(a) Predictive Lipids	Dominant IPL Classes	Potential IPL Remodeling
Dinoflagellates — R^2 = .59, RMSE = 4238	SQDG, DGDG	Recycling of PC and BL under N-limitation Recycling of MGDG under high pH/low pCO_2, or anaerobiosis Increased proportion of DGDG and SQDG under thermal stress or high pH/low pCO_2 Increased proportion of SQDG under shaded conditions Recycling of MGDG and PG under high growth conditions
(b) Diatoms — R^2 = .54, RMSE = 543	MGDG, SQDG, PC	Recycling of BL under N-limitation Increased proportion of SQDG under thermal stress, shaded conditions, and high pH/low pCO_2 Increased proportion of MGDG for photoprotective and antioxidant mechanisms Recycling of PG under high growth conditions
(c) Crypto — R^2 = .50, RMSE = 167	BL, DGDG, MGDG	Recycling of PC under N-limitation Enhanced DGDG under thermal stress Enhanced MGDG for photoprotective and antioxidant mechanisms Recycling of SQDG and PG under high growth conditions
(d) Chloro — R^2 = .49, RMSE = 439	PC, BL, DGDG	Recycling of MGDG under high pH/low pCO_2 or anaerobiosis Enhanced DGDG under thermal stress Recycling of SQDG, MGDG, and PG under high growth conditions
(e) Synecho — R^2 = .51, RMSE = 33	PE, BL	Recycling of PC under N-limitation Recycling of MGDG under high pH/low pCO_2 or anaerobiosis Increased proportion of SQDG under shaded conditions Recycling of SQDG, MGDG, and PG under high growth conditions

% Reduction in Model RMSE