IMPACT OF THE WFD ON AGRICULTURE IN THE NETHERLANDS
AND POSSIBLE EFFECT-SPECIFIC HYDROLOGICAL MEASURES:
THE DUTCH APPROACH

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Abstract

The European Water Framework Directive can have enormous consequences for agriculture in
the Netherlands. In parts of the country agriculture should be taken out of production because
the nutrient loads to the surface water system are far too high. This doom scenario is of course
undesired and a number of source-specific and effect-specific measures are necessary. The fate
of nutrients in the soil is strongly interrelated with its hydrology. Directly, because nutrients are
transported by water and the distribution of the residence time of drainage water is a good
measure for the time behaviour of the nutrient loads to the surface water system. Longer
residence time in the soil means more of nutrients applied by farmers but also a longer recovery
period, after applying source-specific measures. In this paper three promising effect-specific
hydrological measures are described buffer strips, retention strips, and controlled drainage.