

## Project Description

The W.A.T.E.R. Project aims to educate the public about the importance of water and why and how we should conserve and protect its source: our rivers.

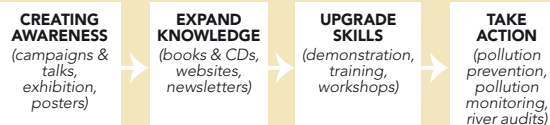
Sungai Kinta Education Outreach Programme is a three years project funded by GAB Foundation in partnership with Global Environment Centre (GEC) focuses on three (3) tributaries of Sungai Kinta: Sungai Senam, Sungai Kledang and Sungai Buntong to enhance community participation in river protection and river rehabilitation.

## Objectives

1. To protect and enhance Sungai Kinta, urban river through community ownership and engagement.
2. To promote and support localise resource management activities.
3. To support and supplement government's ongoing programme as 'The Living River' by Department of Irrigation and Drainage Negeri Perak (DID Perak State) / Ministry of Natural Resources and Environment (NRE).

## Civil Science Approach

Civic Science is an approach towards educating the community about caring for their own environment. The concept is as follows:



## GAB Foundation

The Foundation was established to enrich communities and empower the public to conserve and play a role in protecting our environment; especially our water resources (rivers).

GABF kickstarted Sg. Way River Project in 2007 with the combination of hard approach (river rehabilitation) and with the soft approach (community engagement). As an expansion of this project, Sg. Kinta Education Programme was initiated under W.A.T.E.R. Project in 2012.

## Department of Irrigation and Drainage (DID) Perak

DID Perak through their on-going river rehabilitation and maintenance of the Sungai Kinta, has identified their biggest challenge: changing the mindsets and behaviours of the surrounding communities.

DID acknowledged and embark the importance of community engagement in ensuring the sustainability of Sungai Kinta rehabilitation efforts. Hence, have been very supportive of this programme.

## Other Stakeholders

- **Ipoh City Council (MBI):** Business Community Approach.
- **Department National Unity and National Integration (JPNIN):** Local Community Engagement.
- **University of Tunku Abdul Rahman (UTAR):** Water Quality and Biodiversity (invertebrate) Study.

## Global Environment Centre (GEC)

Global Environment Centre is a Malaysian non-profit NGO, and was established in 1998 to address key environmental issues. The Centre is based in Malaysia but supports activities worldwide. The organization has three (3) main programme areas: Forest & Peatland, River Care and Outreach & Partnership.

The River Care Programme (through RIVER Ranger and SMART Ranger) undertakes projects and activities related to water and river management, solid waste management and environmental education. Its mission is to "Promote the protection, restoration and sustainable use of rivers by enhancing multi-stakeholder participation and knowledge to stimulate local action".



# SUNGAI KINTA

## RIVER EDUCATION PROGRAMME: COMMUNITY APPROACH

## ORGANISED BY:



## SUPPORTED BY:



## Identified Pollution Sources

of Sungai Senam, Sungai Kledang and Sungai Buntong.



### RESIDENTIAL

Household sewage, fertilizers, herbicides and pesticides contaminate and deteriorate the quality of river water. Improper disposal of hazardous chemicals into drains introduces toxic materials into the ecosystem, contaminating the water supply in a way that can harm aquatic life.



