The following supplement accompanies the article

Suspension feeder diversity enhances community filtration rates in different flow environments

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Table S1. Culture phytoplankton species and traits related to growth form and size.

Product Name	Species	Phylum	Class	Morphological Type	Growth Form	Cell Length (µm)	Cell Width (µm)
CCMP525	*Nannochloropsis oculata*	Ochrophyta	Chrysophyceae	Flagellate	Solitary	1-4	1-4
LB 987	*Isochrysis galbana*	Haptophyta	Prymnesiophyceae	Flagellate	Solitary	3-6	3-6
LB 2763	*Rhodomonas salina*	Cryptophyta	Cryptophyceae	Flagellate	Solitary	5-8	2-4
CCMP1302	*Dunaliella tertiolecta* cf.	Chlorophyta	Chlorophyceae	Flagellate	Solitary	8-10	3-4
LB 2054	*Thalassiosira* sp.	Ochrophyta	Bacillariophyceae	Centric Diatom	Solitary	11-15	10-11
CCMP139	*Asterionellopsis glacialis*	Ochrophyta	Bacillariophyceae	Pennate Diatom	Chain-forming	28-44	8-10
CCMP312	*Coscinodiscus radiatus* cf.	Ochrophyta	Bacillariophyceae	Centric Diatom	Solitary	50-115	40-45

CCMP cultures from National Center for Marine Algae and Microbiota; LB cultures from University of Texas, Austin

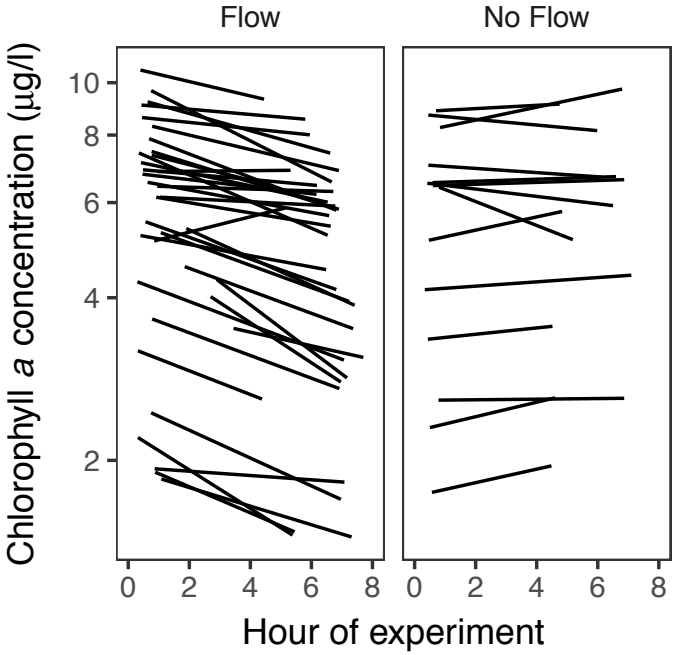

Fig S1. Trends in phytoplankton concentration (shown on a log scale) in consumer-free controls in each flow treatment. Lines connect data points for individual replicates. Note the independence of starting conditions on the temporal trends and the greater decline in phytoplankton abundance in the flow treatment. The standard deviation associated with random slopes for individual experimental trials was very small (sd = 0.004) compared with those of random intercepts for trials (sd = 0.407) and residual variation (sd = 0.098).

