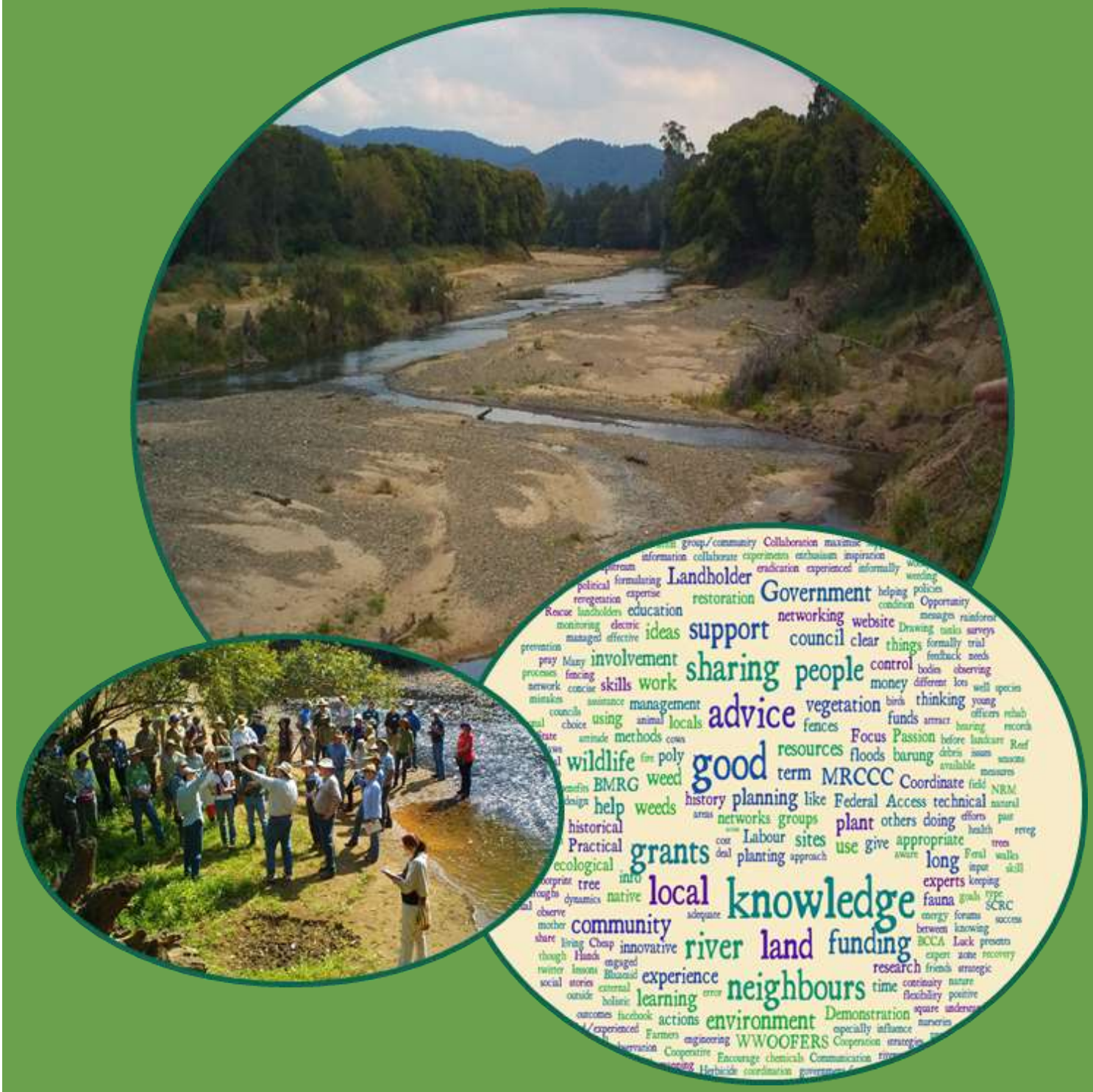
MARY RIVER CATCHMENT COORDINATING COMMITTEE

Annual Report 2013



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The MRCCC gratefully acknowledges the support of the Federal Department of Environment, the Queensland Department of Transport and Main Roads, the Queensland Department of Environment and Heritage, the Burnett Mary Regional Group, Sunshine Coast Council, Gympie Regional Council, Fraser Coast Regional Council and landholders throughout the Mary Catchment

DONATIONS TO THE MARY CATCHMENT PUBLIC FUND ARE TAX DEDUCTIBLE

Front cover images: The Mary River at Cambroon. Participants on the "Learning to Work with Rivers" bus trip. Images courtesy of Peter McAdam

Contents

MRCCC Staff 2012-2013

Brad Wedlock	Operations Manager
Eva Ford	Catchment Officer Threatened Species
Dale Watson	Catchment Officer to June 2013
Steve Burgess	Catchment Officer
Dr Tanzi Smith	Catchment Officer
Peter McAdam	Biodiversity Field Officer
Jenny Whyte	Waterwatch Coordinator
Chris Rosin	Catchment Officer
Jono Hooper	Project Support and Web Design
Dale Ricketts	Casual Administration and Events Assistant
Debbie Seal	Administration Manager
Kelvin Neilsen	Project and Office Support (Mutual Obligation)
Ruth Hutchison	Volunteer Project Support

MRCCC Delegates 2012-2013

Interest Sector	Name	Title
Beef/Grazing	Vacant	
Dairying	Rob Priebe	Deputy Chair
DEHP	Renae Cabrie	Delegate
QDAFF	Graeme Elphinstone	Delegate
Education	Sue Gibson	Delegate
Environment	Emma-Kate Currie	Delegate
Fishing	Chris Mangold	Delegate
Forestry	Ernie Rider	Delegate
General Community Lower	Ross Smith	Delegate
General Community Middle	Ray Zerner	Delegate
General Community Upper	Dave Sands	Delegate
General Community Western	Rosemary Burnett	Delegate
Horticulture	Barry Bewick	Delegate
Irrigation -	Vacant	
Landcare, Lower Mary	Carol Neilson	Delegate
Landcare, Upper Mary	Phil Moran	Delegate
Landholder	Elke Watson	Treasurer
Landholder	Helen Lofthouse	Delegate
Life Member	Margaret Thompson	Secretary
Life Member	Jim Buchanan	Delegate
Fraser Coast Council	Cr James Hanson	Delegate
Gympie Regional Council	Cr Wayne Sachs	Delegate
Sunshine Coast Council	Ben McMullen	Delegate
Seqwater	Tim Odgers	Delegate
Special Member	Nai Nai Bird	Delegate
Special Member	Glenda Pickersgill	Delegate
Sugar	Chris Coutts-Smith	Delegate
Waterwatch	Ian Mackay	Chairman

