When groundcover is lost, top soil is removed by erosion and fragile subsoils are exposed to the elements, gullies form and can grow quickly with each rainfall event.

the

Once gullies are actively eroding they are hard to stop without physical intervention and improved grazing land management of the gully catchment. The aim of gully remediation in the Mary River catchment is to improve downstream water quality and reduce fine sediments flowing to Hervey Bay and the southern Great Barrier Reef.

Gully remediation work generally occurs in fragile grazing landscapes and requires an indepth knowledge of the catchment's history and land-use, good design principles and operators experienced in working with complex situations. Remediating gullies requires consultation with the landholder, meeting the design requirements and working closely with good earthworks operators, and most importantly adopting appropriate grazing strategies for long-term success, which can only be assessed following significant rain events.

In early 2022, between 600mm and 1 metre of rain fell in just over 24 hours on all gully sites where remediation works had taken place in the Western Mary catchment ie. Munna, Wide Bay, Widgee sub-catchments. When these same sites were evaluated earlier in 2023, this is what Soil Conservation specialist, John Day, had to say :

"Although minor erosion occurred at some sites, the vast majority of the remediation works withstood the onslaught of the elements, even though several sites were subjected to complete inundation during the record flood peaks in some of the Western Mary River sub-catchments in 2022. As flood waters recede there is added stress on gully rehabilitation structures due to the sucking action from the mass of water leaving the landscape."

SEPTEMBER 2023 • ISSUE #

Katy at the base of the gully at St Marys, situated on the lower Mary River.

All the gully remediation project sites performed well above expectations given the designs were prepared for a one in twenty year rainfall event. The floods and rainfall received were described in the media as one in one hundred years or larger.

The performance of the structures is testament to having conservative design specifications, good landholder involvement, adoption of improved grazing practices and a competent team project managing all of the works.

Using two well known and experienced local contractors to undertake the onground component of the works was also a significant factor in the overall success of the projects.

John noted, "The most important aspect of having the one team working on all of the projects in a short period of time was the continuous learning passed from one project to the next, which assisted in refining the construction process to a very efficient and effective routine."

STORY AND PHOTOS CONTINUE ON PAGE 15



the Coo DLine

History of our Codline magazine

The Mary River Cod Community Network was created after the release of the Mary River Cod Recovery plan. The objective of the Network was to spread the word about the cod and provide readers with information about protecting the cod and improving and conserving their habitat.

The first CodLine (called Cod Catch-up back then) was produced in 1998, at the time that the Recovery plan noted that there were as few as 800 cod left in the catchment. Anecdotal evidence in recent years suggests that the cod population has increased, possibly due to the release of many thousands of captive bred fingerlings, greater awareness of the species and 25+ years of instream and riparian habitat improvement by riparian land managers.

Each issue of CodLine features at least one article from a land manager who has made a conscious decision to fence off the creek from stock, remove woody weeds, install off stream watering points and revegetate with local native species. Multiply this by many hundreds of landholders throughout the catchment, and we may well say **'once an endangered species'** when talking about the cod!

Grab a cuppa...

Grab a cuppa, sit yourself down in a comfy chair, and check out the wide range of videos on the MRCCC's website. There's hours of viewing now available covering riparian rehabilitation, Waterwatch and catchment crawls, threatened species including our cod, turtles and lungfish, Mary Catchment history and our new River Processes video!

Look under the Information tab for Mary Catchment videos...

https://mrccc.org.au/videos/

30th celebration at AGM

The MRCCC will be celebrating 30 years of catchment rehabilitation actions at this year's AGM, which is being held in a natural bush setting surrounded by rainforest at the Triballink Activity Centre at Mapleton on Tuesday 24th October.

Contact the MRCCC for more information, or to RSVP.



