



Geo-conservation: an example of the application of its principles in the sanitation of the polluted Laarder Wasmeren area near Hilversum, het Gooi, The Netherlands.

Jan Sevink (1), Eric Khodabux (2), Dick Landsmeer (3), and Jan Stoeten (4)

(1) University of Amsterdam, IBED, Amsterdam, The Netherlands, (2) Provincie Noord-Holland, Haarlem, The Netherlands, (3) Goois Natuurreservaat, Hilversum, The Netherlands, (4) Waternet, Amsterdam, The Netherlands

The Laarder Wasmeren area near Hilversum, a nature reserve under management of the Goois Natuurreservaat with extensive drift sands and several fens, was heavily polluted by heavy metals and toxic organic substances as a result of prolonged discharge of sewage water onto the fens. Already upon the start of its environmental restoration in 2004, it became clear that the area holds important geological phenomena, including LateGlacial paleosols and multiple Holocene drift sands with intercalated paleosols. This discovery induced the Province of Noord-Holland in 2006 to declare het Gooi, of which the Laarder Wasmeren area forms part, a geological monument and thus to set limits for future activities that might lead to disturbance of its superficial geology. Today het Gooi is one of the 17 geological monuments of the province.

The basic principle of provincial geo-conservation - minimal disturbance of the superficial geology - was also applied in the further restoration of the LWM area that included its ecological restoration as a nature reserve. This restoration project was supervised by the author and belongs to the major operations of that kind in the Netherlands. Completed in 2010/2011, it resulted in the discovery and conservation of a complex of Holocene drift sands and paleosols that is unique for the Netherlands. The project forms an excellent example of the application of a provincial geo-conservation policy.