



Sustainable Solutions

Client
Public Utilities Board

Location
Republic of Singapore

“This unprecedented project will transform Singapore’s storm drainages into beautifully restored streams that weave through new nature-scape for this vibrant island nation.”

Linda Macpherson,
Watershed Manager,
ABC Waters Project and Principal
Technologist in Water Reuse

Master Planning for Central Water Catchment

Project Description

In 2006, CH2M HILL and a partner firm, Atelier Dreiseitl, were selected by the Public Utilities Board (PUB), Singapore’s national water agency, to create a master plan for Singapore’s Central Water Catchment. The central water catchments consisted of one-sixth of the island’s land area, including Singapore’s financial center.

PUB’s new vision for its reservoirs, canals, and rivers goes beyond the originally intended engineering function of flood control. Singapore’s leaders realize that these water systems can be transformed into tremendous community assets by bringing the best of engineering together with water-sensitive urban design to support recreation, the arts, heritage, and culture.

The long-term initiative, known as the ABC Waters program, seeks to transform Singapore’s extensive network of 14 reservoirs, 32 major rivers, and more than 7,000 kilometers of canals and drains into lively community spaces—increasing economic growth, attracting tourists and businesses, and bringing Singapore’s citizens closer to the beneficial aspects of nature and water.

ABC Waters is named for the three central program themes:

- “A” is for active, meaning Singaporeans can enjoy a wide range of water-based activities, from canoeing and sailing to dragon-boat racing.
- “B” is for beautiful, because Singapore wants to transform their waterways into beautiful streams, rivers, and lakes that enhance the living environment.
- “C” is for clean, so that whatever Singapore does with its water bodies, they will continue to be kept litter and pollution free.

Two noteworthy projects that are helping to preserve Singapore’s water resources include the Bishan Park on the popular Kallang River waterfront and the Alexandra Canal. Bishan Park will be transformed into a river with landscaped banks. Footbridges will be built to improve access to Bishan Park from housing on the other side of the canal. Streams and water-play areas will also be introduced.

Sustainable Components

- Convert flood control water systems into community assets
- Increase economic growth, attract tourists and businesses, and bring Singapore’s citizens closer to the beneficial aspects of nature and water