Sandhill Fen Constructed Watershed — Oil Sands Peatland Reclamation Trial (Alberta, Canada)

PES & Nature-Based Solutions · Good practice · Canada

Quality score: 40/100

Evidence strength: Moderate

Summary

A 2012 PNAS study found Alberta oil-sands mining will destroy 29,555 ha of peatland, releasing up to 47.3 million tonnes of carbon. Syncrude's Sandhill Fen (built 2012) tests reclaiming peat function on mine spoil - after 3 years only its wettest zone was a net carbon sink.

Key dimensions

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

Evaluated by C-NAPSE

Data sources

C-NAPSE web research — accessed 2026-07-04

Syncrude Canada Ltd., in partnership with University of Waterloo, University of Alberta & other academic research teams — accessed 2026-07-04

Rooney, Bayley & Schindler 2012, PNAS — accessed 2026-07-04

PMC full text — accessed 2026-07-04

BGC Engineering: Sandhill Fen and Watershed — accessed 2026-07-04

Cite this — Evidoria. *Sandhill Fen Constructed Watershed — Oil Sands Peatland Reclamation Trial (Alberta, Canada)*. Persistent ID: 1fcee6a2-965b-436e-9370-4b99facdfba9.