

Coastal Nitrogen Drives Respiration Quotient in the Southern California Bight

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1. Supplementary Information

1.1. Supplementary Figures

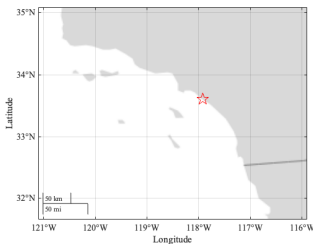


Figure S1. Microbes in the Coastal Region of Orange County (MICRO) time-series sampling location at Newport Pier (33.608°N and 117.928°W) in Newport Beach, CA.▲

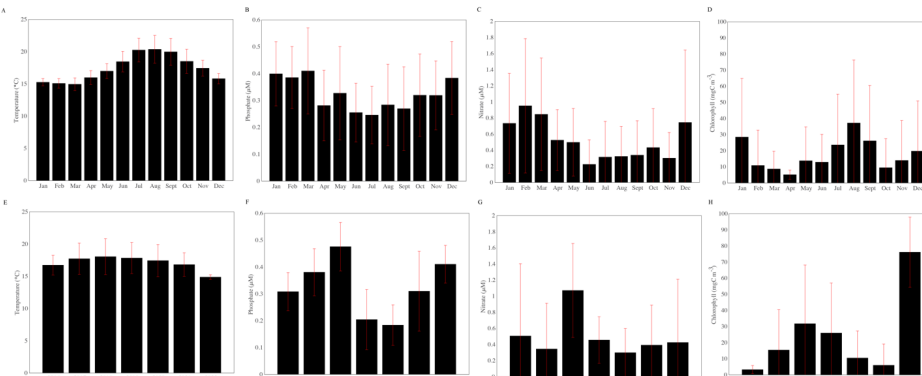


Figure S2. Average monthly and annual environmental parameter trends. A/E. Temperature. B/F. Phosphate. C/G. Nitrate. D/H. Chlorophyll. Red lines represent the standard deviation from the average.

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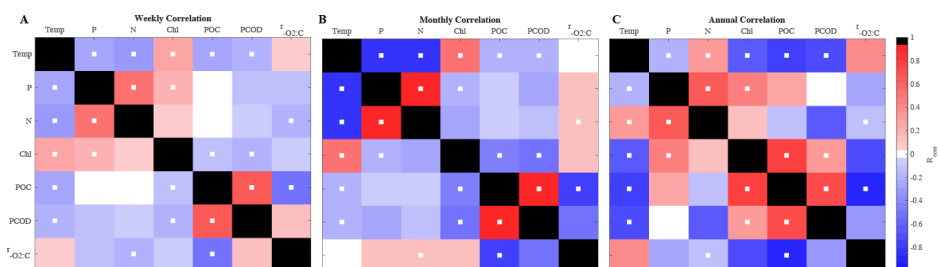


Figure S3. Covariations between all physical, chemical, and biological parameters. A. Weekly correlations. B. Monthly correlations. C. Annual correlations. **White squares represent statistical significance at p-value < 0.05.**

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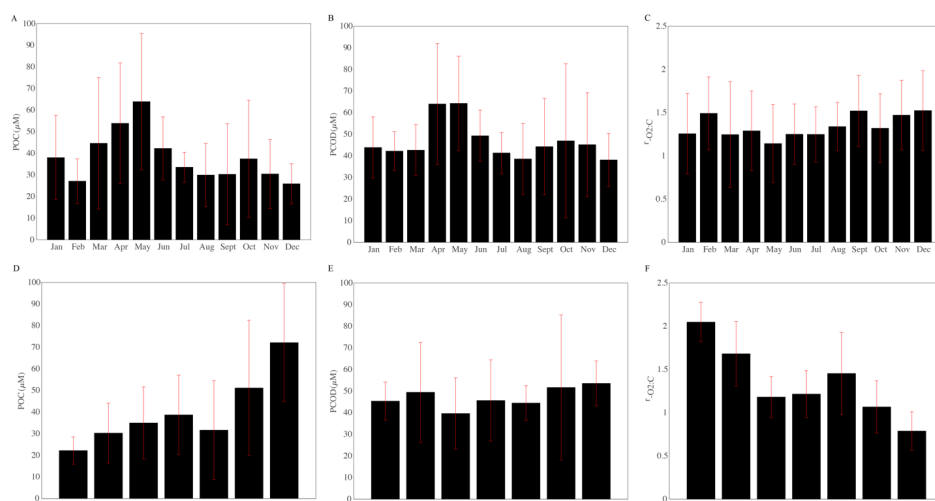


Figure S4. Average monthly and annual particulate organic matter and ratio trends. A/D POC concentrations. B/E. PCOC concentration. C/F. $r_{O_2:C}$. Red lines represent the standard deviation.

