8. Model evaluation

8.1 Strengths

The export coefficient model based on hydrology needs few parameters and its operation is simple. Not only does it have a comprehensive consideration but also certain accuracy.

We use the BP neural net model to forecast the Water quality and potentially-toxic algal blooms, avoiding analyzing the complex relationship between various factors.

Given the factors including ecology、nature and society, the model of evaluation with the AHP can integrallty evaluate a lake.

8.2 Weaknesses

**Lack of Data Support:** the data for the problem is hard to get. The data we collect are little for the model we build.

**Estimated Parameters:** Due to lack of data, some values used in the calculations had to be estimated.

**Simplified Assumption:** Simplifying assumptions had to be made in order to create a solvable model.

8.3 Future Work

Because the system of evaluation of the lake is very complex. Only seven indexes can not make it clear. Our evaluating model needs more indexes to be perfect. What’s more, we should combine the AHP with the Fuzzy Algorithm rather than only the AHP to make the model of evaluation more reasonable. We should collect more data for the model to improve the stability of the model.