



Department of Civil Engineering 2012 Autumn Semester Yoshimura Chihiro

Water Quality Dynamics

Outline #9: Eutrophication of Lakes

- 1. Report of the last exercise (Ex8-1 to Ex8-3)
 - Presentation (Lauri, Shiena)
 - Discussion
- 2. Equilibrium Chemical Model
 - Activity corrections
 - Equilibrium constant and temperature
- 3. Eutrophication of Lakes
 - Major processes of eutrophication
 - Stoichiometry and limiting nutrient
 - Mass balance of total phosphorus in lakes
 - Dynamic ecosystem models
- 4. Exercise (Ex9-1 to Ex9-3)