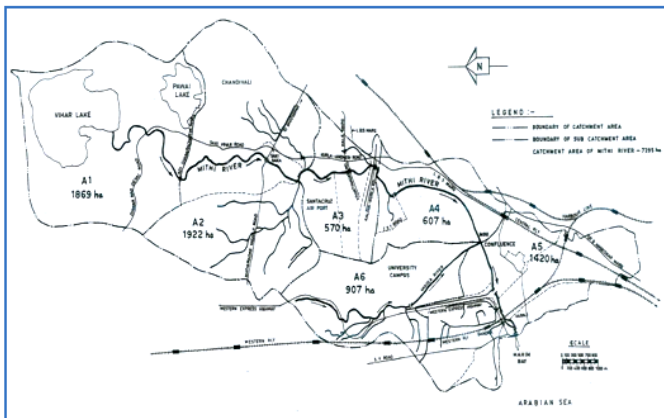


FLOOD MITIGATION OF MITHI RIVER, MUMBAI

Background

The Mithi River originates in the hills east of the Sanjay Gandhi National Park. It carries the overflow discharge from Tulsi-Vihar-Powai Lake system and runoff from its catchments. The river is of short length of 17.922 km, which flows from its origin at Vihar Lake and join the Arabian sea near the Mahim Bay. The tidal reach of the river is about 7 km from Mahim Bay upto Air India complex. The total catchment area of Mithi River basin is 7295 ha which also includes the 907 ha area of the major tributary, the Vakola Nalla system and 70 ha of Mahim bay.



Catchment Area of Mithi River Basin

Studies Conducted

- After the deluge of 26th July 2005, the Mumbai Metropolitan Region Development Authority (MMRDA) reviewed various options for avoiding the recurrence of the floods in the Mithi River.
- CWPRS carried out 1-D mathematical model studies and recommended channelisation of the Mithi River by providing adequate depths and widths in various reaches of the River, including increasing the water way under various bridges.

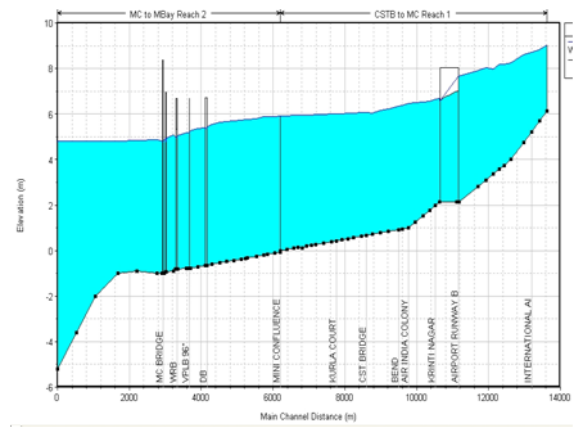
Outcome and Benefits

- The work of channelization, to the extent possible, is in progress and the widening of old bridges and construction of new bridges is also being planned.
- CWPRS has also taken up the work of construction of a physical model of the Mithi River including construction of a hangar (80 m x 26.50 m) in which the entire length of Mithi River including the portion of Arabian Sea and Mahim Bay were reproduced.





Physical Model



Numerical Model result