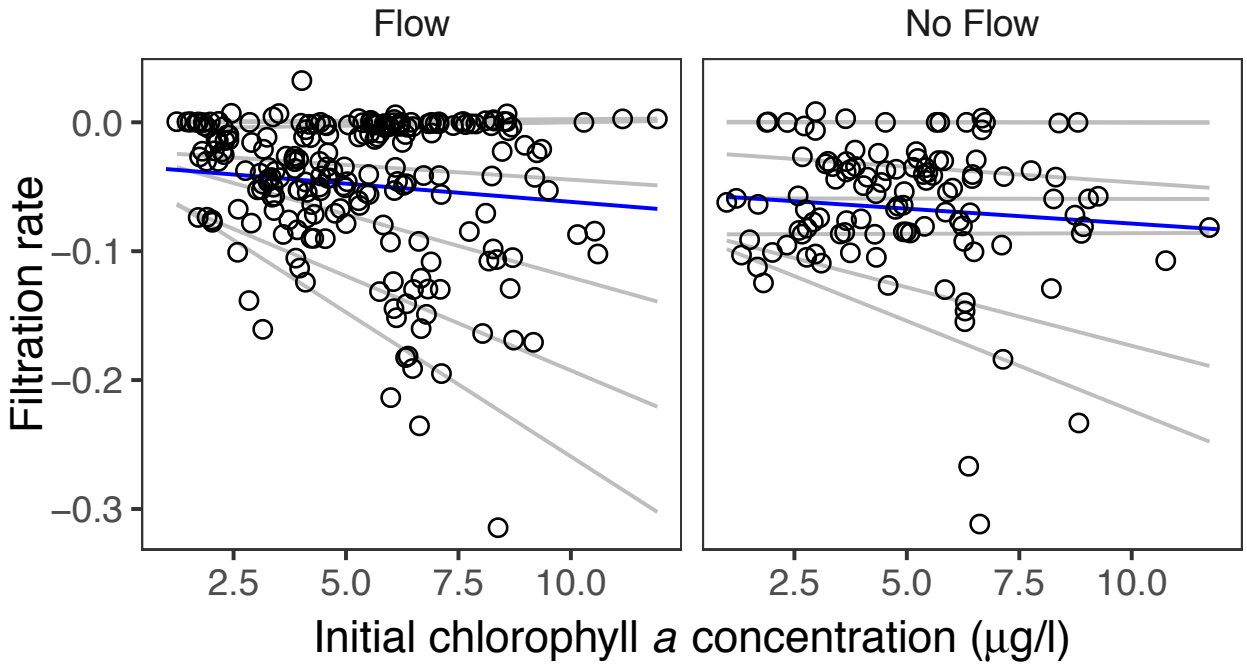

Fig S2. Relationship between initial phytoplankton chlorophyll *a* (chl) concentration on filtration rate in flow and no flow treatments using a linear mixed effects model that includes an interaction between flow treatment and initial chl concentration and random intercepts for consumer treatments (blue line). Relationship estimated using linear mixed effects model that accounted for differences in average filtration by different consumer treatments (random intercepts). The relationship between chlorophyll a concentration and filtration rate was negative but not significant in both flow ($p = 0.074$) and non-flow treatments ($p = 0.312$). Gray lines show the 0.05, 0.10, 0.25, 0.50, 0.75, and 0.95 quartile regression estimates.