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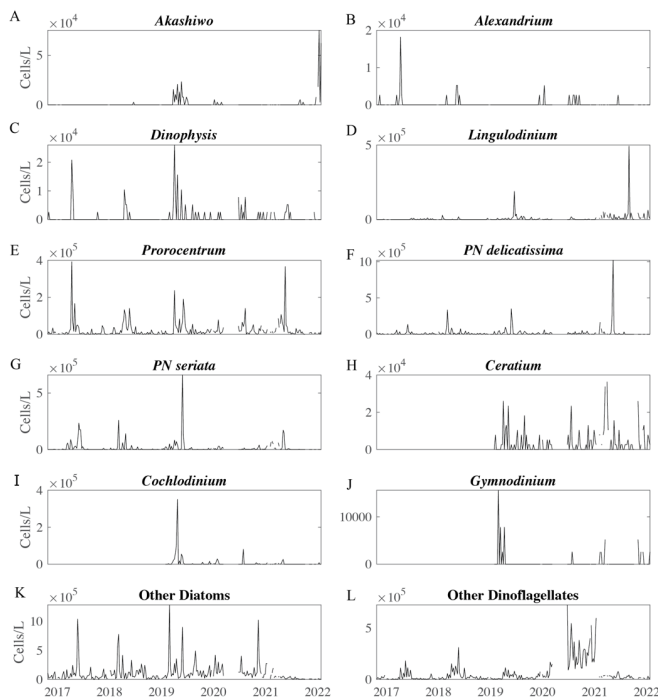


Figure S5. Primarily large phytoplankton (diatoms and dinoflagellates) abundance over time.

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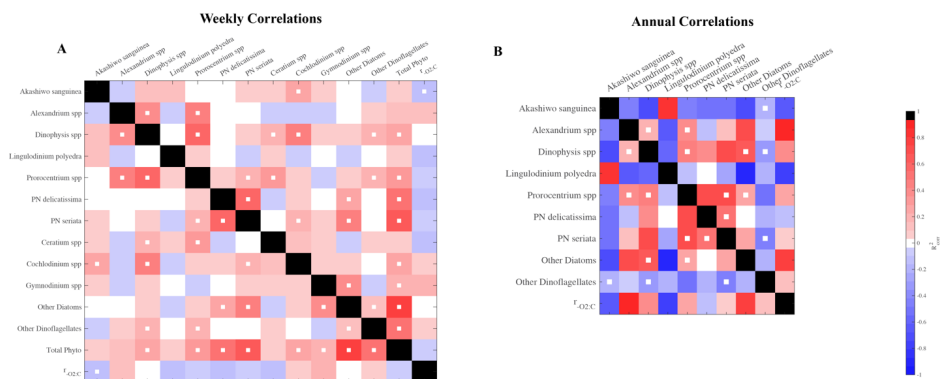


Figure S6. Correlations between all large phytoplankton species and r_{02C} . A. Weekly and B. Annual correlations. White squares represent statistically significant correlations (p -value ≤ 0.05).

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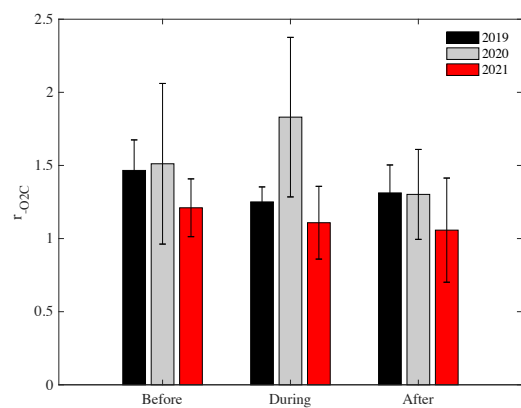


Figure S7. Annual differences in $r_{-O_2:C}$ during the oil spill timeframes. Average $r_{-O_2:C}$ in 2019 (black), 2020 (grey), and 2021 (red). Error bars represent the standard deviation.

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