

GEOECO — Capability Statement

Environmental Geospatial Science · Sustainable Development Indicators · Spatial & Environmental Planning
GEOECO Inc. (USA/Canada) · GEOECO Global OÜ (Estonia) · geoecoglobal.com

FIRM OVERVIEW

GEOECO is an independent environmental planning, geospatial science, and sustainable development consultancy delivering indicator-based assessment, geoinformatics, environmental site assessment, spatial planning, and decision-support analytics. In practice since 2008 and led by Dr. Richard Ross Shaker, the firm pairs primary field data collection with advanced multivariate and spatial statistics to produce rigorous, reproducible, decision-ready deliverables. GEOECO works across international development, national-to-local planning, Small Island Developing States (SIDS), Landlocked Developing Countries (LLDCs), and place-based environmental planning contexts, serving governments, international organizations, nongovernmental organizations, legal and project teams, and applied research partners.

CORE SERVICES

- **Sustainable development assessment** — Sustainable Development Goals (SDGs)-aligned indicator frameworks; local, national, and regional sustainability indices; composite-index construction, weighting, validation, and benchmarking.
- **Spatial and environmental planning** — land-use analysis, suitability modeling, waterfront and watershed studies, flood mitigation, strategic planning, feasibility studies, and remediation-planning support.
- **Geospatial technology, geoinformatics, training & research** — geographic information systems, remote sensing, geodatabase development, dashboards, geovisualization, spatial statistics, training workshops, technical instruction, and applied research capacity building.
- **Environmental site assessment** — primary soil, water, air-quality, and lake-sediment sampling; environmental forensics; contamination geovisualization; and defensible technical reporting for project and legal teams.
- **Indicators, ecological modeling & statistical analysis** — indicator-based assessments, ecological and landscape modeling, environmental DNA (eDNA) surveillance, aquatic invasive species risk forecasting, multivariate and spatial statistics, and resilience assessment for aquatic and terrestrial systems.

WHAT DISTINGUISHES GEOECO

- **Field + analytics:** primary field data collection paired with peer-reviewed quantitative and spatial methods.
- **Indicator track record:** development of the Mega-Index of Sustainable Development and Megacity Sustainability Index frameworks, along with Dr. Shaker's local sustainable development index framework applied in the Republic of Moldova and adapted to Botswana for local spatial planning of sustainable development.
- **Botswana framework:** designed to help guide development and decision-making toward Botswana Vision 2036, Africa's Agenda 2063, and the SDGs, using a 10 × 10 × 10 social, economic, and environmental co-selection of indicators with expert stakeholders across government, nongovernmental organizations, for-profit organizations, and academic institutions.
- **Internationally contract-ready:** GEOECO Inc. and GEOECO Global OÜ support North American and international contracting, invoicing, and remote or on-mission delivery.

REPRESENTATIVE ENGAGEMENTS

- Local sustainable-development indicator framework & decision-support dashboard, University of Botswana — adapting the framework first built for Moldova. Funded by the U.S. Department of State (Fulbright Specialist Program).
- Village of Afton, NY — Strategic Plan and Waterfront Revitalization Feasibility Study (riverfront revitalization, flood mitigation, economic development). Funded by the New York State Department of State and Empire State Development.
- Beach Rd., Sherkston, ON — environmental forensics assessment for civil litigation (forest-patch die-off): primary soil/water sampling, geospatial analysis, and geovisualization. Prepared for private clients through legal counsel.
- Nineteenth St., Jordan Station, ON — environmental forensics assessment for civil litigation (septic-system pollution): site assessment and remediation-planning support. Prepared for private clients through legal counsel.
- Point Abino Lighthouse Atlas — bathymetric and shoreline geovisualization for the Point Abino Lighthouse Preservation Society (charitable).
- Lake Champlain Basin — environmental DNA and geospatial aquatic invasive species risk infrastructure.

CORPORATE DETAILS

GEOECO Inc. — incorporated Ontario, Canada (Corp. No. 1000291753), with U.S. operations. **GEOECO Global OÜ** — registered Estonia (research & development, field 72101); principal holds Estonian e-Residency. **Founded** 2008. **Contact:** Dr. Richard Ross Shaker · richard@geoecoglobal.com · +1 929.266.7419 · geoecoglobal.com.

