CHS engagement helps a small miner to operate more sustainably

It would be hard to find someone who hasn't heard of the importance of sustainability in today's business climate. However, when people think of sustainability they rarely think of mining, which by its very nature is not sustainable! Some mining companies are choosing to think outside of that box and are funding research at ECU with the intention of not only minimising environmental damage resulting from their operations, but also of maximising benefits to local communities. More than ever before, the natural environment forms a part of the equation.

Dr. Clint McCullough, a Research Fellow and Lecturer in the Faculty's Centre for Ecosystem Management (CEM) explains. "Because of the large amount of land they manage, the intensity with which it is managed is coming under increasing public pressure, and more and more mining companies are being very proactive about their environmental management. In many cases, this pro-activity goes beyond normal regulatory compliance; partially because of an inability by regulators to inform mining companies as to environmental closure requirements, but largely due to an internalised responsibility on behalf of the companies and their shareholders.' Dr. McCullough cites current projects which he and his colleague Assoc. Prof. Mark Lund are engaged in, including significant research projects with some smaller operators who have smaller economies-of-scale and resources available than the big multi-national players.

In one of these cases, the research group has engaged with a smaller local, mining company Kemerton Silica Sand (KSS) through a sponsored CEM MSc research student project, to study the ecological requirements of the threatened black stripe minnow, (Galaxiidae: Galaxiella nigrostriata), found on their project area just north of Bunbury. MSc student, Dave Galeotti, describes



Assoc. Prof. Mark Lund collecting an aquatic macroinvertebrate (small insects and crustaceans) from a strongly tannin-stained wetland on the KSS project area.



MSc student Dave Galeotti with a catch of gilgies (Cherax quinquecarinatus).

the project as "an important scientific exercise in a drying climate when seasonal wetlands are under increased threat to loss of biodiversity". Surrounded by seasonal wetlands of important ecological value, the mining company has also supported other research into understanding wetland ecology and function, with a view to using this information to help rehabilitate mined areas as well as for the intrinsic scientific conservation value.

General Manager Mark Gell says: "I feel that there is more value in such novel studies conducted by pure research scientists starting at a grass roots level than with consultant-directed work which may just be based on previous experience." He also feels that, "it is important that the information learned not just be confined to a consultancy report, but rather as an opportunity to distribute new findings to other scientists; including academics and their students."

With the mining boom showing no signs of slowing and with environmental sustainability and business responsibility increasingly on the agenda of companies, I, such collaborations sound like good sustainable management for both forward-thinking industry and university research providers as well.

More information on the research group's recent and current activities is on their web site: http://www.ecu.edu.au/chs/cem/CSML-ECU/