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MRCCC Delegates

Interest Sector

Beef Biocontrol Grazing Lands Dairying Dept of Environment and Science Dept of Agriculture and Forestry Dept of Education Environment, Lower Mary Environment, Upper Mary Fishing Forestry General Community, Lower General Community, Middle General Community, Upper General Community, Western Gympie Field Naturalists Landcare, Lower Mary Landcare, Upper Mary Land for Wildlife Fraser Coast Council Gympie Regional Council Sunshine Coast Council Noosa Shire Council Seqwater Project Participant Project Participant Small Farms Special Member Special Member Special Member Life Member Life Member Horticulture - Tree Crops Waterwatch Waterwatch

Name

David Higgins Ross Smith Graeme Elphinstone Elke Watson Maria Zann Jason Keating Greg Hardwick David Arthur Narelle McCarthy Charlie Ladd Ernie Rider John Williams Ray Zerner John & Mary King Peter & Bevly Hughes Berry Doak Carol Neilsen Phil Moran Nonie Metzler Cr James Hansen Cr Jess Milne Denise Lindon Cr Tom Wegener Julian Omara Michelle Wilson Bob Hood Steve Burgess Nai Nai Bird Glenda Pickersgill Ian Mackay Margaret Thompson Iim Buchanan Brice Kaddatz Craig & Leslie Hanson Garth Jacobson

Story authors

Alana Ebert, Mackenzi Finger, Deb Seal, Ian Mackay, Bec Watson and Brad Wedlock



Butchulla Sand Art, Maryborough 2020

Cod only knows

What happened to threatened aquatic species in the Mary River catchment after the record flooding in 2022? Are there surviving populations of the endangered Mary River cod, the endangered Mary River turtle, the vulnerable lungfish and Giant barred frog, and the critically endangered White throated snapping turtle? Can they hold fast in their usual habitat despite floodwaters spreading out across the land? Or do they get washed away in the raging torrent? Since the floods, we've heard stories of cod near the barrage downstream of Tiaro, and sheltering in undercuts where they can withstand the floodwaters but have no data to confirm either.

And what was the fate of pest species like Tilapia, and introduced species like the Sooty grunter? Did Mother Nature do everyone a favour and wash them away too?

We know cod need cool shaded pools with submerged logs and instream structure for breeding habitat, and turtles use sandy nesting banks to lay their eggs, whilst lungfish rely on the riffles and beds of native macrophytes to feed and breed. Did these aquatic habitats survive the floods throughout the catchment?



It's a question that many would like an answer to, particularly the MRCCC, which has spent 25 years addressing habitat degradation and improving riparian condition for the endangered species of the catchment.

Readers of last year's CodLine will know that most of the MRCCC's rehabilitation sites along the river withstood the floodwaters, stopping significant erosion and loss of riparian vegetation. Sites where no rehabilitation was undertaken and/or riparian vegetation cleared did not fare so well. At many locations along the river, massive erosion muddled the water with excessive amounts of sediment, impacting on the habitat of the Mary's unique threatened aquatic species, potentially destroying their safe havens in the river system.

On a positive note, over the next two years, work is planned to survey sites in the river and tributaries to determine the presence of aquatic fauna and monitor and protect turtle nesting sites. The creation of artificial refuges for cod to improve nesting and recruitment is also planned, as is replanting macrophyte beds for lungfish to accelerate nesting and recruitment. The MRCCC will also continue to work with landholders with the aim of improving flood resilience through the rehabilitation of riparian habitat.

In addition, thousands more captive bred Mary River cod fingerlings will be released into waterways around the catchment for conservation stocking later this year, potentially reinstating juvenile cod populations.

The current closed season for fishing in Mary catchment waterways south of Gympie is also providing respite for Mary River cod during their breeding season until 31st October.

By this time next year, it's likely there will be scientific data available to answer some of the questions we have been seeking answers to for a very long time. Watch this space!!

A Paddle with a Purpose

A ten-day canoe trip along almost 200 kilometres of the Mary recently incorporated a mix of science, monitoring and indigenous connection. Organised by Tom Espinoza of the Burnett Mary Regional Group in conjunction with MRCCC, Griffith University's Australian Rivers Institute and Jinibara, Kabi Kabi and Butchulla peoples, the trip had multiple aims.

The first was to look at both flood damage and regeneration, to look at habitat for threatened species like the lungfish, two species of turtles and the Mary River cod, map invasive land weeds like Cat's Claw and Madeira vine, record water weeds like salvinia and hyacinth and pest fish like Tilapia and Sooty Grunter. The traditional owners contributed cultural knowledge about the River throughout the survey.