Chairman's Report 2013

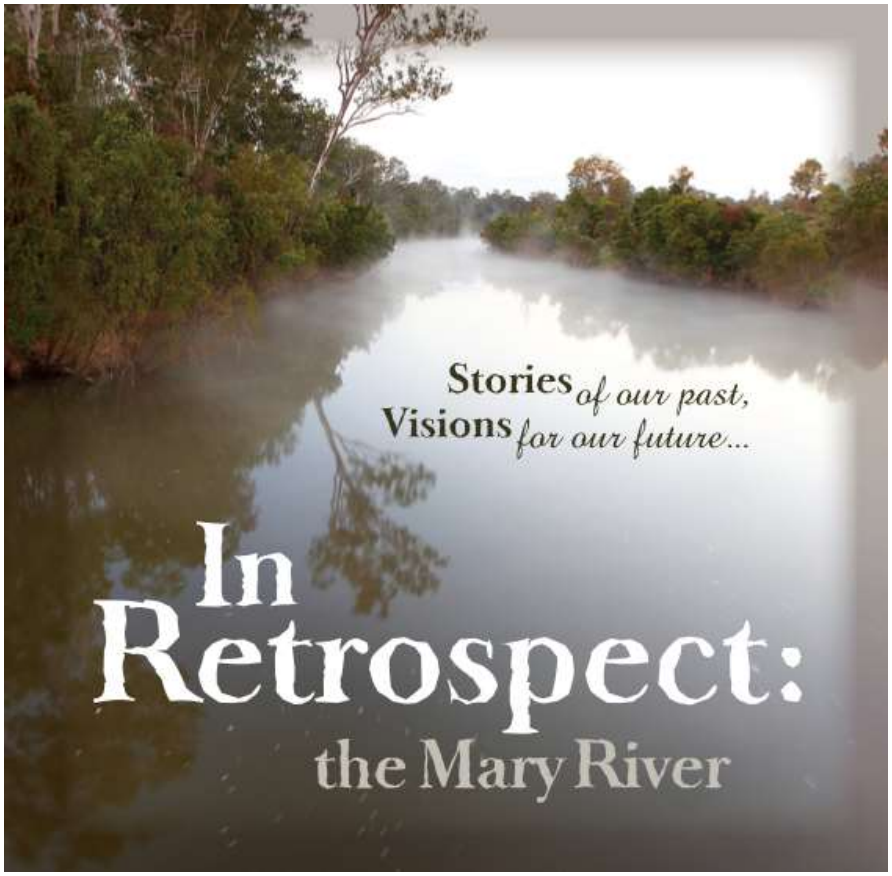
It was with some trepidation at the last AGM that I took the baton as Chair of MRCCC from Phil Moran. In the twelve months since I have often had cause to reflect on what a wonderful organisation this is, at so many levels. Our Delegates bring with them a wide range of backgrounds and interests, but always work together in a congenial and collaborative manner, giving us all the benefit of their wide experience. Our staff are energetic and dedicated and we so value their long term commitment to the MRCCC and to ecological care in the Mary River Catchment.

At another level are our many wonderful "river carers", the more formal "waterwatchers" and a host of others who attend workshops, field days and info stalls, keen to learn about their river and creeks. Others too like the observant Ian Harling of Imbil who brought to our notice many thousands of tyres dumped in a gully and Yabba Creek near Imbil or the upper Mary landholders who located the source of persistent turbidity in the very headwaters of the Mary.

Sadly, the MRCCC farewelled two stalwarts of the catchment with the passing of Peter Oliver and Percy Bishop this year. Both were giants in their respective fields and much respected by the community of the Mary Catchment and beyond.

For much of the last part of 2012, we were in the grip of drought, the only reasonable rain coinciding with the Mary River Festival in Kandanga. More was to come closer to year's end and again in the New Year when ex Tropical Cyclone Oswald took a leisurely perambulation down the Great Divide deluging Queensland and extending well into New South Wales. Sasha Ambrose made national news when she picked up a sizeable lungfish swimming in the car park behind Mary Street whilst the Mary demonstrated the expansiveness of its flood plain with particularly heavy falls in Wide Bay Creek and Munna Creek. Many landholders experienced major damage to fencing and riparian areas. In some areas the devastation was so great that months later landholders are still cleaning up and counting the cost, both economically and spiritually.

After the floods, MRCCC staff and helpers kayaked sections of the upper Mary, not only assessing flood damage but also noting the many areas of resilience, in addition to logging the locations of riffles and nesting banks as well as the extent of the spread of Cat's Claw and Madeira Vine.



In June we held the Festival of Water at Lake Macdonald on Six Mile Creek and again managed to attract the rain, though it certainly didn't deter participants. Education is important for MRCCC and days like the Festival of Water and the Mary River Festival, along with some very successful workshops play a big role. This year, thanks to funding from Landcare Australia's Be Natural grants program, Dr Tanzi Smith and Glenbo Craig produced the "Something about Mary" booklet, an excellent and informative publication. This was followed by the new Mary River brochure which was produced by Tanzi and Cooran designer Liz Capelin, with funding from the Federal Government's Community Action Grants program.

Tanzi also arranged a number of workshops to gather oral histories of the catchment.

These Mary River stories provided the content for the soon to be released "In Retrospect" film produced by local film maker Luke Barrowcliffe *(front cover image above)*. Popular too were the river workshops, a series of three, which culminated in a very successful bus trip in late August visiting a number of river rehabilitation sites in the upper Mary.

Dr Tanzi Smith with the "Something About Mary" publication

I've already mentioned that our staff, our long-serving, and very hard-working staff are probably our greatest asset. Brad our Operations Manager ran the Reef Rescue program as well as coordinating activities for the Biodiversity Fund project. Apart from her frog work Eva liaises closely with Sunshine Coast Council around their landholder Environment Grants Program.

We were successful this year in receiving funding from the Queensland Government's Everybody's Environment Grants Program to revitalise the waterwatch networks. Steve has been busily analysing data and preparing reports and is partway through delivering workshops to each of the waterwatch networks and other interested landholders and individuals. Jenny quietly slips in and ensures that all kits are calibrated and accurate and calmly handles the logistics that keep all the networks flowing smoothly.

Deb is the calm voice behind the phone and the smooth running of the office. Dale Watson delivered a major midyear hiccup when he had the temerity to leave MRCCC for a position as Waterways Extension Officer with Redland Council. Dale had been an invaluable member of the MRCCC team for ten years and had been engaged on the Main Roads monitoring project. The vacancy drew some excellent applicants, with Chris Rosin, who'd been working near Barcaldine, coming on board as Dale's replacement and we welcome him into the family.

The Mary River Threatened Species Recovery Plan inches closer to completion. It's been a collaboration between Dr Tanzi Smith at this end, and the federal Environment Department. Tanzi is to be heartily commended for the work she's put into this document. It will be great to see it finally adopted and used in the future for better, more informed, management of our river.

For much of the past year Peter McAdam ran a Healthy Habitats/Land for Wildlife program, funded by BMRG but based at MRCCC. Land for Wildlife is an excellent voluntary conservation scheme and it was disappointing to see Peter's position finish at the end of June due to lack of funds.

In September I had the privilege of being the MC for the Sunshine Coast Conservation Forum, where the Sunshine Coast Council thanks its Land for Wildlifers for their great works. Tim Flannery was brought in as guest speaker. Land for Wildlife exists in SEQ thanks to coordination by SEQ Catchments and the involvement of all councils. The Sunshine Coast has just over 1000 properties registered for Land for Wildlife. Gympie region has around 250 from when the program operated several years back. MRCCC is strong in the hope that it may once again operate in this region.

This past year has not been without its frustrations. In reading annual reports from past Chairmen, I couldn't help but note a recurring theme of both despair and eternal optimism in the relationship with our regional group BMRG. This year, after something of an internal revolt, BMRG set out to make some changes to its organisation. Part of this involved a survey to members. Never have I seen so much time or passion at MRCCC meetings devoted to responding to the survey. Despite our lengthy deliberations, we were saddened to see few of our concerns addressed, including the issue of membership. There seems something fundamentally wrong when the vote of an individual carries exactly the same weight as that of a group which represents many individuals.

Geographically too there are problems. An analysis of BMRG's 250 members shows that the majority are based in the Burnett catchment and that close to a quarter of them are either staff or Directors of BMRG, or their immediate family members. It may have been this imbalance of memberships that saw BMRG allocate $7.75m of flood recovery funding to the Burnett with only $250 000 going to the Mary. It is the strong view of this organisation and that of others in the Mary catchment that undertaking a membership drive for BMRG should not be necessary to ensure good and fair NRM outcomes for the Mary, and should not be necessary to secure ongoing supportive funding assistance for the good NRM works of our existing groups.

On the MRCCC home base front, our Mary Catchment Public Fund, established almost a decade ago principally to eventually fund our own premises, has grown tantalisingly close to being within striking distance to purchase a property. We are grateful to Gympie Regional Council for our present accommodation but our tenure there is not indefinite as they have plans to re-develop the site. Although we are in the position of having sufficient funds for a good deposit on our own premises, we are understandably wary of taking out a loan for the remainder, and the

commitment that entails. Having said all that, I remind all friends of MRCCC that donations to the Public Fund are tax deductible and I thank those who have contributed, especially over the past year.

A good news story is that the Mary River Cod in the hatchery at Lake Macdonald spawned successfully this year. After several years with no spawning, this is a heartening outcome for all concerned. We are in the process of organising an Open Day at the Hatchery to enable the wider community to visit the facility and gain a greater understanding of the Cod and it's needs for survival.

