

Measure, manage and measure: Hydrology and Catchment Management in the Republic of Palau



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SOPAC



Need & Use for Catchment Management

- **Ngerikiil & Kmekumel Rivers: Airai State**
 - Water source for over 75% ROP population
 - During strong El Nino earlier this year HYCOS monitored Ngerikiil River stream flow on weekly basis and report to Bureau of Public Works
 - Ecosystem Based Management (EBM)



Need & Used for Catchment Management

- **Ngermeskang River: Ngeremlengui State**
 - Babeldaob Watershed Alliance
 - Bird Sanctuary
 - Potential water source
 - Flood risk management in Ngeremlengui State
 - Conservation Area
- **Tabecheding River: Ngatpang State**
 - Potential water source
 - Flood risk management



Need & Used for Catchment Management

- **Diongradid River: Ngardmau State**
 - Tourist Hot Spot—Highest Waterfall in Palau
 - Babeldaob Watershed Alliance
- **Lake Ngardok: Melekeok State**
 - Water source for Melekeok State & Ngerulmuud Capitol
 - Conservation Area
 - BWA

Need & Used for Catchment Management

- **Ngarchelong Rain Gauge: Ngerchelong State**
 - Driest state in Babeldaob and has no major river
- **Ngerchelchuus Rain Gauge: Ngardmau State**
 - Highest point in Palau

Hydrological Data

- **Rainfall data**

1. Dry season-help BPW water hours
2. Rainy season- Road management (landslides and road drainages)
3. Road mitigation
4. Ownership of data
5. Calculate recharge rate
6. Climate change

Future Plans for HYCOS Data

- Water level Billboard
 - Will be like a fuel gauge
- Water Quantity
 - Drought mitigation
 - Rainy season- Road management (landslides and road drainages)
 - Calculate recharge rate
 - Ownership of data
 - Climate change

Hydrological Data Provided

- Bureau of Public Works
- Babeldaob Watershed Alliance
- Palau International Coral Reef Center
- Belau National Museum
- Palau Conservation Society
- Private Companies
- The State Offices

Palau Project Progress

- Sanitary Survey Completed
- Invasive Species Survey Completed
- Storm water Road Drainage Mitigation study completed.
 - Tree Planting Ceremony
 - July 29th
- ArcInfo GIS Map of land uses Ngerikiil.
- Intern from Palau Community College.

