

GITHUB CONTENTS: RATE DEPENDENCE PROJECT

File Name	Purpose
3driver_plots_3epsilon_2025-05-21.R <i>which uses output files from the simulations for Figures 2, 4, 6</i>	Fig. 1, driver curves at 3 rates
SIM3_p0_max3_eps0dot3+chl+forecast_v2refuge_PAR-P-Z_2025-05-10.R <i>and</i> SIM3_p0_max3_eps1-or-3+chl+forecast_v2refuge_PAR-P-Z_2025-05-10.R <i>which call</i> Constants+Functions_PAR-P-Z_2025-03-29.R <i>and use data in</i> chl+drivers_3lakes.Rdata <i>followed by construction of the composite figure</i> 5results-X-3epsilon_for p0expt_2025-05-22.R	Fig. 2, Enrichment simulations and dynamic indicators of resilience at 3 values of epsilon
SIM3_kNCspeeds+chl+forecast_V2refuge_PAR-P-Z_2025-04-12.R <i>which calls:</i> Constants+Functions_PAR-P-Z_2025-03-29.R <i>and uses data in:</i> chl+drivers_3lakes.Rdata <i>followed by construction of the composite figure:</i> 5results-X-3epsilon_for kNCexpt_2025-05-22.R	Fig. 4, kNC simulations and dynamic indicators of resilience at 3 values of epsilon
qE_rate_expts_Cascade_EcoLetts2008_V3_2025-05-17.R <i>which calls</i> Constants+Functions_qE_Cascade_2025-05-15.R <i>uses critical point in</i> Crit_qE_AdultPisc.Rdata <i>and is followed by analyses and graphics:</i> Run_ForecastDLM_qE_cascade_model_2025-05-17.R <i>and construction of the composite figure by</i> 5results-X-3epsilon_for qEexpt_2025-05-22.R	Fig. 6, piscivore harvest simulations and dynamic indicators of resilience at 3 values of epsilon
R scripts for Fig. 2 were rerun with sigma divided by 10	Fig. 3, Enrichment simulations and dynamic indicators of resilience at 3 values of epsilon with small additive noise
R scripts for Fig. 2 were rerun with sigma divided by 10	Fig. 5, kNC simulations and dynamic indicators of resilience at 3 levels of epsilon with small additive noise

R scripts for Fig. 3 were rerun with sigma values for planktivores, herbivores and phytoplankton divided by 10	Fig. 7, piscivore harvest simulations and dynamic indicators of resilience at 3 values of epsilon with small additive noise
Fit_EXPTS_3lakes_2024_v2refuge_PAR-P-Zmodel_2024-12-26.R <i>and</i> Fit_EXPTS_3lakes_2024_v2refuge_Profile_Likelihoods_2024-12-27.R <i>which use data in</i> chl+drivers_3lakes.Rdata	Fit of the model in Appendix B to daily observations from 3 lakes in 2024
SIM2_vinf- Crit_kNC_P0_Peter2024_v2refuge_MapCritPts+limits.R <i>which calls:</i> Constants+Functions_PAR-P-Z_2025-03-29.R	Fig. B1, critical values of enrichment rate versus kNC and critical values of kNC versus enrichment rate and Fig. B2, chlorophyll equilibria versus enrichment rate and versus kNC
<i>Find critical point for piscivore harvest rate</i> Cascade_crit_qE_A_F_2025-05-12.R <i>Then plot the figure</i> Fish_Thresh3_plot_for_Appendix.r	Fig. C1, critical point of piscivore harvest model