We are also anticipating a change in representation on the Committee, when Noosa Council will rise from the ashes of de-amalgamation in January 2014. We are looking forward to working with the renewed Noosa Council and Noosa Biosphere Limited, as well as continuing to partner with the Sunshine Coast, Gympie and Fraser Coast councils.

Vince "the Codfather" Collis feeding the fry at the hatchery

There are many people to thank at this time of the year. Firstly I thank my fellow members of our Executive, Rob Priebe, our Deputy Chair, Margaret Thompson, our long-serving Secretary, Elke Watson our Treasurer and Helen Lofthouse, our assistant Secretary. A special thankyou to all our Delegates who bring a real depth and spread to our organisation and who give so freely of their time to be involved and also to Peter and Bevly Hughes who attend most meetings, field days and workshops and report on our activities to the Gympie Times. Thanks also to Eve Witney who produces the Codline newsletter and arranges for its wide spread distribution. I add into that mix, a boundless thankyou to our wonderful staff, a vital part of our MRCCC family. I thank them for their dedication, and for their patience in helping an inexperienced Chairman come to understand how things work.

I'd like to also thank our local members, both state and federal for their continued support, and particularly thank Federal member for Wide Bay and Deputy Prime Minister, Warren Truss, a long term supporter of the MRCCC.

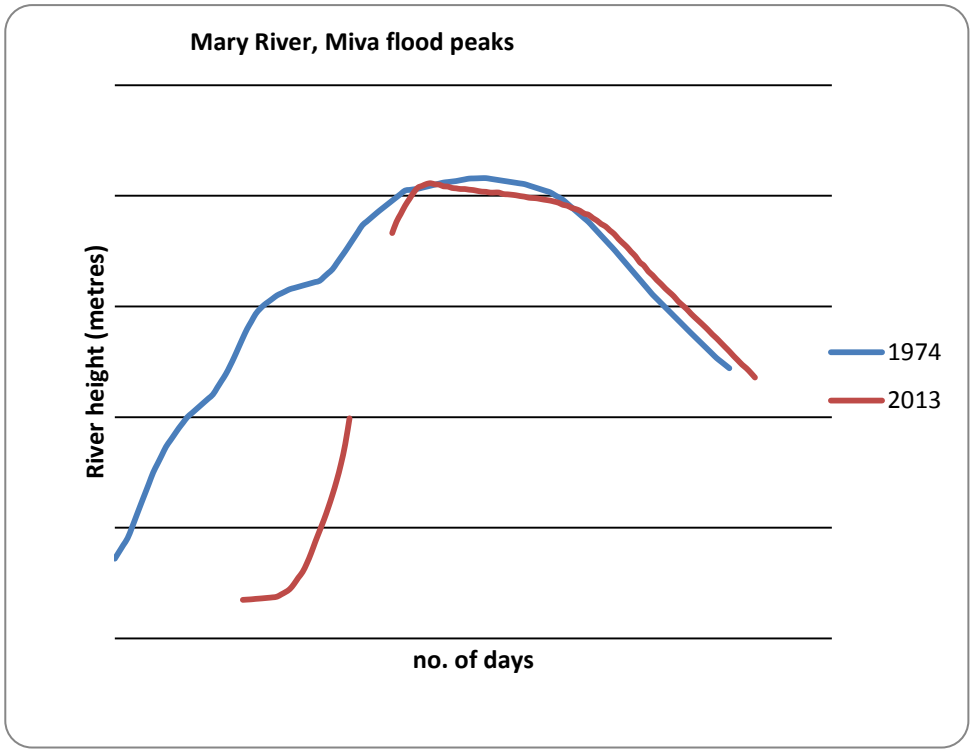
In conclusion, I'd like to share a thought from our perceptive Deputy chair. The MRCCC, he says, is not just well-known, but more importantly it is known well. My thanks to all those who, over our twenty year history, have contributed to that position.

Ian Mackay, Chairman, MRCCC

Mary River Waterwatch and the January 2013 floods – Steve Burgess

The Waterwatch monitoring program reached a significant milestone this year with some of the original volunteers passing the 10 years of service mark – **Congratulations** and thank you for your long-term involvement in Waterwatch. Some of these same volunteers also scored their first "century", ie they have now collected over 100 water quality samples at their site. This long-term consistent effort from the community has provided invaluable long-term baseline data on water quality throughout the catchment which would have been practically impossible to gather in any other way. This community support is invaluable.

Flooding punctuated the last 12 months with significant damage sustained in the entire Mary River Catchment. The 2013 Australia Day floods, like the January 2011 floods, set new flood peak records throughout the Mary River Catchment. The stream gauges in Wide Bay Creek near the townships of Woolooga and Kilkivan measured record flood peaks again (after creating new records in 2011) and these towns were again severely impacted. The Marodian gauging station located on lower Munna Creek recorded a new flood peak surpassing the 1955 record by 0.5 metre, while locals in the upper Munna Creek catchment believe this flood was the highest in living memory. The Glastonbury Creek gauging station also recorded a new flood peak, just beating the 1955 record. Locals report in Widgee Creek that this was the highest flood in living memory, while Kandanga Creek recorded its 3rd highest flood peak, only 20cm below the 1989 record of 8.77m. The Mary River at Miva, downstream of Gympie, recorded its 3rd highest flood peak since 1910, only 30cm below the record flood in 1974, while Home Park on the Mary River above Tiaro broke its previous record – with a staggering 23.56m flood peak. Maryborough recorded its 4th highest flood peak since 1893 at 10.7 metres.

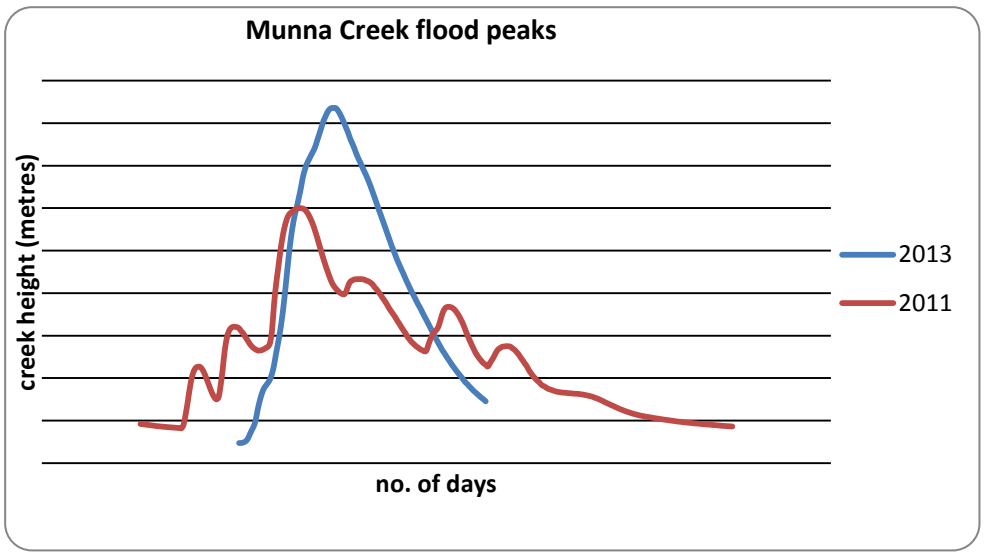


In the upper Mary River upstream from Kenilworth (at the Bellbird station) the January flood was the 5th highest flood recorded at just below 9m (in 1989 the record peak was 11m).

The highest daily rainfall levels in the Mary River Catchment occurred in the Munna Creek catchment and Gutchy Creek catchment on the 27th January 2013 at Brooweena (Munna catchment) with 336mm, Marodian (Munna catchment) with 347mm and Mt Kanigan (Gutchy catchment) with 396mm.

The difference between the 2011 and 2013 floods was the Mary River and creeks started rising from almost cease-to-flow conditions in January 2013 due to the extended dry period experienced from July 2012 until late January 2013. Whereas in early 2011 the catchment was saturated and the river and creeks had considerably higher ambient flows before the floods began.

