



Water Supply System Development of South Singkawang City Area

Naga City, 20/11/17

By Asyir A. Bakar Gerry Candra



Asian Development Bank







Singkawang City



Area : 504 km²

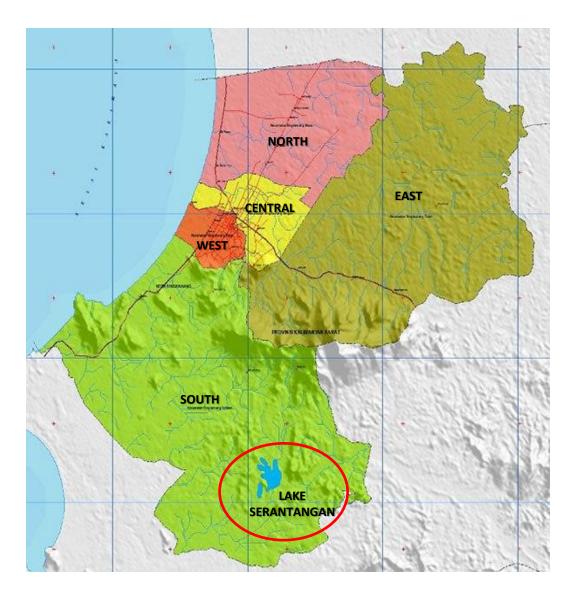
: 258,862 (2016)

Population

- Density
- Rainfall

- : 515 hab/km²
- : 2,819 mm/year

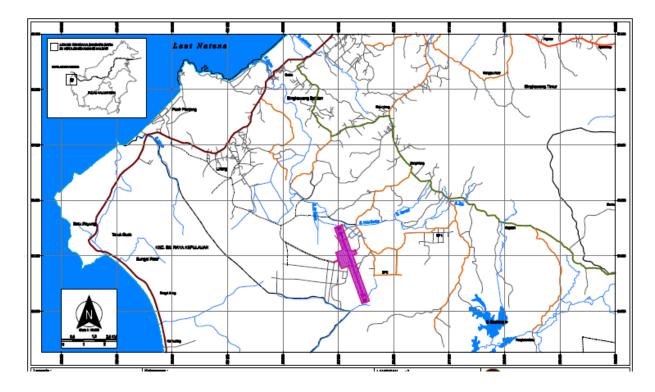
Background



SINGAKAWANG WATER SUPPLY SYSTEM

- Total needs : 480 l/s (2034)
- Existing :
 - 60 l/s (north)
 - 130 l/s (west and central)
 - 150 l/s (west and east)
- Future WTP :
 - 120 l/s (south) in Lake Serantangan
 - 20 l/s (east)

South Area of Singkawang City



PROFILE

- Area : 224.48 km²
- Population : 44,071 hab
- Density : 196 hab/km²

ACTIVITIES

- Port
 - Airport
- Plantation

Settlement

Industries

Lake Serantangan



- Area : 134.08 ha
- Water depth : 0.5 3 m (normal condition)
- Capacity : 1,975,926 m³



NO	PRELIMINARY PROJECT ESTIMATION (2014)	USD
1	Raw water intake unit	91,434
2	Water treatment unit	2,244,208
3	Water distribution unit	5,881,425
4	Houshold connection unit	600,209
5	Capacity building	30,769
6	Planning and controlling	192,308
	Total	9,040,353

Regulations



 Local regulation about Raw Water Protection (2015)

ALLOCATIONS IN THE STATE OF THE

PROVINSI KALIMANTAN BARAT KEPUTUSAN WALIKOTA SINGKAWANG NOMOR TAHUN 2017

Mayor Decree about
 Designation of Raw Water
 Locations (in process, 2017)

Interventions

STUDIES & DESIGNS

- Physical Condition Identification Study (2009)
- Survey and Investigation Design (2014)
- DED for Lake Serantangan Revitalization (2016)
 - \rightarrow Lake dredging : 3,846,153 USD





ACTIONS

- Access road construction (2015)
- Dam construction and river normalization (2016)





Next Step

- Application for CDIA Support (2017)
- Technical Assistance from CDIA
 → Feasibilty Study (2018)
- DED of Water Intake (2018)
- DED of Water Treatment Plant and Distribution Networks (2018)
- Construction phase (?)





