Marina Barrage and Marina Bay Reservoir

Extract from Wikipedia

The S\$226 million project turns <u>Marina Bay</u> and <u>Kallang Basin</u> into a new downtown <u>freshwater Marina Reservoir</u>. It provides water supply, <u>flood control</u> and a new lifestyle attraction.

By keeping out seawater, the barrage forms Singapore's 15th reservoir and first reservoir in the city. Marina Reservoir, together with the future <u>Punggol</u> and <u>Serangoon</u> reservoirs, will increase Singapore's water catchment areas from half to two-thirds of Singapore's total land area.

Marina Barrage also acts as a tidal barrier to keep seawater out, helping to alleviate flooding in low lying areas of the city such as <u>Chinatown</u>, <u>Jalan Besar</u> and <u>Geylang</u>. [4]

When it rains heavily during low-tide, the barrage's crest gates will be lowered to release excess water from the reservoir into the sea. If heavy rain falls during high-tide, the crest gates remain closed and giant drainage pumps are activated to pump excess water out to sea.

As the water in the Marina Basin is unaffected by the tides, the water level will be kept constant, making it ideal for all kinds of recreational activities such as boating, windsurfing, kayaking and dragonboating etc.

BUM BOATS @ Singapore River.

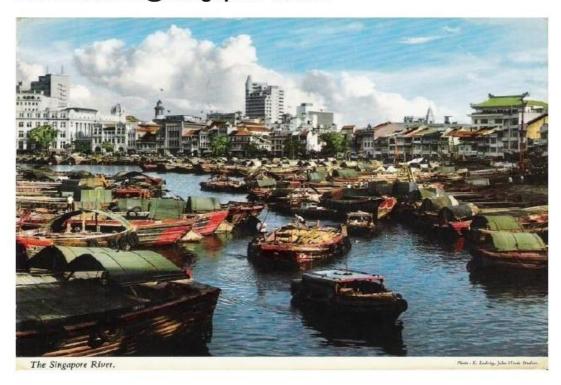


Figure 1 Singapore River 1968 – pre barrage

Developments – post barrage

The following photos show the developments that have taken place around Marina Bay, after the completion of the barrage in 2008.

While it is not suggested that Launceston and the Tamar Valley, with less than 5% of the population of Singapore, will benefit to the same extent, commercial developments in Launceston and around the shores of Tamar Lake will get a major boost from the formation of the lake.

More information on the Marina Barrage is available at: http://www.pub.gov.sg/Marina/Pages/default.aspx



Figure 2. Marina Bay – 2004 – before barrage and lake developments



Figure 3. Marina Bay – 2014 Barrage in place

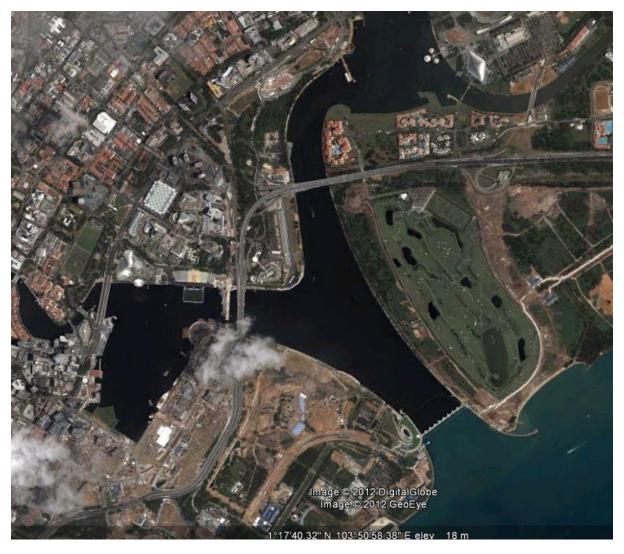


Figure 4. Marina Bay - barrage in place



Figure 5- New Developments around lake-formula 1 pits and Ferris Wheel.



Figure 6. New Developments around lake – Marina Bay Gardens



Figure 7. - Gardens by the Bay - Flower Dome and Planet Marina



Figure 8. Gardens by the Bay - Flower Dome and Planet Marina



Figure 9. Esplanade Theatres on the Bay



Figure 10. Marina Bay - Marina Bay Sands Hotel, Conference Centre, financial district and amphitheatre