Figure S1. Population dynamics of *Synechococcus* in four replicate chemostats (–V₁, –V₂, –V₃, –V₄). Dashed vertical line (day 29) represent the time of virus was added to the +V chemostats.
**Fig. S2.** Growth curves for some of the heterotrophic bacteria that were isolated from the inoculum and chemostats. A 1 mL aliquot of a homogenized culture was inoculated into replicate Erlenmeyer flasks containing 20 mL of AN (artificial seawater) or LB (carbon-rich) media. Population densities (mean ± SEM) were assessed by measuring the optical density at 600 nm (OD 600) of subsamples over time or by the number of colony forming units (CFU) on LB agar plates.
**Fig. S3.** Concentrations (mean ± SEM) of particulate (i.e., microbial) carbon, nitrogen, and phosphorus in +V and –V treatments over the duration of the chemostat experiment. Vertical line indicates time of virus addition for +V treatments.