This year the MRCCC was successful in obtaining a Queensland Government "Everyone's Environment Grant" for "Revitalising the Waterwatch Network". This grant has enabled the MRCCC to purchase some new water testing equipment, expand the reach of the Waterwatch program with a series of workshops and volunteer training visits and provide updated Report Cards for each of the networks. This funding adds to the invaluable assistance that MRCCC has consistently received from both Gympie and Sunshine Coast Councils in keeping the MRCCC Waterwatch program operating long enough to provide valuable long-term data. Hancocks Queensland Plantations also supported the Waterwatch program throughout 2012 and 2013, with staff forming part of the volunteer networks and providing assistance with equipment. Lastly, Queensland Parks and Wildlife Officers have always been an important part of the MRCCC Waterwatch program, monitoring important streams in the Conondale Ranges and MRCCC would like to thank QPWS staff for their important continued contribution.



Munna Creek heights comparison, Marodian gauging station

Munna Creek Waterwatch network

Many of our Munna Creek Waterwatchers passed the 10 years of continual service mark this year. When you consider that this involves visiting your local waterway to sample water quality approximately 10 times a year for 10 years, this represents a very high level of commitment and dedication on the part of these volunteers and we congratulate you all on this milestone achievement.

The Munna Creek Marodian gauging station reset the record flood peak in January 2013 by recording a 0.5m higher flood peak than the 1955 flood, at 16.71m (319,000 megalitres/day).

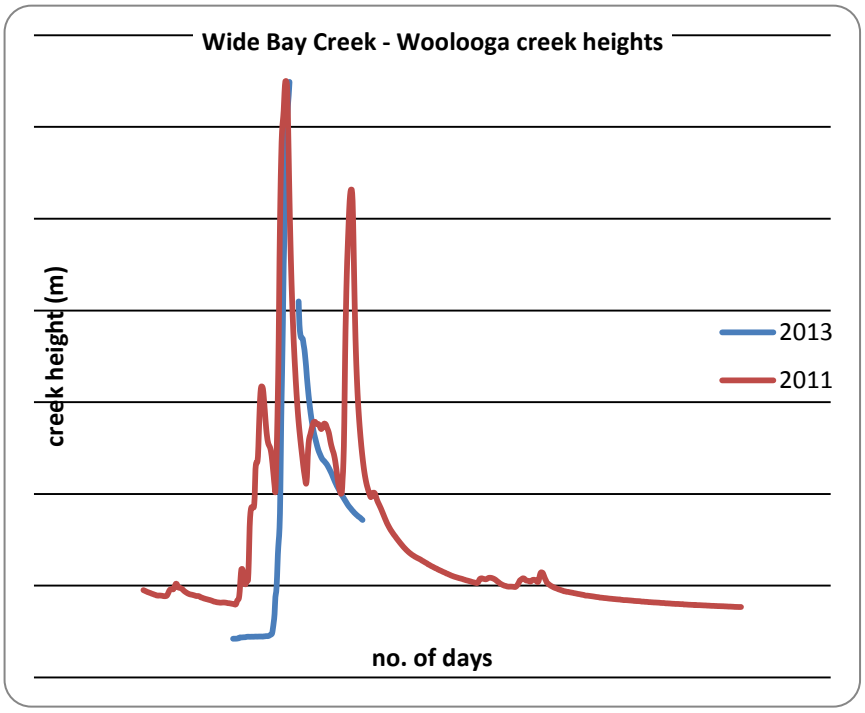
The flooding rains on the 27th January 2013 resulted in almost 8 times the total volume of Borumba Dam flowing down Munna Creek in one day. This large volume of water contributed significantly to the flooding in Maryborough.

These consistent flows in the Munna Catchment during 2012 and 2013 reflected in improved assessments of physical chemical water quality throughout most of the system. However some Waterwatch sites were affected by the long-term dry spell recorded from July 2012 to January 2013.

Wide Bay – Widgee Creeks Waterwatch network

After recording the highest peak ever on Wide Bay Creek at both Kilkivan and Woolooga in January 2011 the Wide Bay Creek near Woolooga broke another record in 2013, recording a new flood peak of 13.78m (approximately 200,000 megalitres/day, or more than 4 Borumba dams per day), approximately 0.8m higher than 2011. Interestingly, records from the 1893 flood in Woolooga show a peak of 12.04 metres. Glastonbury Creek also broke the 1955 flood record, and anecdotally the Widgee Creek recorded the biggest flood in living memory.

Water quality results for this network have been good, however electrical conductivity levels (salinity) have started to creep back to previous levels during the dry spell between July 2012 and January 2013 which resulted in some sites dropping in their report card grade.



2011 & 2013 flood comparisons at Wide Bay Creek, Woolooga (Brooyar

Kenilworth District Waterwatch network

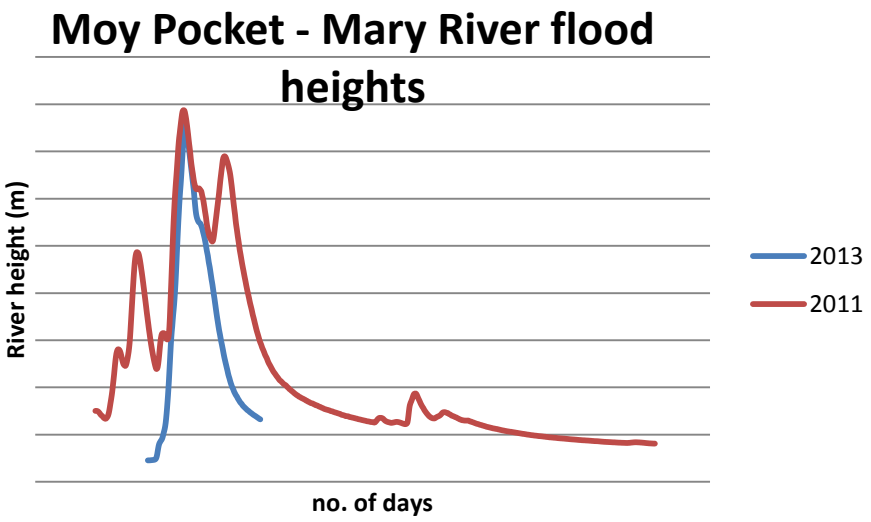
During 2012 a suite of new volunteers started collecting water quality data in the Kenilworth district. MRCCC was pleasantly surprised by the response from the district to assist with Waterwatch activities and we welcome these new Kenilworth volunteers to the fraternity. QPWS has been monitoring their suite of Waterwatch sites in the Booloumba and Little Yabba Creek sub-catchments for over 10 years, and some of these sites have scored their "century" of 100 samples.

Widgee Creek flood flows
Image courtesy Phil Weiss and Brenda Nancarrow

During January 2013, the Mary River at the Moy Pocket gauging station recorded the 10th highest flood peak at 15.26m (223,000 meg/day) – the equivalent of almost 5 Borumba Dams.

Gympie – Amamoor Waterwatch network

A number of original Waterwatch volunteers of the Gympie – Amamoor network passed the 10 years of continual service this year which is a remarkable achievement. Meanwhile, the Australia Day floods ravaged the Mary River and the western tributaries of the Mary Valley. Kandanga Creek recorded its 3rd highest flood peak, only 20cm lower than the 1989 record of 8.77m. Amamoor Creek recorded a 9.67 metre flood peak in the town of Amamoor, 1.2 metres below the 1989 record flood peak. However, the upper reaches of the creek were significantly changed by violent flows upstream of Bluebell, and it was reported that creek water flooded the Gympie Music Muster stage. HQPlantations has started water testing in the Imbil timber plantations within the Yabba Creek sub-catchment.



2011 & 2013 flood comparisons at Moy Pocket Mary River

The Mary River creating a new channel at Conondale where approximately 3 Ha of pasture was washed away

Flooding in the Maryborough CBD

Tinana subcatchments Waterwatch Network

A new Eastern Catchments Waterwatch network was formed to monitor the upper Tinana Creek catchment, with HQP monitoring a number of sites within their Toolara timber plantation. Two years of data is now available from Tinana Creek and its tributaries with water testing by several landholders, residents and HQP staff. The Tinana subcatchments show striking differences in pH and Dissolved Oxygen levels between those creeks draining from the east across Wallum country and those flowing from the West. As Tinana Creek provides important habitat for endangered Mary River Species gaining a better understanding of these creeks is vital.

