

Highlight And Instrument Research

- This research has instruments are distance of sea water intrusion, area of mangrove ecosystem, the width greenbelt, water salinity, soil porosity, mangrove density and diversity, and fresh water demand for industry, settlement etc.
- This research was analysed by system analysis, mapping analysis, and mathematical analysis
- Mangrove ecosystem in Jakarta was degraded. The mangrove degradation was caused by mangrove conversion and mangrove mortality
- The mangrove degradation and fresh water demand caused sea water intrusion in Jakarta
- Based on mangrove density was showed that mangrove density only between 70 trees/hectare – 300 trees/hectare (rare)
- Based on sea water intrusion was showed that rate of sea water intrusion was about 0.20 km/year (with mangrove as component system), and the rate of sea water intrusion was about 0.3 – 0.4 km/year (without mangrove as component system)
- Sea water intrusion can be reduced by planting of *Avicennia marina*, *A. alba*, *Rhizophora stylosa*, *Sonneratia alba* and *S. caseolaris*.