

Abstract:

Impact of drainage from managed peatlands on the ecological quality of associated streams

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Peatland ecosystems are an iconic and ecologically diverse feature of the Irish landscape. Of both biological and economic importance, 90% of Irish peatlands have been subject to drainage for land-use conversion and commercial extraction. While the degradation of peatlands has been shown to produce deleterious effects upon terrestrial fauna and carbon emissions, little is known of the effects upon the water quality of surrounding catchments. The EPA-funded project SWAMP (Strategies to improve Water quality in Managed Peatlands) seeks to investigate potential impacts of the release of chemical contaminants such as ammonium on downstream water bodies and their associated aquatic flora and fauna. By comparing river sites located downstream from drained, restored and intact peatlands the project will provide quantitative evidence of the effects of drainage and extraction on downstream catchments that will inform measures for improving their status in accordance with the Water Framework Directive.