

Talk or poster presentation?	Talk
Language of the presentation	English
Title of the presentation (limited to 150 characters including spaces)	How effective are created or restored freshwater wetlands for nitrogen and phosphorus removal?
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Abstract (limited to 150 words)	A widely used method to reduce the input of polluting nutrients to freshwater and coastal marine environments is to let nutrient-rich water pass through a created or restored wetland. To better understand the large variations in measured nutrient removal rate and removal efficiency in such wetlands we conducted a systematic review including meta-analyses and response surface analyses. Regressions were performed using generalized additive models that can handle nonlinear relationships and interaction effects. In total, 93 articles including 203 wetlands receiving secondary or tertiary treated domestic wastewater, urban storm water, stream/river water, or agricultural runoff were included. The removal rate of total nitrogen (TN) and total phosphorus (TP) is highly dependent on loading rate. Median removal rates of TN and TP were 93 and 1.2 g·m ⁻² ·yr ⁻¹ , respectively. The median removal efficiency was 37% (95% CI 29-44) for TN and 46% (95% CI 37-55) for TP. Effect modifiers will be discussed.
Required support for French/English translation (for talks)	