1.3

Firstly we divide the land into nine type in our paper. Then we build the Export Coefficient Model to get the load of N and P. Given the amount of N and P, we analyze the water quality. Next combining the meteorology and the other factors, we forecast the potentially-toxic algal blooms. Lastly, we building the evaluation model based on the AHP. What’s more, we create an evaluation system. We can evaluate the chaohu with the evaluation model and evaluation system.

2.1

Firstly, from the question we can know that the goods and services that lakes provide result from complex interactions between meteorology, hydrology, nutrient loads and in-lake processes. In addition, we know that Hydrology and nutrient loads are, in turn, influenced by socio-economic factors such as human habitation, water abstraction and land-management, within their catchments. The last, the question let us build models to link these different domains and forecast the effects of different management scenarios on lakes and evaluate the lake.