urriðaholt district drains stormwater through swales and rain gardens to protect the Urriðavatn wetland. University of Iceland field tests found a grass swale cut runoff peaks by ~38% in summer but only ~13% in winter, as frost limited infiltration.


### *Key dimensions*

| Dimension | Score |
|---|---|
| Carbon — sequestration / storage, evidenced | 0/3 |
| Biodiversity — conservation / improvement, evidenced | 1/3 |
| Water & soil — retention, infiltration, erosion control | 2/3 |
| Fire resilience — risk reduction, evidenced | 0/3 |
| Governance, certification & transferability | 2/3 |

Evaluated by C-NAPSE

### *Data sources*


C-NAPSE web research — accessed 2026-11-14

Garðabær municipality / Urriðaholt ehf. — accessed 2026-11-14

Zaqout & Andradóttir (2021), grass swales in cold maritime climates — Journal of Hydrology — accessed 2026-11-14

Zaqout et al. (2022), infiltration under freeze–thaw — Journal of Hydrology — accessed 2026-11-14

BREEAM — Urriðaholt, Garðabær case study — accessed 2026-11-14

NBSguide — Rain gardens and swales (Urriðaholt) — accessed 2026-11-14



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