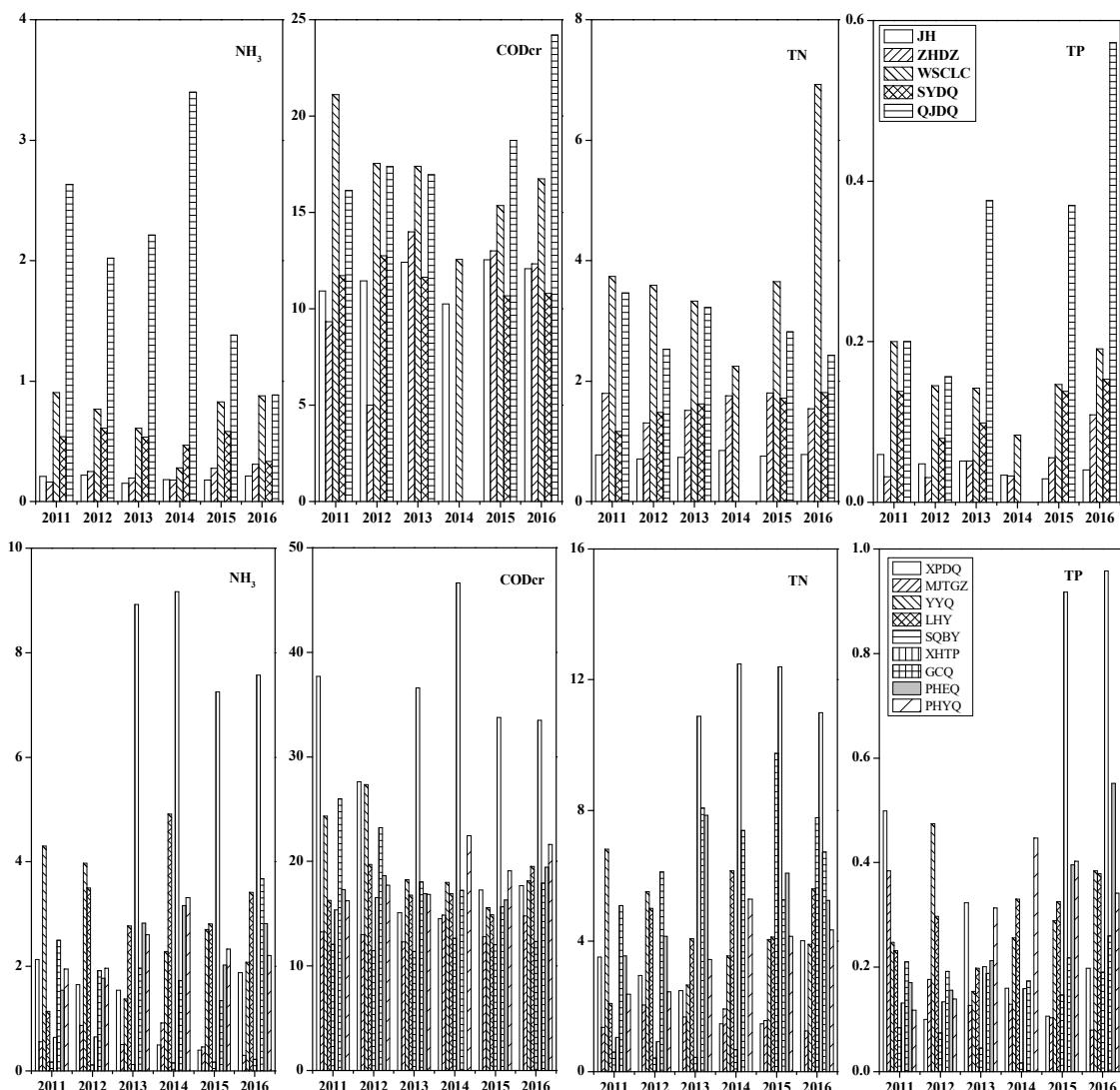
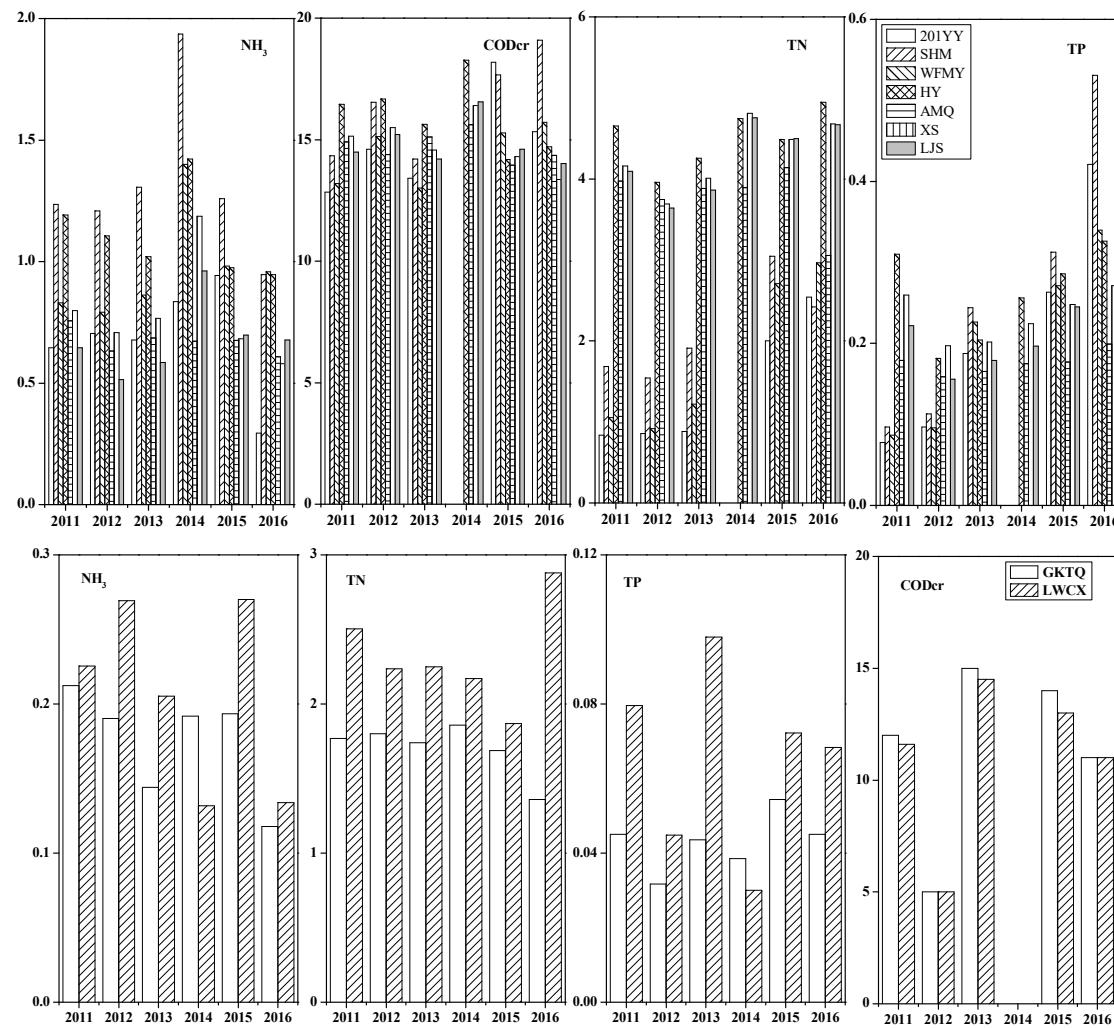
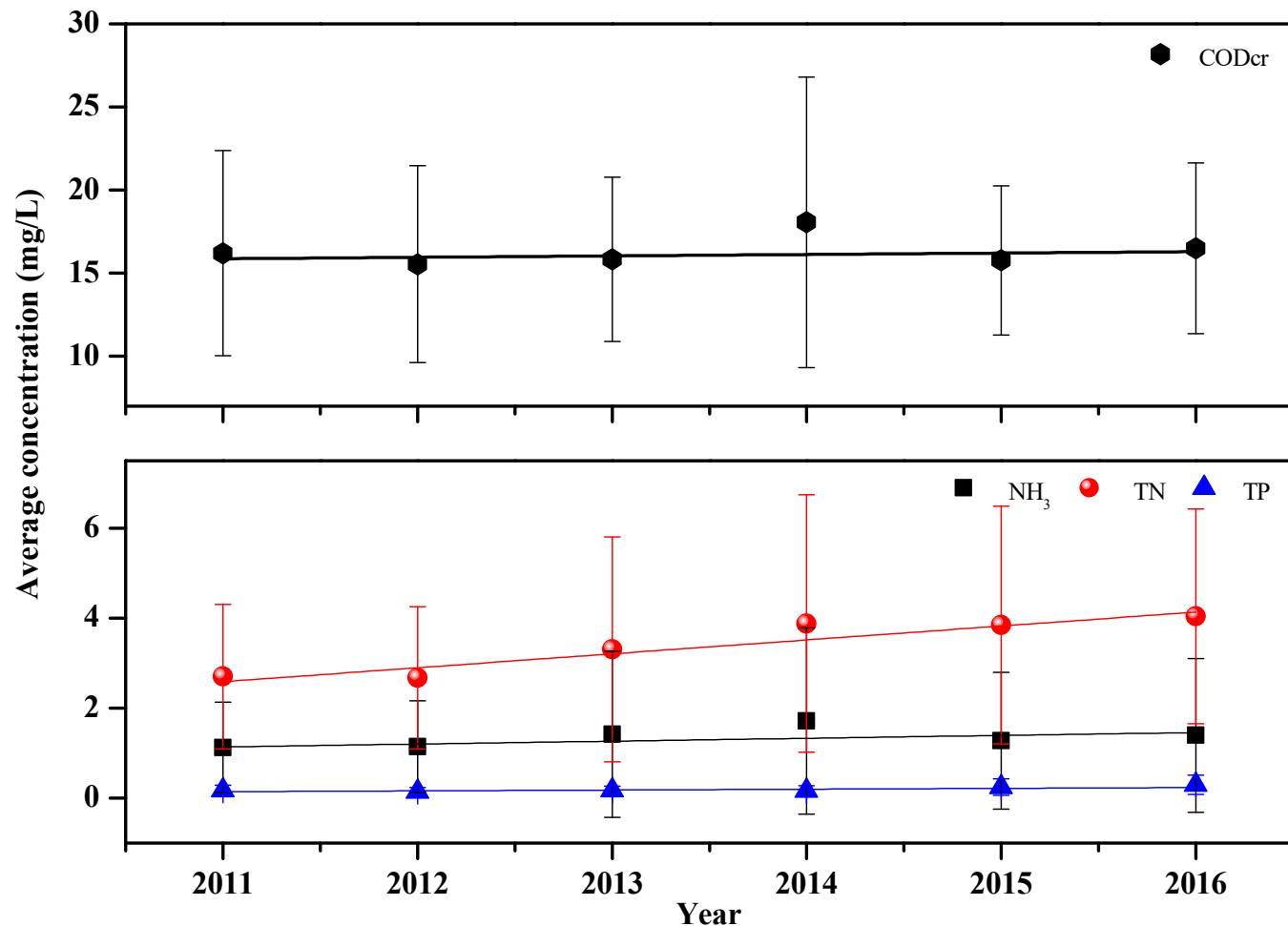


**Figure S1.** The concept map of the river system and the monitoring stations.





**Figure S2.** The  $\text{NH}_4^+$ , TN, TP and CODcr temporal spatial variation in monitoring station.



**Figure S3.** The NH<sub>4</sub><sup>+</sup>, TN, TP and CODcr temporal spatial variation in monitoring station.