And all were learning from each other, about each other, but especially about the river and its inhabitants.

MRCCC were building on a baseline of riparian rainforest vegetation condition, environmental weeds and riverbank stability that had been conducted 20 years ago following the destructive 1999 floods. The recent appraisal of the flood damage to the river channel by canoe offered a systematic approach to assessing the flood damage offered a long-term comparison of the condition of the river based from the information collected after the 1999 floods. This information will assist with prioritising future riverbank stabilisation activities, according to severity of eroding riverbanks and proximity to threatened aquatic species habitat.

In the 1990s the Mary River was described as one of the most degraded rivers on the east coast of Australia owing to the extent of riverbank erosion that was evident.

Since then, riverbank erosion has been one of the key issues of the MRCCC with focused awareness, capacity building and onground action. Information from this trip enables a comparison of riverbank erosion sites from the 1990s through to 2023, and will complement assessments undertaken during 2022 following each flood.

In the late 1990s a whole of river assessment of the environmental weed condition in the riparian rainforest on the Mary River was conducted because weeds were identified as a threat to the ongoing survival of the endangered Mary River cod.

Mary River cod require cool, shaded water to survive and breed. Environmental weeds such as the invasive cats claw vine infests riparian rainforest and destroys the vegetation structure, resulting in sunlight penetrating the water surface, thus warming the water temperature and creating habitat unsuitable for the Mary River cod. Unfortunately, after floods, weeds such as cats claw vine take advantage of flood damaged vegetation and colonise these areas faster than native trees, shrubs and vines. Weed control following floods is imperative to prevent a small infestation taking advantage – a system of early detection, rapid response is required for weed control following floods.

CONTINUED...





Data gathered on the canoe trip enables a comparison between the 1990s and today, to determine where new infestations occur and to prioritise weed control effort to minimise spread of weeds following the 2022 floods.

The Mary's headwaters are in Jinibara country in the Blackall and Conondale Ranges. It then flows through traditional Kabi territory until it reaches Butchulla country around Maryborough and Great Sandy Strait in the lee of K'gari.

The whole-hearted involvement of the Jinibara, Kabi and Butchulla members was so important to the success of the trip. Says Tom Espinoza, "They were always connected in the past, and what we're trying to do now is not only to reconnect them, but also to reconnect us."

Butchulla man Conway Burns summed it up. "We've seen some sites where it has really opened our eyes... we've walked in our old people's footsteps."

The trip was featured on a recent 7.30 Report with presenter and camera crew joining the trip downstream of Gympie. https://www.abc.net.au/news/2023-04-19/ bottom-breathing-turtles-lungfish-maryriver-queensland/102182496

Photo at left shows a young Mary River turtle found in shallow water at the edge of a sandbar.

TurtleSAT is a Citizen Science mapping tool produced by the 1 Million Turtles Community Conservation program.

TurtleSAT allows communities to map the location of freshwater turtles in waterways and wetlands across the country. Australia's unique freshwater turtles are in crisis - their numbers are declining and your help is needed to record where you see turtles in your local area.

Go to https://turtlesat.org.au/turtlesat/ Download App and create user name. Start using it immediately.

TurtleSat – real time data visualisations





Upper Mary Rivercare

Upper Mary Rivercare is a community-driven water quality improvement program - a joint Seqwater and MRCCC initative. The program was co-designed with local landholders and reflects the needs and interests of landholders, while also providing positive water quality outcomes for the Mary River and protecting the quality of Kenilworth's drinking water supply.

In 2023 our Upper Mary Rivercare program is streaming ahead! We've been busily workshopping, signprinting and property planning, and our new program is beginning to take shape!

This year the program has taken off with a number of new participants signed up, and two Gateway workshops hosted in Kenilworth in October 2022 and June 2023. At the workshops, Upper Mary landholders were introduced to the Rivercare program and had the opportunity to connect with each other and learn about local water quality, water testing, waterway and ecosystem health and actions that can impact on water quality. MRCCC, Seqwater and Landholders then gathered at Charles Street Park on the Mary River at Kenilworth to view and learn about the Kenilworth water offtake and catch up over lunch. Upper Mary Rivercarers

also attended workshops on the topics of regenerative grazing land management, farm fencing, tributar forage budgeting and riverbank remediation.

