Although hypoxic blackwater events may occur naturally, extensive river management has exacerbated their frequency and impact (Whitworth et al. 2012). For example, retention of peak winter flows for later irrigation water delivery reduces the frequency of floodplain inundation (Poff et al. 1997), which allows increased litter accumulation between flood events and leads to high pulses of DOC to surface water following rainfall events (Baldwin 2014).