

Supplementary materials

Nitrogen loading increases both algal and non-algal turbidity in subtropical shallow mesocosms: implication for nutrient management

Hu He ^{1,2}, Lei Zhang ¹, Xiaoyu Ning ¹, Zhigang Mao ^{2*}, Erik Jeppesen ^{3,4,5,6,7}

¹ School of Civil Engineering and Architecture, Chuzhou University, Chuzhou, China

² Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences,
Nanjing, China

³ Department of Ecoscience and WATEC, Aarhus University, 8000, Aarhus, Denmark

⁴ Sino-Danish Centre for Education and Research (SDC), University of Chinese
Academy of Sciences, Beijing 100190, China

⁵ Limnology Laboratory, Department of Biological Sciences and Centre for
Ecosystem Research and implementation, Middle East Technical University, Ankara
06800, Turkey

⁶ Institute of Marine Sciences, Middle East Technical University, 33731 Erdemli-
Mersin, Turkey

⁷ Institute for Ecological Research and Pollution Control of Plateau Lakes, School of
Ecology and Environmental Science, Yunnan University, Kunming, China

* Corresponding author: Dr. Zhigang Mao

E-mail: zgmao@niglas.ac.cn

Postal address: 73 East Beijing Road, Nanjing, 210008, China

Fig. S1 Temporal dynamics of (a) inorganic suspended solids (ISS) and (b) light attenuation coefficient (Kd). The days were ranged from Day 0 – Day 70. (c) Significant positive relationship between ISS concentration and non-algal turbidity. We calculated the non-algal turbidity using the empirical formula in Lake Taihu ($Turb_{NonAlgal} = 1/ZSD - 0.011 \times Chl. a - 0.18$) (Ma et al. 2021), Where ZSD is the Secchi depth which were calculated by the formula: $ZSD = 1.852 / (Kd - 0.096)$ (Zhang et al., 2004