MRCCC staff have visited three Upper Mary properties this year to undertake Best Land Management Practice (BMP) assessments with landholders. The results are used to develop plans, which outline future actions and projects that Upper Mary landholders can implement to improve land management, farm productivity and water quality. The final plans will incorporate multi-year funding commitments from Seqwater towards priority projects.

Landholders will also receive laminated property maps with project designs and land features and an Upper Mary Rivercare gate sign for their property.

The Upper Mary Rivercare program is currently open to landholders whose properties border the Mary River or



tributaries within 25km upstream (south) of the Kenilworth town water offtake. If eligible, participating landholders can receive planning and multi-year funding support to implement on-ground projects focusing on improving riparian zone management and Kenilworth's water quality. Participating landholders can also attend workshops and field days, connect with other landholders in their area and share their insights and experiences with other landholders. MRCCC will deliver more gateway workshops next year, when we will expand the program to the Coles Creek-Tuchekoi-Bollier area, encompassing properties up to 25km upstream

of Seqwater's Goomong water offtake.

Landholders can register their interest for the program by contacting the MRCCC.



Long-term frog monitoring in the Mary

There is no excitement quite like finding something that was lost! Two frog outings along Obi Obi Creek in Maleny in February were cause to exclaim out loud and get some snaps of a waterway star; the Giant barred frog (*Mixophyes iteratus*). This stream dependant frog has recently been downgraded from Endangered to Vulnerable under state and federal legislation, in response to updated distribution and population knowledge. The major threats for this species have been losses due to the amphibian Chytrid fungus, and habitat loss.

Aerial photography from 1958 shows widespread vegetation loss from the riparian zone of Obi Obi Creek all the way from the headwaters to Gardiner's Falls. Any riparian-loving beast would be comprehensively displaced and that seemed to be the situation for many decades. No reports of the Giant barred frogs were noted until one fine evening in 2012 when the MRCCC and Barung Landcare conducted a frog survey at the Maleny Precinct site before works began there. There we found three individuals and the excitement grew as another was observed later on Walkers Creek and downstream towards Lake Baroon. However, numerous surveys along the other sections of Obi Obi Creek from the Book Farm to Kenilworth, over two decades could not reveal other populations. 10 years ago a survey along the Maleny Boardwalk revealed nothing.

However, over the past 25 years there has been a strong revegetation effort along the waterways of the plateau. In town the Boardwalk planting started in 1993 by Barung Landcare, and Maleny State School planted a corner in the early 2000's. The extensive Maleny Precinct revegetation began in 2014.

The MRCCC's annual Find a Frog in February event encourages people to survey waterways at night and in 2020 the first sightings of Giant barred frogs started to come in from locals. This year a large group of workshop attendees walked the Boardwalk and

Giant barred frog

we held an outing for the students and teachers of Maleny State School on their grounds. At the Boardwalk we encountered 12 individuals and seven at the school, with one male calling across the creek at the Precinct. To everyone's delight males, females and juveniles were all seen. This is a majestic species; especially awe-inspiring when spotted by torch-light under the dark canopy of the night. Key to food webs and energy transfer between terrestrial and aquatic ecosystems, its presence is vital.

The sightings confirm that, given time, revegetated sites do bring exceptional ecological benefit through supporting processes and providing complex habitat. We calculate that, around Maleny, 20 years of growth was needed to bring this species back to living and breeding at the site. The trees are now providing a suitable microclimate (moist and cool), ground cover (leaf-litter and refuge 'furniture') and stable banks, in-stream complexity and deep pools for breeding. It is heartening to know that environmental projects taken on by all landholders, groups and agencies are making a positive difference. It takes knowledge, resources, dedication and patience.



Find a Frog in February is grateful for the continued support provided by the four local councils of the program area; Sunshine Coast Council, Noosa Council, Gympie Regional Council and Fraser Coast Regional Council.

New Mary Basin Water Plan released



Back in February, the Minister for Regional Development, Manufacturing and Water publicly released the draft replacement Mary Basin Water Plan and supporting documents.