There remains capacity for several new volunteers to enter this network.

Upper Mary Waterwatch network

A number of original Waterwatch volunteers of the upper catchment passed 10 years of continual service this year. The Upper Mary Waterwatch network experienced the major flood that affected all the Mary Catchment of early January 2013 – with the peak recorded at just 9 metres at Bellbird gauging station (201,000 megalitres/day - more than 4 Borumba Dams flowing past the Bellbird gauging station on the Mary River above Kenilworth in 1 day).

For the past 3 years many Upper Mary Catchment locals and Waterwatch volunteers have reported unusually 'dirty' water in the Mary River – sometimes not corresponding to a rain event. Since Easter 2013 this turbid water has again been flowing in the upper Mary River. A number of significant landslips in the ranges and headwaters above Conondale have remobilized during the flood events of the last few years and are contributing very turbid water into the upper Mary River. These landslips are major geological features that will not be simple to deal with and may have a continued impact on water quality downstream for many years to come. Thanks to all those waterwatchers and landholders who contacted the MRCCC about this issue. These volunteers represent our eyes on the ground around the catchment, providing valuable information as a result of their observations.

January 2013 flood flows from gauging stations

Gauging Station	2013 Peak Flow	2013 Peak Height	Ranking
Bellbird – Mary River (downstream of Conondale)	201 512 meg/day	8.775m	**6th highest peak since gauging commenced in 1959** **Record peak – 1989 – 11.0m, 329 097 meg/day**
Moy Pocket – Mary River (downstream of Kenilworth)	223 324 meg/day	15.266m	**10th highest peak since gauging commenced in 1963** **Record peak – 1999 – 16.87m, 312 336 meg/day**
Fishermans Pocket – Mary River (downstream of Gympie)	397 035 meg/day	20.954m	**Record peak – 1999 – 23.68m**
Miva - Mary River	623 194 meg/day	20.536m	**3rd highest peak since gauging commenced in 1910** **Record peak – 1974 – 20.8m, 641 606 meg/day**
Home Park – Mary River		23.565m	**New peak since gauging commenced in 1982.**
Mary River - Maryborough		10.7m	**4th highest peak recorded since 1893**
Kilkivan – Wide Bay Ck	99 477 meg/day	8.971m	**2nd highest peak since gauging commenced in 1974** **Record peak – 2011, 8.975+ m**
Wide Bay Ck – downstream of Woolooga (Brooyar)	?200 000 meg/day	13.78m	**New peak since gauging commenced in 1909 (record broken in 2011)** **Previous peak – 1947, 126 835 meg/day**
Munna Creek - Marodian	310 141 meg/day	16.713 m	**New peak , previous peak recorded in 1955 – 16.24m, 274492 meg/day**
Glastonbury Creek	81 974 meg/day	8.331m	**New peak, previous peak recorded in 1955, 81 129 meg/day**
Kandanga Ck – Hygait	104 257 meg/day	8.49m	**3rd highest peak since gauging commenced in 1970** **Record peak – 1989 – 8.77m, 114 566 meg/day**
Tinana Ck – Bauple (Missings Bridge)	71 175 meg/day	13.043m	**Record peak – 2012 – 14.14m,** **91 219 meg/day**
Six Mile Ck – Cooran	32 795 meg/day	10.581m	**Record peak – 1992 - 11.94m**
Amamoor Creek	72 014 meg/day	9.67m	**4th highest peak since gauging commenced in 1984** **Record peak – 1989 – 10.96m**
Obi Obi Ck – Maleny	14 237 meg/day	1.812m	**Record peak – 2.566m**

Eva Ford capturing samples from the Fyke net in Skyring Creek near the realignment. Inset: Eva and Chris Rosin identifying fish species

Waterway Monitoring Program of Skyring and Coles Creek

The waterway monitoring activities for Skyring and Coles Creeks are now in their fourth year. The monitoring program is providing information to the Queensland Department of Transport and Main Roads on changes and trends in the stream health of Skyring and Coles Creeks, with a specific focus on the stream realignments that were constructed as part of Section B of the Bruce Highway upgrade (Cooroy to Curra).

Ambient stream temperature, electrical conductivity, pH, dissolved oxygen, turbidity and Chlorophyll *a* (nutrient surrogate) have been monitored monthly at sites along Skyring and Coles Creeks. The pre-construction median temperature, pH, electrical conductivity and dissolved oxygen values are lower than the values during construction on both creeks due to the short pre-construction monitoring period in dry winter months. The majority of data for both creeks falls within the Queensland Government Water Quality Objectives. The trends of change in the water quality data at all sites are explained by seasonal and diurnal variations of environmental conditions and not related to construction.

Cross sectional surveys of the channel habitat have been undertaken at sites surrounding the stream re-alignments. Results suggest that the stream realignment works on Coles Creek are not currently affecting the channel habitat at the monitoring sites. The Skyring Creek surveys revealed deposition of bed material at the control sites upstream of the stream realignment. Substantial stream bed scour recorded immediately upstream of the realignment may be due to a previous head-cut or construction of the realignment tie-in. Downstream of the realignments, scour of bed material was recorded after the floods of early 2013, possibly due to increased stream velocities. Further monitoring is required to determine if these scour processes are persisting.

Results from macroinvertebrate sampling have shown no significant changes over time when compared with the QLD Water Quality Objectives for SIGNAL scores. Parallel trends in SIGNAL scores over time are observed between the control and impact sites on both Skyring and Coles Creek. These points suggest no detectable impacts from the stream realignments on the macroinvertebrate community at the downstream (impact) monitoring sites at this stage.

The Shannon-Wiener species index has been used to analyse the fish species survey data from Skyring and Coles Creeks. On Coles Creek the May 2013 survey revealed an increase in the Shannon-Wiener index at the upstream (control) site and a significant decrease at the downstream (impact) site, indicating a potential impact on fish species diversity at the downstream site. Further monitoring will be required to investigate if this trend continues. On Skyring Creek the May 2013 survey results revealed a decrease in the Shannon-Wiener index at the upstream (control) site and an increase at the downstream (impact) site. The increase at the downstream site was in contrast to a trend of decreasing species diversity at this impact site.

Frog populations of impacted and unimpacted sites have been monitored for four seasons covering the periods prior to, during and after construction at Coles and Skyring Creeks. Populations of frog fauna at the Coles Creek sites show relatively similar trends over time in species abundance, richness and diversity when comparing the upstream site to the downstream site. Comparisons between the Skyring Creek sites show a marked difference in these same parameters between the up and downstream sites. Erratic variations in abundance, richness and consequently diversity are observed at the downstream site, and may be a reflection of changes to habitat and detectability.

The return of the endangered Giant barred frog (*Mixophyes iteratus*) to the downstream site is encouraging. It was recommended that there should be no further disturbance below the high bank at this site and the site should be monitored at least for a further season post-construction to determine true persistence of this species.

Turbidity Monitoring Programs

Skyring and Coles Creek

An investigation of the entire turbidity data sets (from 2009 to 2013) using cross-correlation analyses for sites upstream (control) and downstream (impact) of areas of construction was undertaken. On Coles Creek, major impacts on turbidity levels were associated with the area where highway construction ran roughly parallel to the stream (where construction occurred across drainage lines that flow into the main stream). Due to the lack of pre-construction data, it is not possible to state whether this increase is inherent or related to highway construction. On Skyring Creek the reach containing the stream realignment and the reach influenced by the southern deviation construction are both associated with significant increases in turbidity levels. Again, due to the lack of pre-construction data, it is not possible to state if the increases are inherent or related to continuing effects of construction. The reach of Skyring Creek influenced by highway construction recorded up to a two fold increase in turbidity in the early stages of construction. This reach has shown a continuing trend of decreasing turbidity since the substantial impacts of early highway construction.

