

SAND AND GRAVEL EXTRACTION IN THE NETHERLANDS: DRIVING FORCES FOR ECOLOGICAL REHABILITATION OF THE RHINE TRIBUTARIES AND MEUSE RIVER ?

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After the 1993 and 1995 floods that occurred in both the Rhine and the Meuse river basins the Dutch administrators decide to adopt a different approach to river management. This new approach is no longer focused on a flood protection strategy, which is mainly based on dike construction. It searches for ways to regain the hydrological resilience of both river basins. Important aspects of this new approach are enlarging the floodplains, the water discharge capacity of the river bed, re-introduction of morphological processes and restoring the water storage capacity of the catchment areas. Simultaneously these measures result in large-scale restoration of lost natural values of these river systems.

Unfortunately, the present Dutch environmental legislation and limited financial budgets hamper the implementation of this new approach, Taylor-made environmental legislation for the floodplains of the Rhine and Meuse rivers and introducing money generating activities Such as modified gravel and sand extraction could solve some of these problems. In this paper, some experiences of implementing this new river management approach along the Meuse river and Rhine tributaries are described. The opportunities and threats of this strategy for ecological rehabilitation are discussed.