



a portion of the wetlands after the first planting



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the hippo exhibit



Spanning over three hectares, the new Kubu River Hippos Experience is a new exhibit at the Werribee Zoo. The exhibit was designed to display 8 adult hippos in three separate pools that are connected hydraulically.

NSI's role was providing water treatment for the 2,000 cubic meter pools and the organic waste from eight hippos.

Recognizing that hippos play a major role in the East African river ecology by providing nutrients for algae eating fish, we considered a design which incorporated an Australian Ecosystem. Working with a local Australian design team and US partners Studio Hanson Roberts, we developed the marsh concept using a 6000 square meter wetlands which provides treatment, habitat and also becomes part of the zoo exhibit.

Because the treatment is passive, significant capital and energy savings were immediately realized resulting in more money for animal care and the exhibit.

Using low head, high flow pumps water is circulated one time a day through the 6000 m² wetlands where suspended solids and nutrients are removed. The nutrients and suspended solids provide food for native micro and macro invertebrates and fish that feed on these organisms. The fish, in turn, become food for birds. A portion of the treated effluent water is used for irrigation. Make up water is provided from the Werribee river.

<http://www.zoo.org.au/vorz/>