Above: Part of the Skyring Creek re-alignment
Below: Fyke netting in Skyring Creek
Images courtesy Jaqui and Ayla Sich

Mary River

Five turbidity loggers on the Mary River are monitoring turbidity levels upstream and downstream of the Skyring, Coles and Traveston Creeks confluences during and post-construction of the Cooroy to Curra Bruce Highway upgrade. Between September 2012 and early January 2013 very low rainfall totals resulted in low and constant turbidity and river height levels in the Mary River. Two large flood events occurred in late January and late February 2013.

Prior to the floods on the 25th of February, the overall turbidity levels at the five turbidity loggers on the Mary River were low (all median values < 50NTU). During the late January flood event the site upstream of the Coles Creek confluence recorded a maximum of 897NTU on the 27th January. Paired analysis show that turbidity levels downstream of the Skyring and Coles Creek confluences are consistently higher than the sites upstream of the confluences. This increase is consistent with previous findings for these paired turbidity logging sites.

Mary Valley Link Road:

Data from the turbidity loggers on Coles Creek recorded a 17 to 49% increase in turbidity levels with no statistical differences between the sites upstream and downstream of the Mary Valley Link Road during construction. Analysis of Mary River and the lower reach of Coles Creek turbidity logger data obtained during construction suggest a 7 to 22% overall increase in turbidity levels between the sites upstream and downstream of the Mary Valley Link Road, with a high statistical difference between the sites. Post construction turbidity data is quite variable for Coles Creek and the Mary River given the sequence of flooding that has occurred since construction ceased at this site. Other potential causes for increased turbidity within the monitored reaches are also recognised.

Mary Valley Link Road & Traveston Connection Road Aquatic Health Monitoring Program

This program is now in its third year of monitoring aquatic health parameters on the Mary River, Coles Creek and Traveston Creek in the vicinity of the Mary Valley Link and Traveston Connection Roads. The program focuses on crucial habitat monitoring for the EPBC listed species (Australian Lungfish, Mary River Turtle and Mary River Cod).

Ten sites on the Mary River, Coles Creek and Traveston Creek are monitored for physical/chemical water quality parameters. The majority of water quality data collected meets the Queensland Water Quality Objectives. The main differences between up and downstream sites were along Traveston Creek where elevated pH levels were detected downstream of construction. Changes in pH levels can be caused by increased algal growth, suspended sediments, groundwater infiltration, nutrients or other pollutants. Consequently further testing would be required to isolate the cause. Elevated EC levels were also recorded at the downstream sites (possibly due to the influence of an unmonitored tributary to the west of the highway known to have elevated EC levels).

This Stony Creek Frog looks very relaxed. Image: Eva Ford

Macrophyte (aquatic plant) monitoring for Australian Lungfish habitat has shown that the large floods in January 2011 and December 2011 to March 2012 and January to March 2013 resulted in the removal of the macrophyte populations in the Mary River. Monitoring for re-colonisation is being undertaken.

Monitoring of Mary River Turtle nesting banks has shown that since the floods the sand bar downstream of the Mary Valley Link was eroded of most of the sand substrate, and the bar is now dominated by eroded clay. Considerable deposition of sand substrate occurred at the sand bars on the left Mary River bank, downstream of the mouth of Coles Creek, as a result of early 2013 floods. Analysis of wildlife camera data of turtles on midstream basking rocks downstream of the Mary Valley Link Road has shown basking peaked during the September to October period in both 2011 and 2012. This coincides with the commencement of the nesting season of the Mary River turtle and Krefft's turtle. Once nesting commences, basking declines. No notable reduction to the number of turtles basking during construction activities was recorded when compared to the period monitored prior to construction.

Cross section surveys are used to monitor changes to the pool habitats (potentially used by Mary River Cod). On Coles Creek no significant changes to channel shape at the cross section sites were recorded both upstream and downstream of the Mary Valley Link Road between 2001 and 2013. The June 2013 survey of the Mary River sites revealed a reworking of the channel shape (bed and banks) at the cross section sites (both upstream and downstream of the Mary Valley Link Road) which occurred during the floods of early 2013. Some bank slumping has occurred (particularly at the upstream sites) and deposition on the bed at the downstream site when compared with the baseline 2011 survey. Some large woody debris was removed during flooding.

Data gathered through monitoring of aquatic macroinvertebrate communities at two sites on the Mary River and two on Coles Creek gives an indication of waterway health. The majority of the aquatic macroinvertebrate data scores meet guideline values and suggest that there are no detectable effects on the aquatic macroinvertebrate community at the sites downstream of the Mary Valley Link Road at this stage.

Three seasons of frog monitoring have occurred at paired (control and impact) sites on the Mary River, Coles Creek and Traveston Creek covering pre-construction and construction phases and a brief period of the post-construction phase. The most common frog species at all sites were the Eastern sedgefrog and Stony-creek frog. The data shows that the frog fauna of the Coles Creek and Mary River sites were not impacted by construction however the trends in abundance and species richness of frogs at the downstream Traveston sites does not conform to the trend of the upstream site. Trends in species richness of microbats for each of the transects were similar at the Coles Creek and Mary River sites, however the change was not consistent at the Traveston Creek sites with an increase followed by a decrease at the upstream site and a consistent decrease at the downstream site. Due to the short post-construction data collection period we await further data from the 2013 to 2014 season to assist with drawing firm conclusions for this site.

The Eastern Sedgefrog – Image: Eva Ford

Assessing the effectiveness of in-stream habitat features in Coles Creek

This program aims to assess the condition and effectiveness of the in-stream habitat features and channel design components incorporated into the meander and bridge realignments constructed on Coles Creek as part of Section B of the Bruce Highway upgrade (Cooroy to Curra). The first report for this program was submitted in March 2013.

Meander Realignment

The constructed riffle in the meander realignment has an acceptable slope for fish passage. Using a stream velocity guideline (of not exceeding 1m/s) it is likely fish would be able to pass this riffle during ambient and slightly above ambient flows. Fyke net surveys showed there is little difference between fish species richness of the control sites (fish moving from natural areas) and the meander realignment site (fish moving through or resident in the realignment), with a richness of 11 and 9 respectively. The meander realignment fish abundance was significantly lower than the control sites. This may be due to the combination of shallow water and lack of riparian cover within the meander realignment.

Bridge Realignment

The riffle at the downstream end of the bridge realignment was not passable by fish during low to ambient stream flow, due to a blockage from a large accumulation of coarse gravel. When sufficient water is flowing over this blockage, it is unlikely fish would be able to pass as stream velocities exceed 1m/s. A properly designed and constructed riffle is required at this critical location.

Two other riffles, not functioning due to excessive water depths, were surveyed in the bridge realignment pool. To restore these two submerged riffles, the riffle at the downstream end of the realignment would need to be significantly lowered, however this may have negative geomorphic impacts downstream and fish passage implications upstream.

The volume of water in the bridge realignment pool is far greater than those measured in less disturbed sections of Coles Creek, and would provide ample refuge for aquatic life during times of low flow.

Higher water temperatures and dissolved oxygen levels recorded within the bridge realignment (likely caused by the large volume of exposed water) may be a tolerable, but unfavourable environment for certain native aquatic species.

Fyke net surveys revealed there is little difference between fish species richness of the control sites (fish moving from natural areas) and the bridge realignment site (fish moving through or resident in the realignment), with a richness of 11 and 10 respectively. Fish abundance of the bridge realignment was significantly greater that the control sites. This may be due to the large pool volume providing for a greater biomass of fish, or fish being confined due to the accumulation of coarse gravel at the downstream end of the bridge realignment pool.

Boat electrofishing data confirmed the use of the constructed in-stream habitat features, particularly the LUNKERs. Visual observations of a small school of Mullet were also noted in the bridge realignment pool.

A Snapshot – Reef Rescue, Grazing Lands in the Mary Catchment (2010-2013)

The Reef Rescue project in the Mary Catchment was delivered as a working partnership between the Mary River Catchment Coordinating Committee (MRCCC), the Queensland Dept of Agriculture, Fisheries & Forestry (DAFF) and the Gympie District Beef Liaison Group (GDBLG). Supporting Partners included the BMRG and AgForce. Funding was provided by the Australian Government. Reef Rescue's primary objective is to increase the adoption of improved land management practices within the grazing industry, to reduce the amount of nutrients, chemicals and sediments leaving the farms with the objective of improving downstream water quality entering the Great Barrier Reef.