The Plan will replace the 2006 Mary Basin Water Plan and seeks to address current and emerging issues in the water plan area. The area covered is wider than just the Mary River catchment and includes the Burrum catchment to the north and the coastal catchments of the Noosa, Maroochy and Mooloolah Rivers.

The previous plan was highly contentious in that, at the eleventh hour, a Strategic Reserve of 150 000 mega litres (ML), more than 3 Borumba Dams full, was identified as being available from the Mary and, within a short space of time, came the announcement of Traveston Crossing Dam with its plans to take up that amount of water and transfer it out of the catchment for southeast Queensland urban water supply.

And while the spirited three and half year campaign sunk the notion of Traveston Dam, that enormous Strategic Reserve had lived on, sitting on the books as a statement of fact, albeit highly contested.

One of the MRCCC's major hopes was that the new plan would revisit this figure and it has.

In talking of a water plan, the first step would be to acknowledge that water in a catchment is a shared resource. It's shared by what is collectively "the environment", the myriad creatures and habitats that have relied on flows in both rivers and creeks for millennia, plus a whole heap of more recent users. Water used in the various agricultural pursuits in the basin and of course town water supplies for Maleny, Gympie, Tiaro and Maryborough not to mention the large volumes transferred to coastal catchments from Baroon Pocket Dam (on Obi Obi Creek a major Mary tributary, or from Six Mile Creek dam (aka Lake Macdonald) or the Goomong offtake. This water has quite often been moved even further out of the catchment to the northern parts of Brisbane, via the Northern Pipeline Interconnector (NPI) Sharing by all these is critical, not to mention the importance of river flows into the estuary for its health and that of Great Sandy Strait Ramsar wetland and the lower part of the Great Barrier Reef. In 2007, the International River Symposium put this succinctly in the Brisbane Declaration that "Water flowing to the sea is not wasted. Fresh water that flows into the ocean nourishes estuaries, which provide abundant food supplies, buffer infrastructure against storms and tidal surges, and dilute and evacuate pollutants".

The plan area contains six water supply schemes supplying water for irrigation and urban water supply needs—these schemes are the Baroon Pocket, Cedar Pocket, Lower Mary River, Mary Valley, Teddington Weir, and Wide Bay water supply schemes.

There are a number of features of the new draft Plan that are major improvements on its predecessor.

Firstly, the 150 000ML strategic reserve has been more than halved and almost all of it is for use in the Mary River catchment.

During the life of the previous plan, the Department carried out extensive ecological research to better understand flow requirements (and the timing of these) in relation to key threatened species, and in the process identified several "key reaches". As a result, there is much better understanding of environmental flow requirements and the commitment to monitor flows in them.

Anyone observing the Mary and tributaries in the 17 years since the previous plan was enacted, couldn't help but notice the steady decline in river and stream flows. The flows modelled in preparing this Plan included not only the data from those intervening years but also factored in the anticipated impacts of climate change into the future.

One particularly anachronistic feature of the 2006 water plan has been addressed.

Previously water users were given an allocation based on the area of land they were irrigating. It seems scarcely credible but there was no effort made to find the actual amount of water used.

The new plan (in line with other water plans across the state) has volumetric allocations and the need to install and read water meters.

Small users such as "stock and domestic" don't require meters but larger users do. More detail can be found in the draft plan.

Another feature of the plan was the consultation with traditional custodians all of whom expressed a strong connection to river and creeks and the need for these to be healthy in both water quality and adequate environmental flows particularly at times of stress or times critical in the breeding cycle. As a result, there is an allocation to each of the Traditional Custodian groups, Jinabara, Kabi Kabi and Butchulla, one of the uses of which could be for environmental releases as the need is determined.

A major anxiety relating to the plan is just how it addresses the proposed Borumba Pumped Hydro Electricity scheme, the key water aspects of which would be the construction of a new, much larger Borumba Dam, a new upper dam and the "quarantining" of a certain quantity of water to flow, again and again, between the two.

The fact that this water is "reused" many times makes it very different to other one-off uses. The plan addresses this by calling it a "nonconsumptive take", however there need to be rules in place as to priorities when the first fill is taking place. The rule, we are assured, is that the Water Plan takes precedence, fulfilling, as best it can, its identified allocations, not the other way around.

