Supplementary Information

ND: Not Detected NA: Not Available

FCM Bacteria: Bacterial abundance cell concentration determined by flow cytometry. FCM Phytoplankton: Phytoplankton cell concentration determined by flow cytometry.

The water depths at sites RSh.1, RSh.3, and R.2 were estimated to be greater or smaller than 1 meter.

Detection limit:

DOC (dissolved organic carbon): 0.05 mg C L⁻¹ DIC (dissolved inorganic carbon): 0.02 mM

TP (total phosphorus): 2 μg P L⁻¹ TN (total nitrogen): 10 μg N L⁻¹