



## Report:

### Case History: Beijing China water park

#### **THE CHALLENGE**

The water sources in China's capital have levels of pollution beyond what is considered safe. Only 60 to 70 percent of urban areas in that city are connected to any sewage treatment plants. A large amount of sewage is being continually discharged directly into the rivers.

The objective of the water environmental agency was to turn the water system within the first and second ring road into a garden landscape watercourse, so can be aesthetically appealing to the local community.

#### **THE SOLUTION**

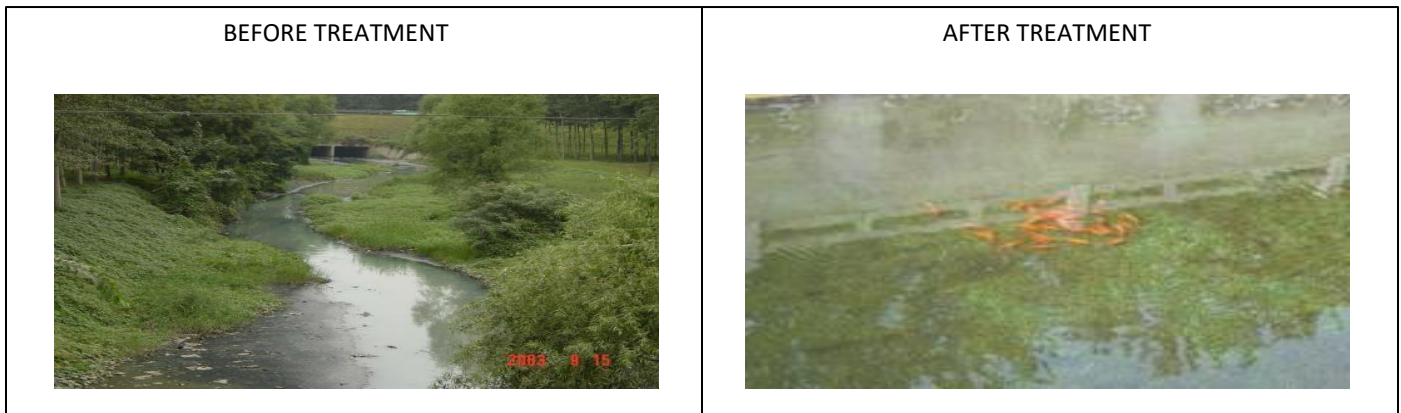
The local team determined that bio-augmentation by microbial cultures utilizing a biological carrier could be an alternative solution.

- immobilized microbe technique is a method that keeps activity of bacteria at a constant peak
- Advantages of high biomass density is the high reaction time, low mortality rate of microbes, easy to control process.
- The biological carriers were impregnated with the specific bacteria developed for this application.
- The immobilized carriers were placed within strategic parts of the lake where it met with tributary's flowing into the river

**THE RESULTS**

- After 6 months of treatment, conclusive visual results proved that the treatment was effective. Refer to the photos:

**CASE HISTORY 1:**



NOTE: That once the system was treated there was less visible sludge, clear water, translucent with visible aquaculture life.

**CASE HISTORY 2:**



NOTE: Once the system had been treated, the retention wall had clear water, with no more visible sludge.