This is welcome news.

One thing the MRCCC would have liked to see as part of the new Plan is the establishment of Water Advisory Groups, and while these aren't legislated they are certainly encouraged, to foster cooperation between geographically – linked water users. Those who are part of the small number of Water Advisory Groups still in existence had the benefit of special briefings on the Water Plan by officers of the department.

The department has published a number of documents to provide enlightenment, a good start being the Statement of Intent at https://www.rdmw.qld.gov.au/__data/assets/pdf_file/0009/1668141/statement-intent-draft-mary-plan.pdf

The document was a draft for comment with submissions due back in May. The final replacement Mary Basin water plan is planned for delivery prior to the expiry of the present plan in May 2024.





Cool Burning Workshops



Call it what you will, but the wisdom, experience and learnings of several indigenous fire practitioners were on display recently in a series of excellent practical workshops in the Mary valley. Organised by the Burnett Mary Regional Group in conjunction with MRCCC, the workshops were a sharing of knowledge and experience of Kabi Kabi and Butchulla peoples. Leader for the workshop was Kabi Kabi man Kerry Jones, ably assisted by experienced Butchulla fire practitioner Conway Burns.

The first two workshops were held in Moy Pocket, on Kabi Kabi territory. They involved areas of overgrown, matted introduced pasture grasses and attracted a number of participants, both local landholders and rural fire brigade reps. After an explanation of the philosophy of cool burning, the fire was lit at just one ignition point to burn into the slight breeze. The spread of the fire was remarkably gradual and relaxed. Feeling the soil just after the fire had passed, all were amazed how it had been scarcely warmed. Both fires were surrounded by firebreaks and the two small fire units in attendance had no need to dampen down any areas.

Workshops on the following two days on a larger property nearer to Conondale presented a very different landscape. The fire here was on hillside country, both forested and grassland and a considerably larger area than in Moy Pocket. The fire was lit at the top of the hill, initially at just the one point again, and followed as it meandered down the slope. Obvious once again was the patient approach of following the fire, with its slow advance allowing wildlife to move up trees or away from the area.

Both workshops were enormously informative and there have been many requests for more in the future.

Exploring STEM in the Mary Riv **Empowering Minds, Nurturing Scientific Curiosity**

The Mary River Catchment Coordinating Committee (MRCCC) kicked off National Science Week with a well-attended forum at the Mimburi Outdoor Education Centre, Belli Park on Saturday 12th August.

The Exploring STEM in the Mary River forum featured Dr Margaret Cook, Research Fellow at the Australian Rivers Institute, Environmental Historian and author of "The River with a City Problem", which examines south east Queensland's history of flooding. The forum also included presentations by experts and practitioners in their respective fields, who provided an insight into some of the Science, Technology, Engineering and Mathematics (STEM) involved in land and water management, and highlighted some of the unique threatened species and ecosystems in the Mary River catchment.

The forum was targeted at everyone in the community who has an interest in exploring the role that STEM plays behind the scenes in protecting our planet and its resources. Those attending were able to hear about some of the latest resource management techniques including drone surveying for koalas, eDNA monitoring, the tiny creatures at the bottom of the food chain and the adventures of water in our landscape.

The Exploring STEM in the Mary River forum was supported by Inspiring Australia through the University of Queensland.

The MRCCC thanks Kabi Kabi Elder, Auntie Bev Hand (pictured at right), Dr Margaret Cook and Professor Mark Kennard from the Australian Rivers Institute, Griffith University, Rachel Lyons from the Noosa & District Landcare group and Wildcare Australia, Tom Espinoza from the Burnett Mary Regional Group, John Day from Emu Ridge Consulting, Science educators Randy Orwin and Steve Burgess, Dr Brian Stockwell and

PROBLEM

MARGARET COOK

11

the Noosa & District State High School.

Check your local library for Margaret Cook's books.



Borumba Pumped Hydro Update



On 13 June 2023, the Queensland Government announced a further \$6 billion in funding for the Borumba Pumped Hydro project. The total project cost is estimated to be \$14.2 billion. This funding will allow Queensland Hydro to progress with exploratory works, the environmental impact assessment and detailed engineering.

