

ASEAN IWRM Country Strategy Guidelines

- IWRM Monitoring Status Guidelines for ASEAN Countries

1. Background

The ASEAN Working Group on Water Resources Management (AWGWRM) has developed an ASEAN Strategic Plan of Action on Water Resources Management with the support from the Australian Government in 2005. To support the implementation of the Plan, ten project concept proposals were formulated and included in the Appendix of the Strategic Plan Report. One of the ten project concepts: Project Concept 2 is on the development of an “ASEAN IWRM Country Strategy Guidelines”. DID Malaysia was requested by the AWGWRM to organize and conduct a workshop to develop the details of the “ASEAN IWRM Country Strategy Guidelines”.

The workshop participants agreed that the generic ASEAN/IWRM framework will be structured on the following 6 major water management issues in ASEAN:

- Water Supply
- Irrigation
- Stormwater Management
- Floods Management
- Water Pollution Management
- Sanitation Management

Arising from the workshop the following outputs have been prepared for use by ASEAN countries to assist them in preparing and reporting on their respective countries' IWRM action plans and strategies to address the above 6 thematic issues.

- (a) A set of specific IWRM goals for the above 6 key water-related issues in the region.
- (b) For each set of thematic goals a set of IWRM objectives to achieve the goals have also been identified, categorized under the 3 categories of GWP IWRM tools, i.e. Enabling environment, Institutional environment and Management tools.
- (c) Also indicators for measuring the progress in achieving the objectives associated with each of the thematic goals have been developed. They can be used for measuring regional performance and progress towards meeting the IWRM goals for the 6 key water related issues in the region.

2. The ASEAN IWRM Monitoring Status Guidelines

The Workshop participants in Malaysia have agreed to develop monitoring guidelines for six key water management issues that are considered important in ASEAN countries. They are as follows:

- (a) Water Supply Management
- (b) Irrigation Management
- (c) Stormwater Management
- (d) Flood Management
- (e) Water Pollution Management
- (f) Sanitation Management

The following are the monitoring guidelines for the above 6 key water management issues.

IWRM Issue 6 – Sanitation Management (18 indicators)			
Indicator Types	Indicators	Progress	Description
Outcome Indicators	1. Percentage of rural population having access to improved sanitation system	NA	100% of Singaporeans live in the urban areas
	2. Percentage of urban population having access to improved sanitation system and served by sewer network	100%	
	3. Percentage of treated wastewater reused for non-potable purpose (i.e. further treatment after wastewater treatment process) [e.g. for washing, cleaning, irrigation]	26.25%	<p>Non-potable use: As it is ultra-clean, NEWater is used mainly for industrial and air-con cooling purposes at wafer fabrication plants, industrial estates and commercial buildings. The biggest users of NEWater are wafer fabrication plants, which require water quality that is even more stringent than water for drinking.</p> <p>NEWater is delivered to industrial customers via a dedicated pipe network.</p> <p>Indirect Potable Use: During dry periods, NEWater is added to our reservoirs to blend with raw water. The raw water from the reservoir is treated at the waterworks before it is supplied to consumers as tap water.</p>
EE Indicators	1. Any “Policy” on urban/ rural sanitation and sewerage systems	8	
	2. Any “Legislation/Regulations” on urban/ rural sanitation and sewerage systems	8	
	3. Any “Financial	8	

	framework and Financial plans” for urban/ rural sanitation and sewerage systems		
IS Indicators	1. Any Integrated national and provincial institutions to implement sanitation policies	8	
	2. Any Policy and Planning Department on sanitation and sewerage	8	
	3. Any Project management Department for sanitation and sewerage	8	
	4. Any Development control branch or unit for sanitation and sewerage	8	
	5. Any private sector participant in providing sanitation services for the people	8	
	6. Any sewerage Network Rehabilitation department	8	
	7. Any Sewerage & Sanitation Maintenance department	8	
MT Indicators	1. Any national sanitation/ sewerage information system/ database	8	
	2. Any comprehensive sewerage/ sanitation master plan at national, regional and local levels	8	
	3. Any code of practice for sewerage and sanitation system design	8	
	4. Any system for treating wastewater for reuse [for non-potable water purposes (i.e. further treatment after waste water treatment process)]	8	
	5. Any sludge disposal programs and systems	8	