



**INTEGRATED WATER RESOURCES MANAGEMENT**

**APPROACH FOR GROUNDWATER IN  
LANGAT RIVER BASIN**

**BY**

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**ABSTRACT**  
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September 2007

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Langat River Basin is located in the south of Selangor and north of Negeri Sembilan within latitude 2°40'N to 3°20'N and longitude 101°10'E to 102°00'E. The catchment area is about 2,394.38 km<sup>2</sup>. It is one of the highly populated areas in Malaysia and is expected to encounter water shortage in the year 2035 due to increase in demand. As a result, groundwater resources need to be explored and sustainably developed.

Successful implementation of IWRM in groundwater management in Langat River Basin requires the creation of National Water Resources Policy, continuous groundwater monitoring and improvement of current legislation and institutional framework. Capacity building in the area of financial and human resources must not be neglected. At the same time, the economic value of the groundwater in Langat River Basin must be assessed.

This study attempts to look at the utilization of Integrated Water Resource Management (IWRM) by among other things using the recommended steps available from the IWRM toolbox to improve the current groundwater management in Langat River Basin.

## ABSTRAK

### PENDEKATAN PENGURUSAN SUMBER AIR BERSEPADU UNTUK AIR BUMI LEMBANGAN SUNGAI LANGAT

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Lembangan Sungai Langat terletak di Selatan Selangor dan Utara Negeri Sembilan dalam lingkungan latitude  $2^{\circ}40'N$  ke  $3^{\circ}20'N$  and longitud  $101^{\circ}10'E$  ke  $102^{\circ}00'E$ . Keluasan tadahan ini adalah lebih kurang  $2,394.38 \text{ km}^2$ . Ia adalah salah satu kawasan yang mempunyai bilangan penduduk yang ramai dan ia dijangka akan menghadapi kekurangan air pada tahun 2035 disebabkan oleh peningkatan penggunaan air. Oleh itu, sumber air bumi perlu dikaji dan dibangunkan dengan mampan.

Kejayakan dalam implementasi Pengurusan Sumber Air Bersepadu (PSAB) dalam pengurusan air bumi di Lembangan Sungai Langat memerlukan perubahan Polisi Sumber Air Nasional, pengawasan air bumi yang berterusan dan kemajuan dalam dasar-dasar dan institusi berkenaan air yang sedia ada. Pembinaan kapasiti dalam bahagian kewangan dan kakitangan tidak harus diabaikan. Pada masa yang sama, nilai ekonomi air bumi di Lembangan Sungai Langat mesti ditentukan.

Pengajian ini bertujuan untuk meneliti penggunaan PSAB dengan mengguna langkah-langkah yang disyorkan daripada kotak peralatan PSAB dalam memajukan pengurusan air bumi yang sedia ada di Lembangan Sungai Langat.

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