



Mekong River Commission

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Ecological Risk Assessment Training Programme

Implemented by

Water Science Pty Ltd, Australia
in collaboration with **Water Studies Centre Monash University & International Water Centre**



Water Science
Pty. Ltd.



**Water
Studies
Centre**

Mentor

Professor Barry Hart

Water Science Pty Ltd, Echuca, Australia

Summary

The Mekong River Commission will run a second Ecological Risk Assessment training program for participants from the four riparian countries in 2006. This follows the successful first training program conducted during 2004-2005.

Background

Although water quality in the Mekong generally appears to be quite good, there are several localities along the river that would appear to be particularly vulnerable. At these sites any deterioration in water quality would have serious consequences for other Mekong countries and downstream communities.

The management of natural resources, such as the Mekong River, and its wetlands and estuaries, is complex. Ecological Risk Assessment (ERA) is increasingly being used around the world as a valuable tool for evaluating present and future ecological risks, and for defining monitoring and research programs to provide additional information.

During 2004-2005, MRC funded the first Ecological Risk Assessment Training Program for participants from the four riparian countries – Cambodia, Laos, Thailand and Vietnam.

This involved 'learning by doing' training where participants undertook two risk assessments, one focused on the Mekong in the vicinity of Vientiane (Lao PDR) and Nongkhai (Thailand), and the other around Phnom Penh (Cambodia) that also included Tonle Sap great lake. The key risks assessed were fish toxicity, algal blooms and adverse effects on fish migration. These were assessed to be all very low around Vientiane, but were somewhat higher around Phnom Penh.

Professor Barry Hart (then Director Water Studies Centre, Monash University, Australia) was the mentor for the first course.

ERA Training Course 2

The second training program will be run between June 2006 and February 2007. Participants will again be from the four riparian countries.

The 2006 course mentor will be **Professor Barry Hart**, Director Water Science Pty Ltd, Australia, in collaboration with **Dr Carmel Pollino** from the Water Studies Centre at Monash University, Australia.

The program for 2006 will be run around four Workshops to be held in June, September and November 2006 and February 2007 (see timetable below).

The focus of the 2006 course will be to undertake an assessment of the ecological risks to the Mekong River in the two areas – one in northern Thailand (Chiang Rai/Bokeo) and the other on the Cambodian/Vietnam border at Chau Doc (Figure 1).

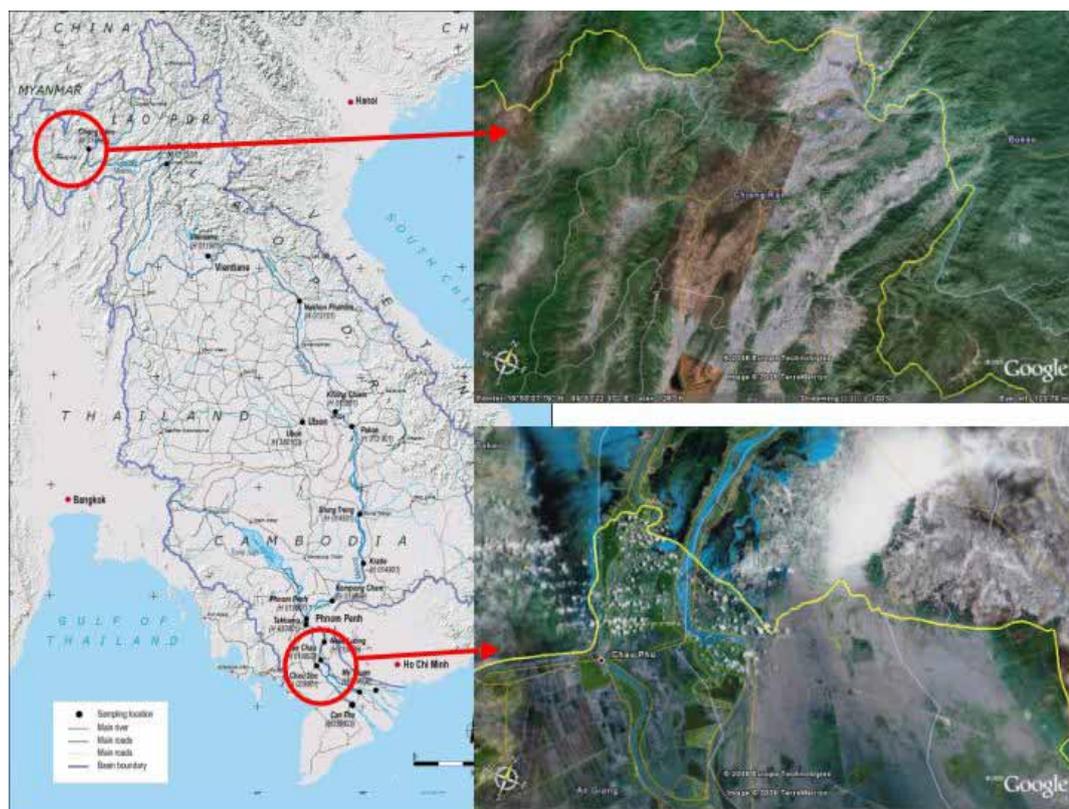
Overall objectives

The overall outcomes of the project will be:

- The completion of two ecological risk assessments, one for the region around Chiang Rai (Thailand/Lao team) and the other for the region around Chau Doc (Vietnam/Cambodian team).
- A group of line agency staff from the four Lower Mekong countries with skills in how to undertake an ERA and to use the results to better managed water quality in the Mekong.

Training course objectives

- Each team members to gain an awareness of ecological risk assessment as a management tool (particularly its advantages and limitations),
- Each team members to become proficient in the basic elements of conducting an ERA,
- To define a program of work that will be undertaken after the workshop to complete the ERA for the specified transboundary area.



Tentative Program

Date	Activity	Mentor
19-23 June 26-30 June (2 weeks)	Workshop 1 Two groups separately – 5 days each <ul style="list-style-type: none"> • Introduction to ERA • Decide on priority issues • Decide on information to be collected 	BTH
July-Sept	Teams collect background information	
4-8 Sept 11-15 Sept (2 weeks)	Workshop 2 Two groups separately – 5 days each <ul style="list-style-type: none"> • Revise ERA principles • Intro to quantitative risk analysis (intro to Bayesian network models) • Decide on what needs to be done Oct-Nov 	BTH
17-21 Sept	Special workshop Bayesian Network Training in Vientiane (5 days x 4 consultants)	CP
Sept-Nov	Collection of further information identified during Sept workshop	
6-11 Nov	Workshop 3 Two groups together – 6 days <ul style="list-style-type: none"> • Teams to build the Bayesian networks for each of the issues 	BTH CP
Nov 2006-Jan 2007	Collection of further information identified during Nov workshop	
2-8 Feb 2007	Workshop 4 Combined groups – 7 days total <ul style="list-style-type: none"> • Final risk assessment • Report writing • Presentation of results 	BTH CP

BTH – Professor Barry Hart

CP – Dr Carmel Pollino

Prof Barry Hart

5 June 2006