



KEY MAP

REFERENCE LOCATIONS

- A Wusongkou (Estuary)
- B Datong
- C Poyanghu Exit, Hukou
- D Han River Mouth
- E Hankou
- F Luoshan
- G Dongtinghu Exit
- H Hongshan
- I Jianli
- J Ouchikou Entry
- K Xinchang
- L Taipingkou Entry
- M Songzikou Entry
- N Zhicheng
- O Qing River Mouth
- P Yichang
- Q Fengjie
- R Wanxian
- S Wu River Mouth
- T Cuntan
- U Jialing River Mouth
- V Zhutuo
- W Tuo River Mouth
- X Pingshan

Canadian International Development Agency People's Republic of China Ministry of Water Resources and Electric Power

THREE GORGES WATER CONTROL PROJECT
FEASIBILITY STUDY

SEDIMENT BUDGET REFERENCE LOCATIONS

CIPM Yangtze Joint Venture

MARCH 1988 PLATE 5J1

5. CONCLUSIONS

1. Data on suspended load quantities and size distribution along the Yangtze River system were analyzed. The result showed the behaviour of size classes through several reaches of the system. More particularly, the sediment budget per size classes for the river's Jingjiang and lower reaches could be characterized.
2. Mathematical model results from IWHR (Han et al, 1986) were used to frame a qualitative analysis of the Three Gorges Project impacts on its downstream reaches. Flushing efficiency and breakdown of the outgoing load for several time intervals after Three Gorges impoundment constituted the basic information for this exercise.
3. During early decades of Three Gorges Project operation, most of the sand load will be trapped in the reservoir. The finer sediments will be flushed through the reservoir.
4. The Three Gorges Project will reduce to some extent the sediment infilling of Dongting Lake.
5. There will be general degradation in the channel between Gezhouba and Zhijiang, but armoring by gravel probably will limit the degradation.
6. There will be some degradation in the lower alluvial reaches of the river.
7. The fine sediment load to the estuary will not be reduced. The sand load will be reduced somewhat, but will eventually recover as the Three Gorges reservoir reaches equilibrium. Overall, the impacts to the estuary and coastal regions should be small.
8. The Three Gorges Project will have effects on the regime of the Jingjiang and lower reaches of the river for many years. Impacts may not be negative in terms of flood control and navigation. However, other potential impacts are less easy to characterize and could not be quantitatively estimated due to the remarkable complexity of the system and to the lack of appropriate data.