

# FIDO's K'gari E-News No 12 (7<sup>th</sup> January, 2018)

*Opportunities to help FIDO protect K'gari and Great Sandy Strait*

Writing this newsletter I feel a sense *déjà vu*. It is a similar feeling to what I experienced from 1971 to 1977 while I was seeing the sandminers off K'gari. We are again opposing mining that is being supported by the Queensland Government. The big differences are that now the mine for coal and not for mineral sand. Although the mine is located about 30 kms from K'gari's western shore K'gari will be undoubtedly suffer from the annual discharge of 946 megalitres of untreated mine water. Translated this means that 200 litres per second (equivalent of 10 x 20 litre containers per second or 600 jerry cans per minute) will all be dumped in the Mary River at Dundathu and find its way just a little downstream to Great Sandy Strait. Here it will be trapped by tides coming from both the north and south. This is where most of the pollutants will fall out. It should come as little surprise that the Queensland Government although of a different colour to that of the 1970s has already rushed to approve this mine.

*John Sinclair* AO FIDO Honorary Project Officer

## Cruise Great Sandy Strait

Discover the rich biodiversity and history of the wonderful Ramsar listed waterway, Great Sandy Strait.

By joining a cruise you can help the research into the water quality of this that is also now being considered for inclusion on the World Heritage List.

Cruises on the *MV Amaroo* start at 9.30 am and conclude at 3.00 pm at the Hervey Bay Boat Club wharf. Each cruise will have expert guides aboard providing a running commentary on the history and outstanding natural values of this heritage and biologically diverse waterway. Numbers for each cruise are strictly limited.

### Cost \$100

This includes morning tea and a sandwich lunch and a contribution to the Research Fund. Organizer of this trip is the Fraser Island Defenders Organisation that ran its first safari on Great Sandy Strait in the 1970s

**Bookings are essential** and can be made and confirmed by

**Emailing:** [cruises@fido.org.au](mailto:cruises@fido.org.au)



### Cruise dates

Tuesday 23<sup>rd</sup> January

Sunday 11<sup>th</sup> March

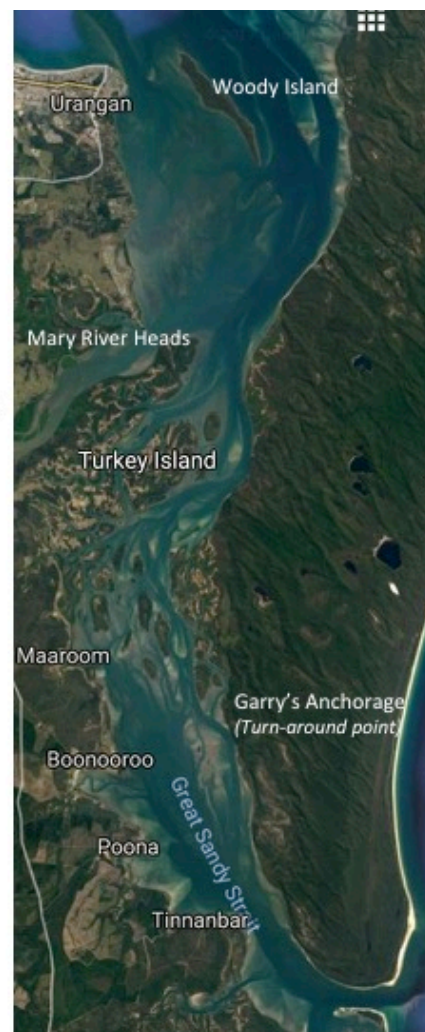
Tuesday 20<sup>th</sup> March



## How to help FIDO's campaigns

There are many ways that FIDO supporters can assist in some vital FIDO campaigns.

1. FIDO has three cruises planned for January and March before the amazing masses of trans-equatorial waders take off for Siberia. Every passenger on these wonderful cruises are contributing \$30 to the research fund to study potential impact on the water quality of this special Ramsar waterway. Helping recruit passengers helps to build our research fund.
2. The more funds we have to support the research to expose in detail the potential environmental impact the better. You can now make tax-deductible donations and/or encourage others to donate.
3. While FIDO's working bees in winter are more popular there is important work to be done combatting weeds at other times and there is one place available for Eurong 25<sup>th</sup> February to 3<sup>rd</sup> March and two places for working with the wonderful Peter Shooter in Happy Valley 11<sup>th</sup> to 17<sup>th</sup> February.



