Qinglong River: River Restoration Project in China
In order to fulfil requirements of Water Resource Bureau of Lijiang, Yunnan Province, to restore Qinglong River, three main aspects are considered: flood control, ecological upgrade and recreational and tourism needs. EBP assisted Changjiang River Scientific Research Institute to carry out this conceptual design for the Qinglong River Restoration Project.

Overall, we need to treat the current issues of Qinglong river and restore it towards natural appearance; promote entire image of the city and improve social-economic development of Shuhe Old Town; create a pilot and best practice case study in Lijiang to improve the city’s eco-culture.

EBP experts have visited the project site several times, discussed with the clients their needs and future views, and have proposed the following key features of the concept design for Qinglong river restoration project:

- Create permanent continuous fish path through the entire project area, including fish passes at ramps; continuous fish paths are a precondition for an ecologically intact and functioning river system.
- Create a functional and ecological wetland park, including river water circulation system and water cleaning facilities, such as Coanda screen (step 1, sediments/sands, nutrients etc.) and bio-filter in ponds (step 2, dissolved organic substances)
- Ecological upgrade of Qinglong river bed through Shuhe town, e.g. put stones and boulders to enhance dynamic flow regime, river bed structure, fish habitats, attractive views etc.
- Preserve the green cultural/historical garden, right bank upstream of Qinglong bridge, in order to benefit from
  - flood control (retention area)
  - "green landscape" and optical/functional link to Qinglong bridge for tourists
  - agricultural garden
  - cultural and historical heritage (existing Three Wells)
- Create awareness spots and viewpoints, explaining eco-upgrade, fish ecology etc. to the public, tourists, suitable spots to be assigned
- Create/preserve ecological buffer zone at right bank downstream of newly built circus, allow natural water-land connection, use this buffer zone as flood retention area, prevent facilities construction close to the river bank etc.
- Create a natural meander river section, downstream from bridge to water diversion gatehouse, remove river bank walls
- Create a water park at the right river bank area, pumping up river water and divert it to different pools, channels for recreational purposes etc.

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