

Call for Bids to fund STEM student research projects

The Great Sandy Strait Research Oversight Committee wants to test their hypothesis that serious and sustained damage to the ecology of the Great Sandy Strait will result from the release of acidic water polluted with abnormal concentrations of heavy metals into the Mary River from the proposed Colton coal mine and that further impacts may result if mine site containment dams are breached or overflow.

The Research Oversight Committee (ROC) is inviting students and/or tutors from the Fraser and Sunshine Coasts to submit projects for funding. Students from this region are preferred because it will be easier for them to access the main target area of Great Sandy Strait which is where the tides from Hervey Bay meet the tides from Inskip Point. This is anticipated to be the area of main impact. These projects may form part of their academic studies or be part of their work experience. The sum of these projects will together constitute an important environmental assessment on the impacts to Great Sandy Strait from the discharge water from the Colton coal mine.

Funds will be available to cover the cost of some travel, boat hire and equipment and other expenses needed to be able to collect data and deliver a credible report within the time frame. While some reports may be completed by the end of 2018, it is anticipated that some projects may need to be carried out during the first semester 2019.

The research projects that the consortium is interested in funding require a basic interest and scientific background that will address the following questions, which may be broken down into a series of smaller projects:

Question 1

- What is the pH of the water likely to be released at the rate of 200 litres per second in the Mary River estuary 8kms from the Ramsar boundary?
- What will be the effect of river flow and tidal movements on this discharge both upstream and downstream of this discharge point?
- How will the cessation of flow across the tidal barrage affect the dispersal of the discharge water?

Question 2

- What will be the effect of lower pH at various levels on the biota of the lower Mary River and the Great Sandy Strait?
- How far are the heavy metals in the water discharged from the Colton Mine likely to be dispersed?
- How long are the heavy metals likely to persist in abnormal concentrations?

- What impacts can be expected on the fauna and flora of the affected area in the short, medium and long term?
- Will heavy metals such as cadmium seriously impact on the food chain and if so for how long and how?

Question 3

What data already exists relating to water quality and stream flows in the lower Mary River and Great Sandy Strait and what is the known impact of heavy metals to be discharged from Colton Mine on the ecosystem and human health.

Other Questions:

Research into other questions that address the environmental impact of the waste water discharge from the Colton Mine on Great Sandy Strait will be considered

TO SUBMIT BIDS

Students individually or as teams are invited to submit bids to fund projects that will address any of the above questions.

The Research Oversight Committee will consider bids on what they deem give the 'best bang for their buck'.

The criteria includes:

- Timing:** Projects need to be completed no later than 1st June 2019. Earlier is preferred.
- Capability:** The experience of individuals and collaborators to complete the projects submitted
- Availability of funds:** Projects can only be funded if the funds have the remaining resources to make an allocation. Early applications are advised.
- Proximity:** Preference will be given to applicants based in proximity of the impact area.

Proposals should be submitted by email to admin@mrccc.org.au

There is no closing date so as long as funds are available applications will be considered. It is hoped to begin the allocation of funding in March 2018

For further details contact admin@mrccc.org.au or john@fido.org.au