The existing lower reservoir (Lake Borumba) will be expanded with a new dam wall downstream of the existing one, drowning out the existing dam and creating a reservoir nearly 5 times the present volume.

A second reservoir will be constructed at a higher altitude with a series of saddle dams. to form a new turkey's nest upper reservoir, 1.8 times the volume of the existing Borumba reservoir,

An underground powerhouse will link the two reservoirs together. When electricity is required, water will be released from the upper reservoir through the underground turbines to the lower reservoir.

Connecting the power station to the electricity grid involves two new power line connector projects currently being undertaken by PowerLink as a separate project.

Earlier in the year Queensland Hydro submitted a Controlled Action referral to the federal government under the Environment Protection and Biodiversity Conservation Act (EPBC Act) in relation to exploratory works. In its submission, Queensland Hydro outlined the scope of the exploratory works and expressed the view that it would be a controlled action. MRCCC agreed with this position and the action was declared a Controlled Action to be assessed under Preliminary Documentation process.

On the 11th August the Queensland Coordinator General issued a works regulation instructing Queensland Hydro

to start constructing the accommodation camps for workers engaged in the exploratory works. This removes the need for those camps to go through the usual Local and State planning processes for developments.

The temporary workers accommodation camps now underway consist of two live-in camps, one accessed by Bella Creek Road on Kingaham Ck at the foot of Mt Buggery, and one accessed via Jimna and Walkers Top Rd. These are each being built to accommodate between 84 and 168 persons living on-site 24 hours a day while the continuous drilling and blasting works required to excavate the main access tunnel to the site of the underground generator and transformer halls take place. This massive tunnel building project is the main component of the exploratory works.

A Courier Mail article described this exploratory tunnel as the size of a three lane road and the main generator cavern as 'roughly the size of the Gabba' and the adjoining transformer room 'almost as big'.

By any assessment, it's a huge project.

Queensland Hydro has set up a stakeholder reference group which meets regularly not only to receive updates but also to air concerns about the project. It is a very different process to what was rolled out for Traveston Crossing Dam.

The exploratory works are planned to be carried out over the next two years and will provide information for the EIS for the final project by late 2025. There are a number of points along the way which allow for public consultation.

Pending successful planning and environmental approvals, the project is targeting first power in 2030.

For more information, go to https://www.epw.qld.gov.au/ about/initiatives/borumba-dam-pumped-hydro



When a tree as significant as '*Big Bob*' (Queensland's tallest tree, near the head of the catchment) isn't mentioned in the National Tree Register, it seemed time to start our own.

Launched recently, the Mary Catchment Significant Tree Register seeks your input to recognise and record significant trees in the catchment.

Trees could be significant on account of their size (like '*Big Bob* 'in the Conondales), or their age (like Linsday Titmarsh's '*Magna Carta Tree*'), their rarity, their place in history or something else.

To nominate a tree, we need a picture, a location (GPS if possible), the type of tree, other features like estimated height and girth and reason for it being significant.

Download and fill out the Significant Tree record sheet and send to admin@mrccc.org.au or inclusion in the register.

The Magna Carta tree

A cattle farmer on the Susan River in the Lower Mary decided to have a mangrove tree on his property carbon dated and the study yielded some very surprising results. The tree came back as being over 700 years old, easily making it the oldest mangrove in Australia and, most likely, the world.

The Magna Carta tree at Tandora in the lower Mary, is a white mangrove near the river mouth carbon-dated at over 800 years old

Lindsay Titmarsh, whose family has worked with cattle on a 5,000-hectare property since 1907, had been aware of the tree for over 20 years but never thought much of it until recently.

"It's only in the last 20 years I have looked at them from a different angle and seen the beauty of them.

"When I saw this tree I knew it was old, it was the oldest one I have ever seen," Mr Titmarsh told ABC News.

He decided to send a sample of the tree to the New Zealand University of Waikato Radiocarbon Dating Library, not expecting to find the tree came to be during the early 13th century. This would put it around the time of the Magna Carta, hence the decision to name the mangrove the Magna Carta tree.

