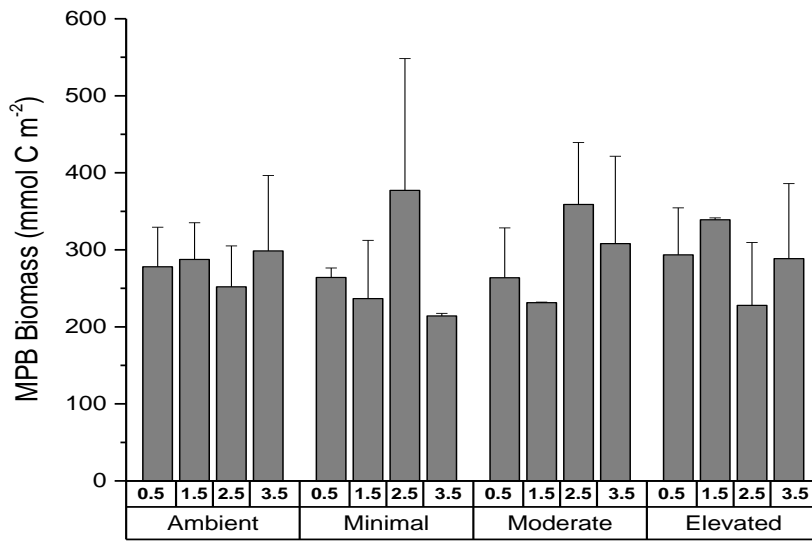
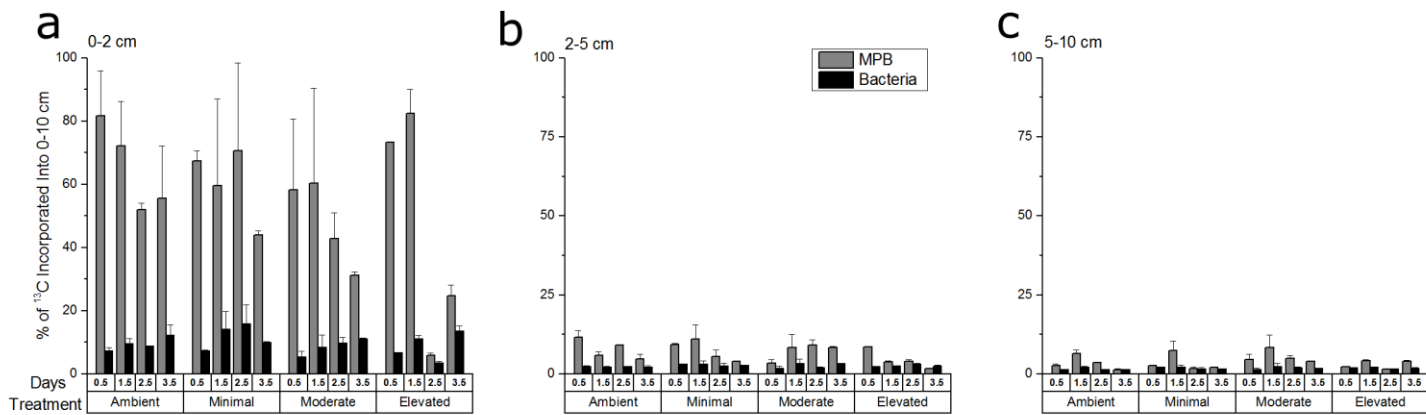
2 **Supplemental Figure 1:** Dissolved inorganic nitrogen in the overlying core waters during

3 sampling for light and dark incubations. The solid line is when cores were placed into

4 treatment tanks prior to the start of incubation. Dashed lines represent additional treatment

5 pulses ($N=NH_4^+$, $P=PO_4^{3-}$, $Si=SiO_3$) that occurred during incubation.

6

**Supplemental Figure 2:** MPB carbon biomass in 0 to 2 cm sediments calculated from

chlorophyll α concentrations, assuming a C:Chl-α ratio of 40 (mean ± SE).

**Supplemental Figure 3:** Excess $^{13}$C incorporation into MPB and bacterial biomass at depths

a) 0-2 cm, b) 2-5 cm and c) 5-10 cm as a portion of the total $^{13}$C in 0-10 cm sediment OC at

each time.

