

**Statement by Dr. Murray Watson, Resource Management and Research  
December 20, 2007**

I wish to clarify, for the record, our findings concerning the Theun-Hinboun Expansion Project, which have been misrepresented in the project's official Environmental Impact Assessment (EIA), prepared by Norwegian company Norplan.

In 2004 RMR was contracted to conduct the EIA for the Theun-Hinboun Expansion Project by the Theun-Hinboun Power Company. After more than two years of investigations and data collection about the existing project and the planned expansion project and its impacts, we were unable to finalise our report within the contracted period. The problem we came up against was the need to treat the impacts and mitigations already experienced by families on the downstream Hai and Hinboun Rivers at a due diligence level. We found these impacts to be much more serious than those shown in the company's reports. We delivered the reports which we had completed to the company towards the end of 2006. From that moment we have heard nothing from the Company nor from Norplan, a Norwegian company, whom we eventually discovered had been contracted to complete the EIA.

The company claims that the report we produced was "too detailed". Normal EIA studies don't usually go into much detail as they deal with the future and all its uncertainties. However as the Theun-Hinboun Project had been operating for 8 years and had already had effects on about 30,000 people, there was a massive amount of investigation and documentation to do. Our investigations over two years showed that the Hai River – the river to which the water is diverted to - had become destabilized, with about 1 million tons of annual erosion along the Nam Hai, a widening and straightening of its course, and a slow moving sediment wave penetrating down the Hinboun, leaving deposits on the banks and filling the deep pools.

Not surprisingly these processes, which were still occurring at the end of 2006, have devastated the fishery in both rivers, produced more frequent, slightly deeper and more prolonged floods of more turbid water, leading to more frequent rice crop failures, more periodic dislocations of normal life and higher risks for human and animal health. We have documented at least 820 hectares of rice paddy land that has been abandoned by Hai and Hinboun residents as a result of the flooding. THPC's mitigation programmes were found to have been only slightly effective in remedying losses, partly because they were not equitably and immediately distributed to all affected families. We estimated the accumulated uncompensated economic losses to recipient river communities at about US\$11 million.

Unfortunately and unwisely the Company had already widely publicized its belief that the impacts of the river diversion were slight, and that its mitigation programme was remedying all the negative consequences. RMR was therefore in the unenviable position of being compelled to document increasingly detailed and well supported facts of the true impacts of the existing project, which would seriously damage the Company's reputation and cause it to spend large sums on remedies and compensations. We were therefore not surprised that the Company closed down the EIA when the opportunity arose. By that time, however, the levels of detail were distinctly inconvenient for both parties.

The main reason for the exceptional impacts on Hai and Hinboun river communities was due to the diversion of large water flows into a river not "designed" to accommodate this flow. This had already been flagged as a problem by Norplan in studies they conducted in 1996,

before the project began operation. They recommended that THPC take measures to stabilize the river banks before project operation. The Company decided against doing this, apparently for financial reasons. Instead they decided that the consequences of impacts of the Theun-Hinboun diversion on the recipient river should be managed by environmental mitigation measures, when in fact they could only be managed by major and expensive engineering mitigations. Much of the damage to the recipient river would have been avoidable had normal engineering practice been followed. .

From our detailed investigations of events from 1998 to 2006, we have concluded that the Company's plans to construct an additional storage reservoir upstream of the existing Headpond and double diversions into the Hai and Hinboun rivers (known as the Theun-Hinboun Expansion Project) require **at the least** that the Nam Hai banks are stabilized and current erosion halted, and that engineering measures to control additional erosion are implemented. These engineering works are not part of the Expansion Project's plan. Norplan's EIA, which understates the severity of the impacts, proposes that the currently occurring erosion and new erosion from the Expansion Project should again be treated as unavoidable damage and remedied through much less costly social and environmental mitigations.

If the diversion is doubled to 200 m<sup>3</sup>/s, as is planned, some problems will be approximately doubled, but others, such as flooding and the flood-sediment effects on rice cropping, will cross tolerance thresholds and have disproportionately larger impact consequences. The consequences for the riverine communities in the upper reaches of the Hai and Hinboun (about 2,000 families) will be serious livelihood damage and periodic dislocation of most other activities, leading to substantial impoverishment, impairment of health and the exhaustion of current coping mechanisms. Many families will find they have to move to new locations. Continuing and increased erosion of the Nam Hai will result in aggravated flooding, higher mortality of submerged rice, loss of productive land, acute fishery damage, higher public and livestock health risks and forced relocations of hundreds of families in the Hai and Hinboun valleys.

The seriousness of these consequences has not been properly presented in the Norplan EIA, which does not meet professional standards expected of scientists. The Norplan EIA seriously under-estimates the risks of the THXP, and understates or ignores the changes already experienced from the Theun-Hinboun Hydropower Project. They are deceiving the Lao Government and enabling their client to externalize costs. The costs of these impacts will definitely seriously impoverish 10,000-15,000 people, probably will moderately impoverish a further 10,000-15,000, and add to existing deficit lines in the national accounts.

Other risks which Norplan has inadequately reported or ignored can be seen in the expanded version of this statement which is in the RMR archive.

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An archive of documents relating to the Theun Hinboun Expansion Project, including a copy of RMR's draft EIA, comments on the Norplan EIA and correspondence with Norplan is available at [\*\*http://tinyurl.com/3ckqwg\*\*](http://tinyurl.com/3ckqwg)