The common belief prior to this discovery was that mangroves generally live for between 100 and 200 years. The trees are a vital part of Australia's coastal ecosystems, playing crucial roles as nurseries for marine wildlife, a filter system for land run-off and buffers from storm surges and erosion.



Over a number of years MRCCC has engaged with many landholders in Reef Trust projects in grazing land managementas wellas streambank

and gully stabilisation.

Image provided by Scott Wilkinson

Representatives from catchment groups in Great Barrier Reef catchments met with CSIRO and state government scientists and modellers and others, in Gympie recently, for the Reef Trust Erosion Control Forum hosted by the Mary River Catchment Coordinating Committee.

The first day at the Gympie Show Pavilion involved presentations

and workshops, while the second day involved field visits to a number of project sites upstream of Gympie. An extra two days were added to visit a number of gully stabilisation sites downstream of Gympie.

A flooded grazing property (situated on the right of the photo below), was the first of three sites visited during the forum.



Step by step how to fix a gul









GULLY STORY CONTINUED FROM FRONT COVER

John Day went on to say, "The project was very intensive and has provided the team at MRCCC with a very sound basis for confidence in the gully erosion design and construction recommendations provided to landholders in the district."

A reference book describing the majority of the different erosion control designs and techniques used during the course of the project is now available to purchase from the MRCCC Resource Centre for \$15, including postage. Call or email MRCCC to order a copy.



Mary River Month

World Rivers Day on Sunday the 24th of September heralds the start of Mary River Month...

...a celebration of our marvellous Mary catchment involving a jam-packed schedule of events right through to Saturday the 11th of November.

On September 24th, make a BIG JUMP into the river to not only celebrate the Mary, but all waterways all over the globe. World Rivers Day highlights the importance of our river systems and aims to encourage stewardship through public awareness. So grab a towel, your friends and family and head down to make a splash for our waterways! Post a snap of your BIG JUMP to social media and be sure to use hashtags #marybigjump and #worldriversday2023.

It's time to send in your snaps for the ninth annual Spring in the Mary Photo Competition, opening on Monday the 25th of September, brought to you by Murray Views Gympie, the Burnett Mary Regional Group, Noosa Landcare, the Greater Mary Association and HQPlantations. Categories include Open, Junior, Rural, Wildlife, River and Creeks, People's Choice and Coastal and Estuary. A maximum of three images per person can be sent to springinthemary@mrccc. org.au to arrive no later than Wednesday the 1st of November. Winners will be announced on Saturday the 11th of November.

Led by Waterwatch Coordinator, Keira McGrath, the MRCCC crew will split into two teams and set off on the annual Catchment Crawl on the Wednesday 4th and Thursday 5th of October. The two-day expedition consists of water quality testing at 36 sites throughout the Mary catchment, commencing at the headwaters in Conondale and working downstream before a picturesque finish at River Heads in Hervey Bay on day two. If you are interested in coming along to chat to the team about their findings, contact the MRCCC for more details and to register your interest, or keep up to date with Team Mary and Team Tributaries via our Facebook page.

Take part in Birdlife Australia's Aussie Backyard Bird Count from Monday the 16th through to Sunday the 22nd of October. Spend 20 minutes in your favourite outdoor space and send in your observations of our feathery friends! Register via: www.aussiebirdcount.org.au



'White throated snapping turtle hatchling' - Ben Revell 'The Sound of Spring Rain, Graceful tree frog' - Ben Revell 'Cattle egret with chicks' - Julie Hempsall (all from 2022)

The MRCCC Annual General Meeting will take place at TribalLink Cultural Activity Centre in Mapleton on Tuesday the 24th of October. To RSVP, contact the MRCCC Resource Centre.

Library Talk

Join Ian Mackay, MRCCC Chairman to learn more of our river, which, to quote Tim Flannery, "*it's not the biggest, it's not the longest, but I reckon it's one of the most important rivers in Australia.*" Catch Ian's talk, *'There's Something about Mary'* at Gympie Regional Library on Friday the 27th of October at 10am.

For more Mary River Month events, head to



mrccc.org.au/mary-river-month or contact the MRCCC!

To include an activity in the MRCCC's Mary River Month calendar email:

admin@mrccc.org.au or call 07 5482 4766