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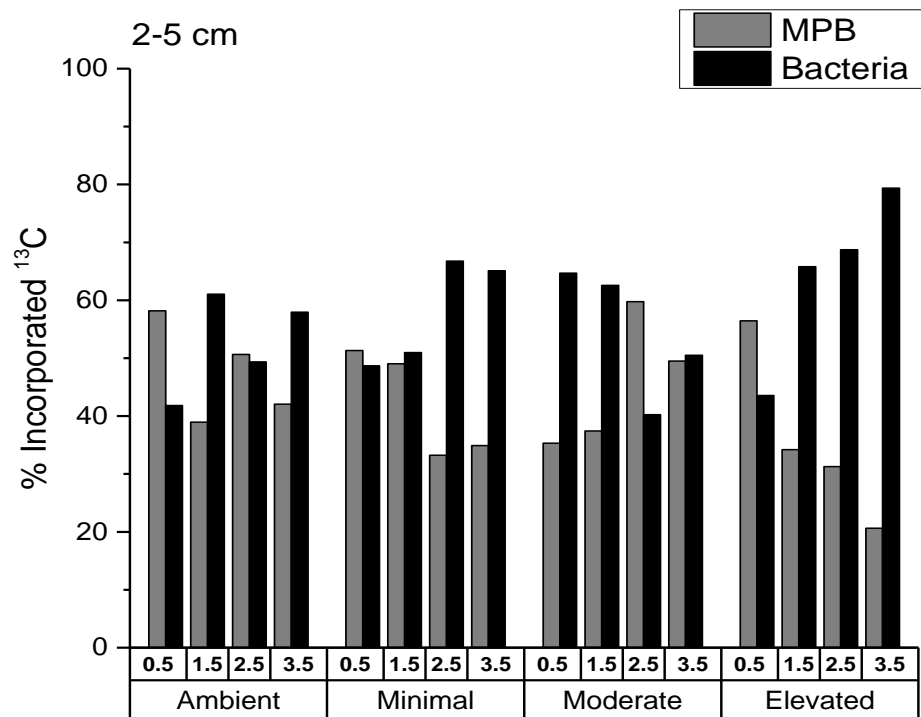
**Supplemental Figure 4:** Excess ^{13}C incorporation into MPB and bacterial biomass at a depth

of 2-5 cm as a percentage of the total ^{13}C in microbial biomass at 2-5 cm at each time period.

There are no error bars as PLFAs were analyzed for only one replicate sample from each time

period.

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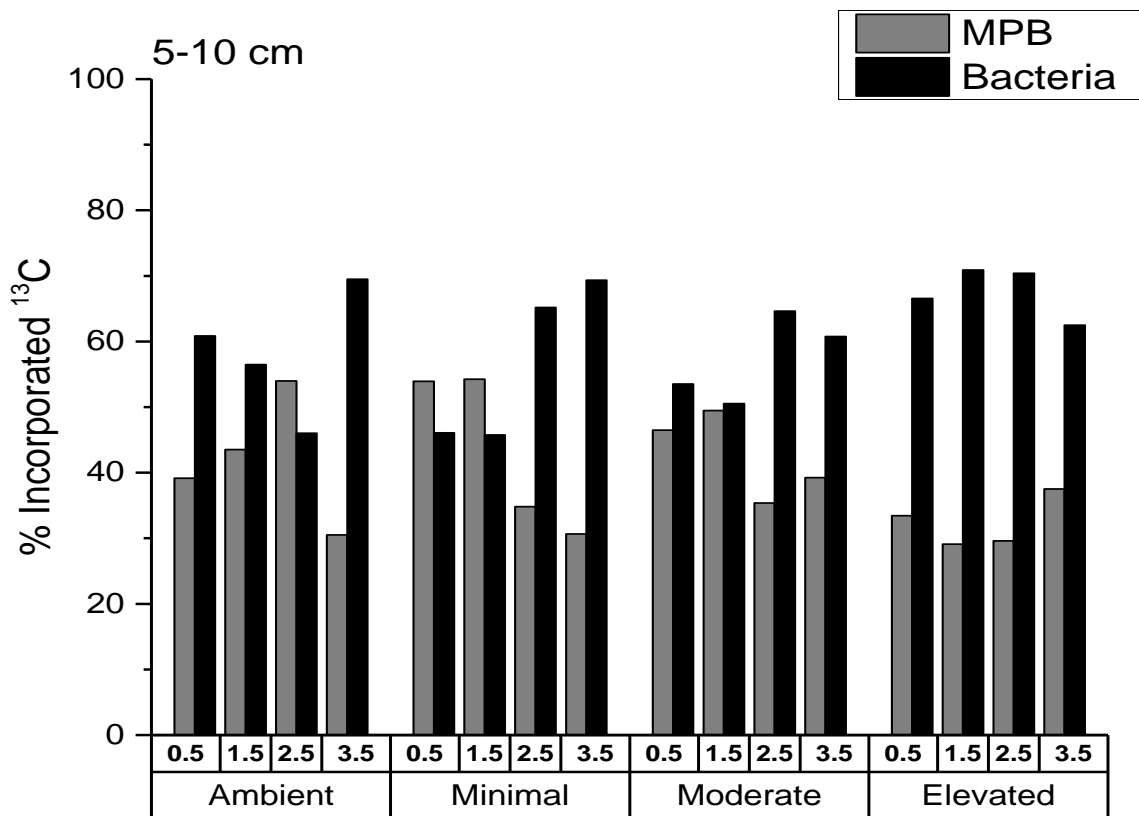
19

**Supplemental Figure 5:** Excess ^{13}C incorporation into MPB and bacterial biomass at a depth

of 5 -10 cm as a percentage of the total ^{13}C in microbial biomass at 5-10 cm at each time

period. There are no error bars as PLFAs were analyzed for only one replicate sample from

each time period.

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