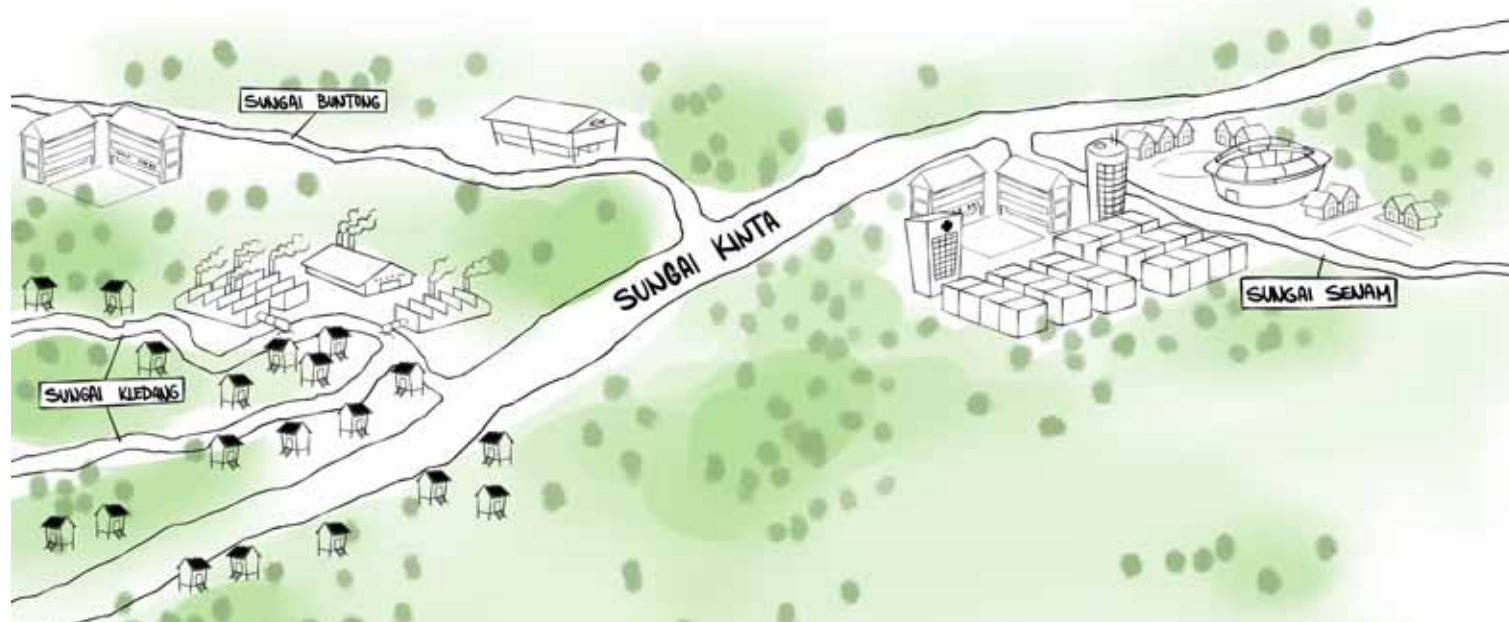
### BUSINESS

Waste and sewage from iron and steel industry, electronic industry, personal care and household products, chemicals and pharmaceuticals as well as food industry containing carcinogenic chemicals, acids, alkaline, abrasive cleaners, toxic or radioactive materials and hazardous compounds get into water bodies through drainage system poses harm to the ecosystem.



### WET MARKET

Release of untreated organic waste make their way to rivers affects the organisms living in a stream by lowering the available oxygen in the water. Organic effluents also frequently contain large quantities of suspended solids which reduce the light available to photosynthetic organisms.



## RIVER EDUCATION ACTIVITIES

### RIVER RANGER

- Provide overview of Integrated River Basin Management.
- Training on basic of River Management Program with practical field training involving Water Quality Monitoring using three (3) different methods: Physical, Chemical and Biological indicators.

### SMART RANGER

- Training concept on the waste minimization, recycling concept, composting and enzyme production.
- Create revenue for local communities using 'Waste is Wealth' concept.

### RIVER RANGER AND SMART RANGER IMPLEMENTATION

- Establish their own Resource Management Activities / Plans.
- Initiate Green Programme for business communities.
- Initiate Sustainable Wastewater and Solid Waste Management System.
- Outreach programme for community.

#### For more information, contact us at:

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## ACTION PLAN

- River Monitoring.
- River Clean up.
- Water Auditing.
- Water Conservation.
- Waste Management.
- Best Management Practice (BMP).

## METHODOLOGY

- Active consultation process.
- Multi-stakeholder partnership.
- Participatory and practical approach.
- Pollution prevention at source.
- Smart partnership.
- Working with ongoing activities.
- Stimulating stakeholder contributions and co-financing.
- Involving the mainstream and social media.
- Integrated river basin approach.
- Sustainability through empowerment.