The Reef Rescue Grazing Lands project incorporated two main components:

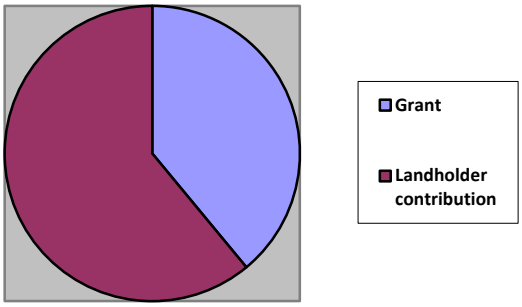
1. Providing technical advice to grazing landholders, and
2. Financial incentives for the implementation of best grazing land management practices.

Reef Rescue Outcomes

Number of properties implementing incentive funded on-ground works	63
Estimated number of graziers reporting practice change	80
Number of graziers trained in riparian zone condition assessment	32
Number of graziers trained in pasture condition assessment	43
Number of property-scale paddock maps produced	71
Number of on-property planning consultations	126
EoIs received for on-property implementation works	99
Number of grazing landholders directly networked	390

Reef Rescue On-ground Projects

No. of Reef Rescue projects implemented	**63**
Total Value of these Implementation Works	**$871,760**
Property Investment Multiplier Factor	**1.52**



% of On-ground projects targeting Reef Rescue Outcomes	Reef Rescue Priority Outcomes
100	Improving downstream water quality
60	Reduced manure losses through runoff into waterways eg. cattle camps
60	Improved stock drinking water quality
51	Improved evenness of grazing; improved utilisation
51	Upgrading the reliability of supply of stock water
48	Improving riparian zone condition
37	Reducing hillslope runoff – reduced loss of top soil
24	Improving grazing land condition to A or B condition
3	Rehabilitation of gully erosion
3	Improving wetland condition

Biodiversity Fund – action on the ground to restore riparian resilience

The **"Restoring Riparian Resilience: Implementing the Mary River Threatened Aquatic Species Recovery Plan"** project was initially supported with funding from the Australian Government's Clean Energy Futures Biodiversity Fund. The Biodiversity Fund was subsequently dismantled by the former Rudd Government when the Carbon Price was scrapped. Despite this, Federal MP Warren Truss advised a Delegation from the MRCCC Executive that any existing contracts with the Federal Government would be honoured.

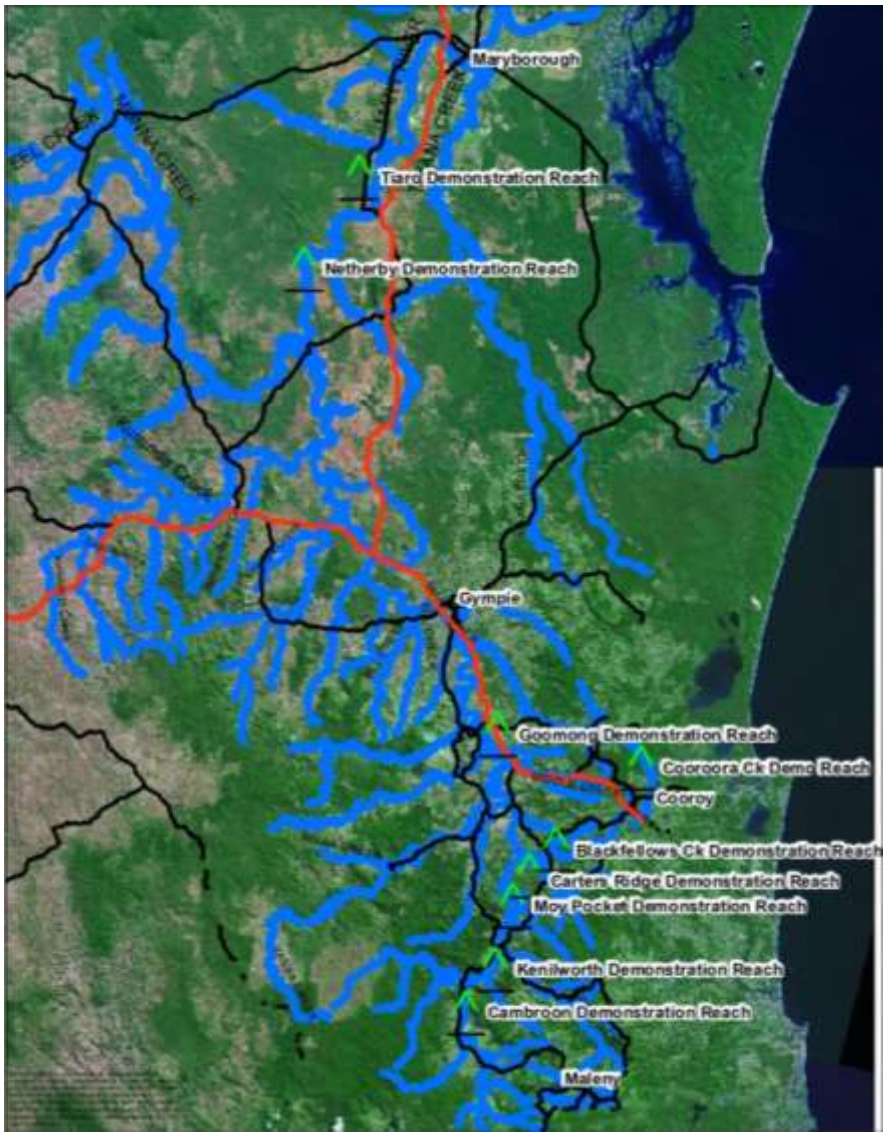
Cat's Claw Creeper tubers and vine section

The MRCCC Biodiversity Fund project has now passed the first 12 months of a 6 year program of on-ground actions in threatened aquatic species habitat. The Biodiversity Fund project targets rehabilitation and protection of the key threatened species of the Mary River Threatened Aquatic Species Recovery Plan including the Mary River Cod, Mary River Turtle, Australian Lungfish and the Giant barred Frog. Activities undertaken include weed control, revegetation, fencing to exclude stock from waterways and provision of off stream watering points.

Mid-way through 2012 a two year plan for the Biodiversity Project was submitted to the Federal Government and approved for implementation. This two year project plan identified the development of eight demonstration reaches located throughout the catchment in key threatened species habitat where the MRCCC has good partnerships with landholders, Landcare and other community groups. The project intends to build on these partnerships and extend the work out beyond the demonstration reaches to neighbouring landholders.

The extended dry period between July 2012 and January 2013 forced the postponement of revegetation activities in key demonstration reaches until more favourable weather conditions prevailed. Unfortunately the severe dry spell was broken by record flooding on the Australia Day weekend, which was favourable for revegetation, but many sites became inaccessible due to the wet conditions, and many landholders were in clean-up mode simply trying to get their enterprises back in production.

A number of environmental weed control activities within some of the demonstration reaches were undertaken during the dry spell last year, with weed control activities focused on eradicating small infestations of Cats Claw Creeper or Madeira vine in key species habitat. Chinese Elm control was also performed in strategic locations. Riparian fencing and off-stream watering points were installed in key habitats in particular in Mary River Turtle nesting sites. The project now enters into its second year of its implementation, hopefully with less climatic challenges.



Biodiversity Fund Demonstration Reaches

Living with Threatened Species – Eva Ford
Sunshine Coast Council Community Partnership Program

Top: Eva Ford talks to Bushcarers on a tributary of Obi Obi Creek
Middle: Waterwatch training on Elaman Creek
Below: Mary Ann and Don Law monitor turbidity at Oakey Creek

In June this year the 3rd year of the Community Partnership Program (CPP) supported by the Sunshine Coast Council ended. Over the past 12 months the MRCCC was able to work closely with 33 landholders in the Sunshine Coast hinterland to develop property plans and apply for funding under the Council's Landholder Environment Grant (LEG) program. Collectively these property owners were successful in obtaining $77,300 funding to help them start or continue projects to enhance threatened ecological communities and threatened species habitat along the Mary River and tributaries. It is worth noting that landholders contributed an additional $256,600 in-kind support to their projects, which represents a significant contribution. The flow-on effects of stock control away from waterways through riparian fencing and off-stream watering systems, weed control, encouragement of natural regeneration of vegetation and tree planting are many fold and include stabilised creek and river banks, improved water quality, provision of habitat and corridors for wildlife and increased resilience of ecosystems in the face of extreme weather events.

