Mekong River Commission

Ecological Risk Assessment Training Program

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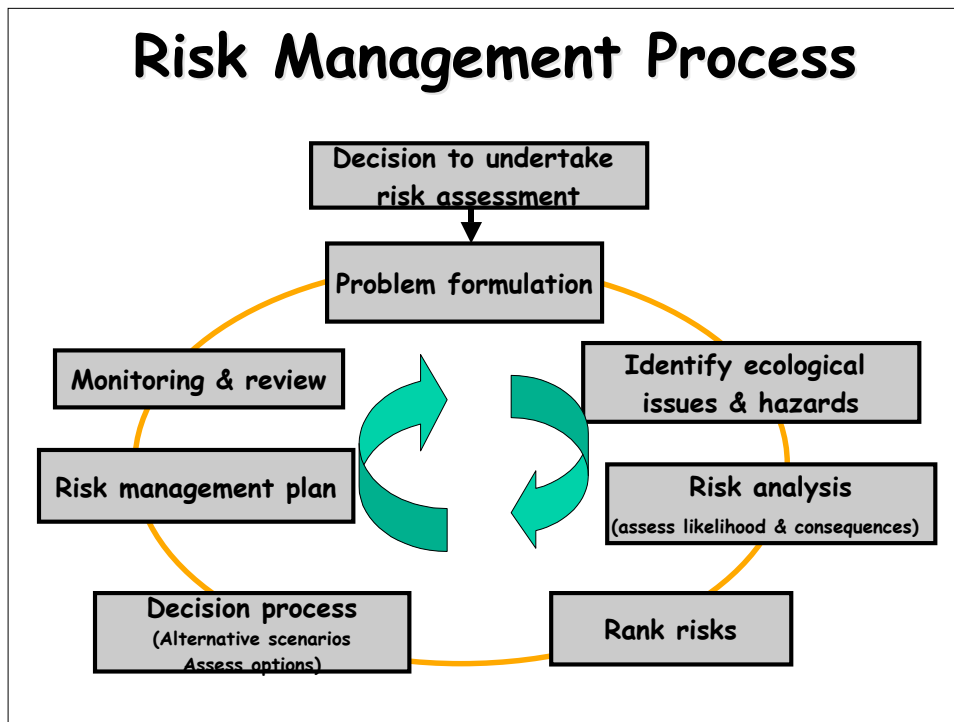**Australia**

Overall Objective

- To assess the potential ecological and WQ risks (local & transboundary) over next 10 years from runoff and effluents from the vicinity of Chiang Rai (Thailand) and Chau Doc (Vietnam)
- Process
  - Run training courses on the ERA process for the two teams
  - Teams to work on their separate risk assessments
  - Mentor to make subsequent visits to assist teams undertaking the ERA's
  - Complete ERA's and report

Outcomes

- Overall project
  - Complete two ecological risk assessments (one for region around Chiang Rai, one for region around Chau Doc)
  - Group of line agency staff from 4 lower Mekong countries trained in how to conduct an ERA
  - Use these results to better manage ecology & WQ in the Mekong

Workshop 1 Outcomes

- Each team member:
  - to gain an awareness of the basic principles of ecological risk assessment as a natural resources assessment tool,
  - to define the problem for their particular case study,
  - to define a program of work that will be undertaken between Workshops 1 and 2.

Risk Management Process

Decision to undertake risk assessment

Problem formulation

Monitoring & review

Identify ecological issues & hazards

Risk management plan

Risk analysis
(assess likelihood & consequences)

Decision process
(Alternative scenarios
Assess options)

Rank risks

Workshop 1 Course Outline

- Component 1: ERA Overview
  - L1a: Outline of the course
  - L1b: WQ Management - ecological approach
  - L1c: Ecological risk assessment/management

- **Component 2: Problem Formulation**
  - L2a: Problem formulation
  - L2b: Conceptual Diagrams
- **Component 3: Risk Analysis**
  - L3a: Risk analysis 1
  - L3b: Risk analysis 2
  - L3c: Ecological modelling
  - L3d: Uncertainty analysis

- **Component 3: Risk Analysis**
  - Case Study 1 (Salinity)
  - Case Study 2 (algal blooms)
  - Case Study 3 (water quality)
  - Case Study 4 (native fish abundance)
- **Component 4: Risk Management**
  - L4: Risk management
- **Component 5: Monitoring & assessment**
  - L5: Monitoring & assessment programs

- **Component 6: Program of work to complete ERA**