

# 12<sup>th</sup> International Riversymposium

Brisbane Australia 21 – 24 September 2009



**Community Approach to River Monitoring Programme in Malaysia**

**Kalithasan KAILASAM**

**Global Environment Centre, Malaysia**

# community river basin monitoring in Malaysia

- Why community
  - we are **main stakeholders**; & cause & receive all pollutants & impacts
- Ultimate goal
  - to sustain or **improve the health** of its ecosystem for the use of inhabitants of the earth
- Purpose
  - survey streams and water sources to assess its physical condition.
  - **identify areas** where water quality degradation exist and how the improvement can be achieved.
  - provide a comprehensive **database** to analyze trends in water quality.
- What to monitor
  - **any water body** concerned like drains, streams/streams & lakes
  - project implementation; service provider and any illegal activities



RIVER Ranger is a comprehensive program for communities on the environment, water resources and rivers, which emphasizes not only about water pollution but every aspect of freshwater ecosystems including its biodiversity, functions, values, and benefits to mankind.

([www.riverranger.net](http://www.riverranger.net))

- To educate the public on rivers and river basin management
- Become the **eyes & ears** of rivers
- Practice “Health Assessment of Streams/Rivers”
- Approach : **Civic Science**
- Monitoring programme
  - Pollution & Polluter mapping & monitoring;
  - River health assessment
  - Water quality testing

## River Health Check

### 1. Visual Observation

- River Report Card

### 2. Chemical monitoring

- Lab & in-site measures

### 3. Biological monitoring

- Fish & invertebrate



river report Card

Write down scores for each category and total them up.

Our awards, medals and medals are for more than just a part of the scenery - they are the health of the river itself. This provides a means for monitoring the quality, which applies to humans and animals, and checks of freshwater and equipment for it or, in addition, they check the health of the surrounding area because they are the ultimate path for water coming from an area.

But how can you tell if a river is healthy? It is actually quite simple to determine the overall condition of the river. You do not need expensive equipment or training, but you will need your senses, your common sense and a genuine concern for the river.

In the next page, we have prepared categories to monitor your water resources in your local area. In each category you can rate your river and then compare your scores to some guidelines we prepared along the way. You do have to compare observed items in different areas along the same river - long good miles or even different, nearby the location, size and shape of a waterway before the right can be said to be. This is important so you can compare your scores if you need the data over time.

Site Description

Name of waterway / site : \_\_\_\_\_  
 Date : \_\_\_\_\_  
 Time : \_\_\_\_\_  
 Weather : \_\_\_\_\_  
 Has it rained in the past 24 hours?  
 If yes, was it heavy? \_\_\_\_\_

Overall Rating

What do you think of this site?  
 (Draw a mouth for the face according to the total score)

😊 😊 😐 😞 😡

Month guide

Score	😊	😊	😊	😊	😊
Score	100	80	60	40	20

Name : \_\_\_\_\_  
 Contact details : \_\_\_\_\_  
 School / organization : \_\_\_\_\_  
 Date : \_\_\_\_\_

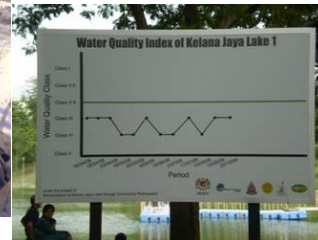
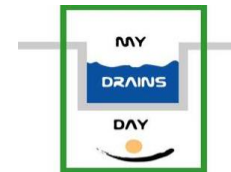
## River Monitoring - Programme Steps

<b>Step 1</b>	<b>Identifying 20 people as core members</b>	<b>Local community, CBO, schools students</b>
<b>Step 2</b>	<b>Formation of club (Friends of Sg. Pencala) and Working committee</b>	<b>Technical advisory members – government agencies like DID, DOE, local authorities, university, NGO, local politicians</b>
<b>Step 3</b>	<b>Training River Ranger members</b>	<b>Trained leaders will train the others</b>
<b>Step 4</b>	<b>Carry out river mapping to identify issues &amp; problems</b>	<b>Identify the stakeholders</b>
<b>Step 5</b>	<b>Develop local action plan &amp; the milestone</b>	<b>Involve the related &amp; relevant stakeholders including private sectors.</b>
<b>Step 6</b>	<b>Carry out planned activities inclusive of monthly Water Quality monitoring</b>	<b>Collect resources &amp; tools needed</b>
<b>Step 7</b>	<b>Data collection &amp; management and upload data in website</b>	<b>Develop simple web portal eg. <a href="http://www.riverranger.net">www.riverranger.net</a></b>
<b>Step 8</b>	<b>Report generation</b>	<b>Seek technical advice from local experts</b>
<b>Step 9</b>	<b>Report and finding submission</b>	<b>Forward to relevant agencies &amp; individuals</b>



# GEC's Community Based River Monitoring Project

1. W.A.T.E.R Project - Sungai Way Rehabilitation ([www.waterproject.net.my](http://www.waterproject.net.my))
2. One State One River Project - Sg Pencala rehabilitation ([www.1s1rcommunity.net](http://www.1s1rcommunity.net))
3. Kelana Jaya Park Rehabilitation ([www.kelanajayapark.com](http://www.kelanajayapark.com))
4. Sg Pagoh Monitoring Programme ([www.riverrangerpagoh.net](http://www.riverrangerpagoh.net))
5. Sg Nenggiri conservation programme
6. RIVER Ranger ([www.riverranger.net](http://www.riverranger.net))
7. SMART Ranger ([www.smartranger.net](http://www.smartranger.net))



# Outcomes of River Basin Monitoring by Malaysian local community

