ISLANDS TO TREASURE

A self-sustaining resort will help save one of China’s most important lakes and lead the way for a new model of urban development. Paul Noonan reports
Taihu three treasures consist of silver-fish, white shrimps and crabs. These delicacies are plentiful in China’s third-largest freshwater lake, Taihu. Famous for majestic limestone and mysterious caves, Taihu Lake has links to the renowned Grand Canal of the Sui Dynasty (581-618).

An hour from Shanghai, the lake supplies water to about 30 million people. It also suffers from outbreaks of dreaded cyanobacteria, known as blue-green algae.

Associate Professor Rosalea Monacella and Craig Douglas from RMIT’s School of Architecture and Design are working with global engineers Arup to develop a radical urban model for an eco-resort in the Jiaoshan Islands at Taihu Lake.

“The Chinese authorities have given us a brief to be world-leading in all aspects of the design of an alternative sustainable urban model, and in doing so produce an exemplary outcome that would become a benchmark for development in the region and set standards in world practice,” Monacella says.

“We developed a masterplan around self-sustainability, water harvesting, recycling, low-impact construction and mass off-site customisation of building elements.

“The plan retains much of the fishing and orchard industry on the existing main island and will use it as a filtering device to use and clean the lake water. “The model is for the resort to have the ability to generate its own alternative and renewable energy source and to run a self-sustained supply network.

“It will also manage, use and recycle its own sewage and waste, and supply its own water through systematic collection, regeneration, storage and distribution.”

The project is being run by the Office of Urban Transformations Research (OUTR), a research network of RMIT professionals, for Wujin Taihu-Bay Tourism Resort Commission, Changzhou Municipality.

Its genesis is in the three-decade relationship between the Victorian State Government and its counterpart in Changzhou, says Dom Tassone, Project Director with Australian Urban Systems (AUS), which operates under the Victorian Government.

“Back in 2008, AUS took a very large delegation there, led by the then Premier, which resulted in a memorandum of understanding about cleaning up the lake,” Tassone says.

“AUS gave a presentation under the AUS umbrella. The director of the local tourism authority was very impressed with what RMIT had to offer – both in landscape architecture and in urban framework development, both of which are central to this project.”

Monacella adds: “Yes, we are delivering expertise to China, but we are also learning an enormous amount given the scale and complexities of urbanisation in China, where infrastructural, environmental, social and economic issues are amplified.

“As a response to the challenges of a complex rapidly changing world, including issues such as urban density and the associated challenges in Sydney and Melbourne, OUTR is ideally positioned to offer specialist skills and knowledge to industry and government.”

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