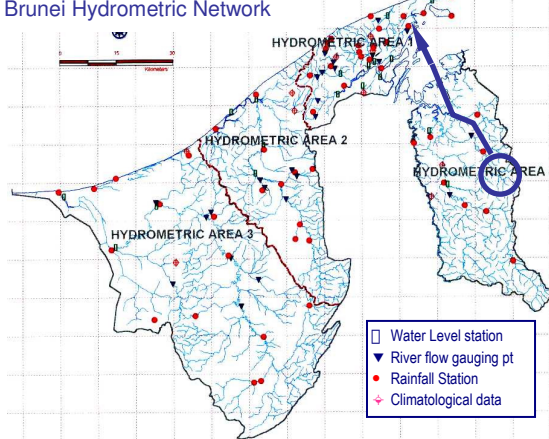

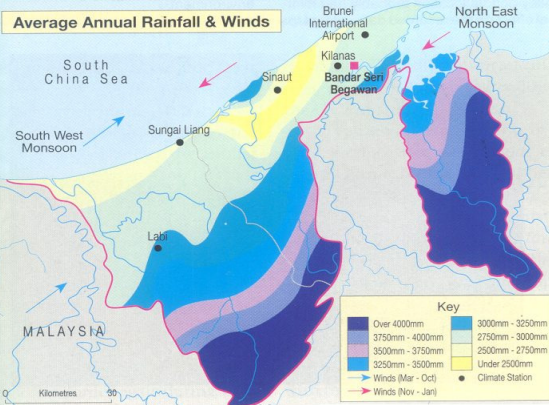


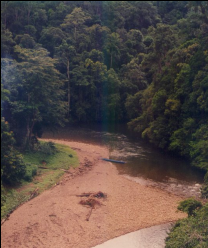
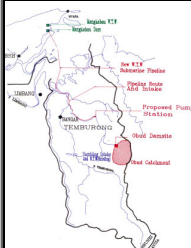



Water Resource Associates

A network of consultants in hydraulics, hydrology, groundwater & environmental issues

Project title: Temburong Transfer Scheme, Negara Brunei Darusalam

Summary: Review and Hydrological Analysis of potential dam sites in Temburong District for meeting public water supply requirements of 735 Mld by the year 2050.

Client: MWH for Jabatan Kerja Raya	Financed by: Brunei Government			
Period of assignment: Dec 2003 - Jul 2004	Location: Negara Brunei Darusalam, Borneo			
Project Value: not known	WRA services: £ 5 000			
In association with: Montgomery Watson Harza [UK] Ltd	Background & Scope of WRA assignment Hydrological study was carried out to assess the options and feasibility for construction of a new dam in the Temburong District of Brunei. The study comprised the review of the yield for various reservoir sizes and sites on the Batu Apoi and Temburong rivers in Eastern Brunei. This ambitious scheme will involve the transfer of water from the wetter and densely-forested part of Brunei, across Brunei Bay to centres of population in the Brunei-Muara District. The study also investigated the increasing severity of drought in Borneo and Brunei over the past 30 years, using 1936-2003 records.			
Brunei Hydrometric Network 				
Annual average rainfall Isohyets derived using Surfer	Results			
	Various catchment models were compared using Hysim, including model based on Sg Medamit in neighbouring Sarawak. The models were used to simulate streamflow in the Batu Apoi and Temburong rivers. The simulated data were then used to drive water resources simulation models to investigate yield and water resources planning options. It was found that a supply of 245 Mld would be required from Temburong between 2025 and 2050 if the Imang Dam is used to full potential to irrigate the Mulaut Plain. Construction of the Ulu Tutong Dam or Temburong transfer scheme would increase Brunei's source capacity from 456 to 735 Mld.			
				

Project Number 000124

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