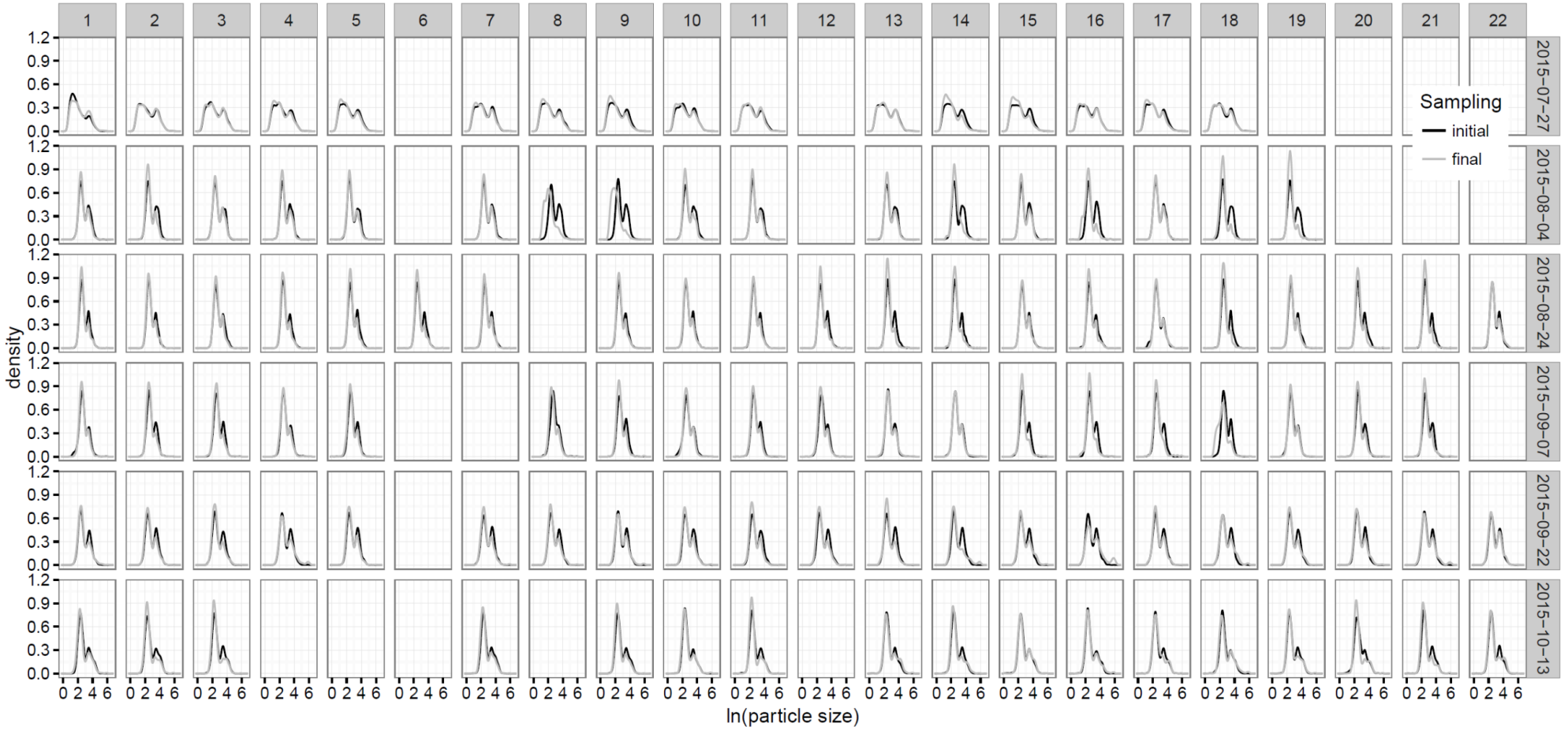

Fig. S3. Size frequency distributions of phytoplankton from all trials with sampling for flow cytometry. Panels are arranged vertically by date of trial and horizontally by location in the laboratory. Flow treatments are locations 1-12 and no flow locations are 13-22. Treatments for each replicate are not shown. Black lines show the size frequency distribution at the initial sampling point at the beginning of trials and grey lines show distributions at the end of trials.

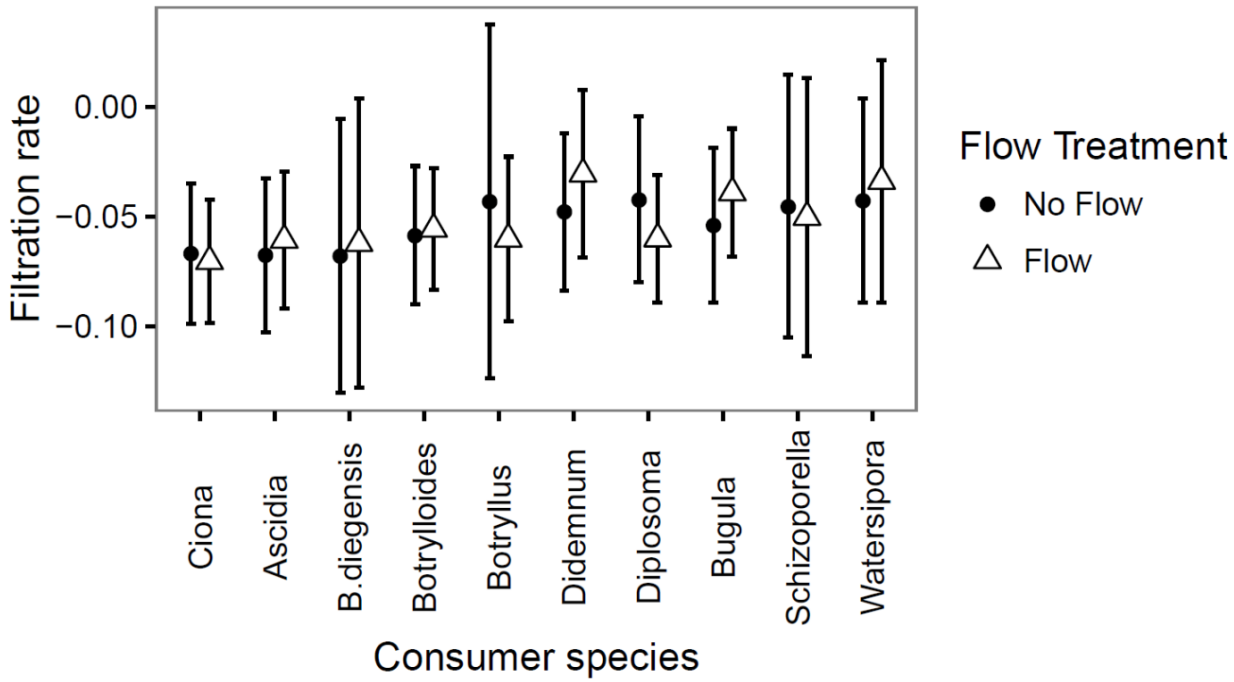

Fig. S4. Estimated means ± 95% confidence intervals for monoculture filtration rates in no flow and flow treatments. Figure 4 in the main article shows the percentage difference between estimated mean filtration rate in no flow and flow treatments for each monoculture.