

# Pilot study for development of fish friendly irrigation and mini hydro design criteria for application in the Mekong and Murray-Darling Basins



## Key details

### Location

Lao PDR

### Duration

Start Apr 2012

End May 2013

### Budget

AUD 150,000

### Commissioned organisation

Department of Primary Industries, Australia

### Partners

Living Aquatic Resources Research Centre;  
National University of Laos; Pacific Northwest  
National Laboratory

### Project Leader

Craig Boys - Department of Primary Industries

### Program

Fisheries

### Project code

FIS/2011/072

The Small Research Activity (SRA) provided the first information regarding the potential impact of water infrastructure on downstream migrating fish within the Lower Mekong Basin, and investigated what hydraulic mechanisms may be responsible for these impacts within the Lower Mekong Basin and Murray Darling Basin.

Whilst providing important guidance on the design of fish friendly infrastructure is the primary objective, the SRA could provide guidance and direction for a larger program which could focus on the main capture fisheries species in both Laos PDR and Australia, and result in timely policy advice on proposed future developments, particularly in hydro power generation.



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## Overview

Unsustainable hydroelectricity and irrigation development has decimated global freshwater fisheries, impacted the livelihood of riverine communities and facilitated the decline of fish-based economies. Fish moving downstream through dams, weirs, regulators or hydro turbines are subject to sudden changes in hydraulic conditions which have been shown to be a major cause of severe declines in migrating fish populations.