## A Collaboration to fund GSS research

On 12<sup>th</sup> December the Fraser Island Defenders Organisation signed a Memorandum of Understanding with two other groups with a great interest and stake in the Mary River catchment that includes Great Sandy Strait. Together with contributions from the Mary River Catchment Coordinating Committee (MRCCC) and the Greater Mary Association (GMA) we have created a fund starting at \$25,000 to fund research into the potential impacts of the discharge of Colton coal mine water on Great Sandy Strait.

**The Mary River Catchment Coordinating Committee:** The administrators of the Research Fund will be the Gympie based. Unlike FIDO and the GMA, MRCCC has its own premises and a very professional full-time staff. MRCCC initiated the unsuccessful request for a review of the EPBC approval for the Colton Mine. It was dismissed by Canberra because it was deemed to contain no new and compelling evidence. That is why the new collaboration is working to fund research to produce compelling new data and evidence that can't be so lightly fobbed off.

**The MARY CATCHMENT PUBLIC FUND** was established in 2005 to raise funds for actions which will help to improve the condition of the Mary River Catchment. To receive your receipt, please fill out the form below and return it to the MRCCC at the address provided, or send an email to [admin@mrccc.org.au](mailto:admin@mrccc.org.au) with details of your donation. Funds may be directly deposited as follows: **BSB: 645-646 Account No: 105536660** Account Name: Mary Catchment Public Fund when paying by bank transfer please include the reference: (donators name) + FIDO

# MARY RIVER



## C A T C H M E N T

### COORDINATING COMMITTEE

To manage the Research Fund, a Research Oversight Committee (ROC) was established by the three partners. The ROC will determine appropriate projects and consider what will give them 'the best bang for their bucks.' They will make allocations accordingly.

The ROC is also committed to the raising additional funds through donations and fundraising activities. FIDO's Great Sandy Strait Cruises are part of that program.

The ROC is aiming to promote STEM student and community engagement in environmental studies. There are insufficient resources to engage professional environmental scientists which is why the ROC is keen to encourage aspiring scientists to take up the challenge by being prepared to meet a variety of expenses to enable them to gather data and produce a report. The ROC is also keen to encourage as much participation from the Fraser and Sunshine Coasts as possible because Great Sandy Strait is one of the greatest natural treasures of the region and it is likely to be considered for World Heritage listing in 2019.

### The Mary River and Great Sandy Strait

Most people make the assumption that because the Mary River follows a generally northwards direction from its source in the Conondale Ranges up to Maryborough and because Mary River Heads are close to Hervey Bay, that the river continues to flow north and discharge into Hervey Bay. That is **WRONG**.

From ancient times the Woody Island Syncline blocked off the river's northwards flow. When sea levels were 120 metres lower than at present, that syncline caused the river to change its direction. Then the Mary River met the ocean off the edge of the continental shelf north east of Double Island Point. Great Sandy Strait is the ancestral bed of the Mary River. It is only in recent geological times that the sea-level has risen sufficiently to allow the river to discharge into Hervey Bay. However even now that only occurs in times of floods in the river.

In normal times the incoming tide funneling down from the north prevents the flow of the river into Hervey Bay and diverts the flow southwards along Great Sandy Strait. Here though, the discharge meets a tide flowing up from the south past Inskip Point. Where the tides meet there is a huge fallout of sediment that has created the mosaic of tidal mudflats and low mangrove islands. It is similar in many respects to a river delta except that it occurs away from the river's nominal mouth.

It is their lack of understanding of local geography that has caused the boffins working behind desks in Canberra to get the whole story and their understanding of the Great Sandy Strait Ramsar site so appallingly **WRONG**.



# Call for bid\$ 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 in serious and sustained damage to the ecology of the Great Sandy Strait resulting 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 complete by the end of 2018 it is anticipated that some projects may need to be carried out during the next deliver a

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:

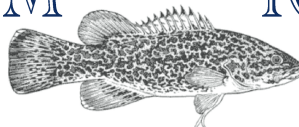
- Timing:** Projects need to be completed no later than 1<sup>st</sup> June 2019. Earlier is preferred.
- Capability:** The experience of individuals and collaborators to complete the projects submitted
- Availability of funds:** Projects can only be funded if the funds have the remaining resources to 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](mailto: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](mailto:admin@mrccc.org.au) or [john@fido.org.au](mailto:john@fido.org.au)

MARY RIVER



CATCHMENT  
COORDINATING COMMITTEE

