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In a recent review, Piña-Ochoa and Álvarez-Cobelas (2006) argued that we need to understand similarities or differences between habitat-scale and regional-scale controls on rates of denitrification.

The denitrification enzyme assay (DEA) is a measure of the potential for a sample to carry out denitrification and can be used to indicate where in a stream there is a large enough capacity to bring about significant  $\text{NO}_3^-$  removal and conversion to N gases. The nature of the assay (e.g., anoxic conditions along with addition of carbon and  $\text{NO}_3^-$







grand median ( $4061 \text{ ng N g AFDM}^{-1} \text{ h}^{-1}$ ), indicating that this substrate type does not necessarily support uniformly high rates of DEA. Mass of epilithic or filamentous algae were generally low in abundance, with median mass ( $0.7 \text{ g AFDM m}^{-2}$ ) much lower

dramatically over-estimate the actual rates of denitrification observed in situ yet this appears not to be the case. In a review of aquatic denitrification rates, Piña-Ochoa and Álvarez-Cobelas (2006) show (their Fig. 2



aerobic microenvironment. Additionally, nitrification during daytime may supply  $\text{NO}_3^-$  that supports denitrification and maintains high potentials.

## Appendix

### References

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