The CPP and the LEG programs have enabled us to work with landholders to develop property management plans for several years into the future with the security of likely support from Council. Many of the landholders are involved in wider projects also such as the development of the Mary River Threatened Species Recovery Plan, Bushcare days with Council, corridor restoration beyond their property boundary, Waterwatch, contributions to Codline and to the collection of experience and stories via the 'Looking Forward, Looking Back' and' Mary River Restoration Stories' programs. Is it our own strong sense of duty to catchment health or is there really an air of cohesion proliferating within the catchment community?!

For the past two years we have been conducting a survey of Landholder Grant recipients to gauge their experience of the LEG program, their project outcomes and what they would like in the future. Around ½ of the landholders live on their land mostly for lifestyle reasons and around ¼ have beef production enterprises. More than ¾ of respondents were happy with the grant process and didn't see the need for changes. However, considering the periods of adverse weather experienced over the past three or so years it is not surprising to see that the most likely impediment to project progress is the weather, followed by not enough time! Nearly all landholders indicated an interest to apply for further assistance through grants as well as participating in workshops, field days and collaboration with neighbours to learn about local flora and fauna and weed identification and control.

The Community Partnership Funding also supported the 'Kenilworth and District' and 'Upper Mary' Waterwatch networks, the biodiversity monitoring program, the fabulous annual Noosa Festival of Water held on the banks of Late Macdonald in June and production of Edition 24 of the Codline.

A new 12 month CPFP began in July this year incorporating similar activities but with the inclusion of the initiation and nurture of landholder neighbourhood groups in the Kenilworth region. We also look forward to purchasing and experimenting with some acoustic monitoring equipment to enhance our biodiversity monitoring program. Two students will be provided with work experience opportunities. We look forward to working with the new face of the Sunshine Coast and Noosa Councils in 2014 following de-amalgamation.

Opportunities to share

Passing on skills, knowledge and enthusiasm to others is of utmost importance for the collective movement of environmental care and restoration. We have been fortunate to have had several opportunities to share stories, to learn from others and to teach. A highlight of the past 12 months has been working with Sunshine Coast University graduate student, Jono Hooper who took up a workplace learning placement with us. With the field work fully underway when he started it was easy to fill his days with far more interesting activities than office work. Some therapeutic data entry and filing helped to keep the experience 'real' for him!

Other educational opportunities included our annual rotational day with Year 9 St Patrick's College in Gympie and other school visits, Frog workshops in Maleny, Higher Ground project development and Hong Kong student program environmental component, volunteer opportunities on frog surveys, collaborative projects with other agencies and groups, public talks, media items, bus tours of the catchment, field days, property visits, bridge replacement consultation with Council staff, Noosa Festival of Water, professional development opportunities, MRCCC General Meetings and all those phone conversations!

Council support for maintaining sensitive areas along road reserves

The Sunshine Coast Council Pest Management Unit has supported the restoration of several sensitive road reserve sites in the upper Mary for the past two years and again for the coming year. Sites include Lockes Lane at Belli Park, Cedar Creek Road at Gheerulla and Policeman Spur Road at Harper Creek where the riparian zones are being widened through native revegetation, and weed control is improving vegetation condition and encouraging natural regeneration.

Weed control is a common theme for the other sites; Kidaman Creek Road, Pickering Bridge river remnant and East Cedar Creek Road.

Top: Vanessa Moscato has St Pats Year 9 boys fascinated with waterbugs
Middle: Students from Hong Kong attack Cat's Claw
Below: Prospecting for weeds along Kidaman Creek with Weed Contractor Jason Flynn

It is with great foresight that Council values these road reserves so that their utility is conserved along with their contribution to a healthy environment. The constructive relationship that exists between the staff of the Pest Management Unit, the Council Conservation Officers and MRCCC allows for easy dialogue, project partnerships and the development of improved approaches to environmental issues and restoration. This has been evident during recent discussions over the seriousness of the Cat's claw creeper infestation in the catchment and the development of a collaborative approach to managing the issue between Sunshine Coast Council, MRCCC and other community groups.

The endangered Giant barred frog.
Eva Ford is a master at detecting these species by their eye shine

Frog hunting in the corners of the Mary Catchment

The past frog season from September 2012 to March 2014 provided an opportunity to continue established monitoring of 14 sites along the Mary and tributaries upstream of the Traveston area. The four long-term sites on Cedar, Belli, Six Mile and Cooroora Creeks continue to be funded by the Sunshine Coast Council. The data, collected over the past eight years, will be analysed this coming year; perhaps providing new insights into the population dynamics of our threatened stream-dependant species and helping us to assess habitat quality on properties where protection and rehabilitation are being addressed. Other monitoring sites support the aquatic monitoring project through the Department of Transport and Main Roads. Some of the sites were visited for the last time early in 2013 while others on Coles and Traveston Creeks and the Mary River will continue for the coming breeding season. This work investigates whether there are observable changes in frog species composition and abundance downstream of road and bridge works.

A new opportunity arose in 2012 to assist Barung Landcare to set up a community monitoring program under funding provided by the Federal Community Action Grant scheme. The site, the Maleny Community Precinct on the edge of Maleny Township, is being converted from ex-dairy country to a multi-use area catering for sports, recreation and water treatment. Initial frog surveys of the site in late 2012 revealed that the endangered Giant barred frog was persisting and breeding in Obi Obi Creek in that area. Excitedly we conducted further surveys but unfortunately this species could not be detected in some isolated remnants upstream of Maleny and has not been found in the past downstream of Baroon Pocket Dam in the Obi Obi, Kidaman Creek and Kenilworth areas. However, the sightings of males, a female and a juvenile sparks hope that there are indeed more populations and that further protection and rehabilitation along Obi Obi Creek will enable this species to persist in this system. More surveys are planned for the 2013-2014 season along Obi Obi Creek.

Other survey work occurred in the Sunshine Coast hinterland area and we targeted some of the streams of the upper catchment in partnership with Alan Wynn from Council and the Land for Wildlife program and with Queensland Parks and Wildlife staff in the Conondale National Park. The Mary River Threatened Species Recovery Plan (in draft) revealed a knowledge gap in the Giant barred frog distribution within the small sub-catchment of Summer Creek that flows into Little Yabba Creek.

Cascade treefrogs and Tusked frogs (both listed as vulnerable) abounded in this system and the survey provided a great opportunity to initiate our new Chair into the world of night-time frog hunting. Other creeks surveys included Elaman, Booloumba and Lobster Creeks with Alan and some Booloumba residents joining in on the searches.

During the season 1588 frog records were collected; 250 of these were threatened species, some providing range extensions such as the Giant barred frog in Obi Obi Creek.

The Mary River Threatened Aquatic Species Recovery Plan Dr Tanzi Smith

The Mary River Threatened Aquatic Species is nearing completion with the final recovery team meeting being held the day before the MRCCC Annual General Meeting to sign off on the plan. Once signed off, the plan has a couple of additional hoops to jump through before it lands on the Federal Environment Minister's desk in Canberra for final approval. The plan must be endorsed by the Queensland Government, be open for public comment for a couple of months and be reviewed by the Threatened Species Scientific Committee. This committee will scrutinise the recovery plan and recommend changes or endorse it for ministerial approval. Once approved by the Minister, this plan will serve several purposes. Australian Government staff who are assessing proposed projects will use the plan as part of their decision making process regarding potential environmental impacts on the species considered in the plan. It should influence whether a project is considered to trigger the application of the Environment Protection and Biodiversity Conservation Act, how a project that triggers this act is assessed and the type of conditions that are put on approved projects.

Most importantly, in terms of the ongoing activities of MRCCC, this plan and the actions outlined in it represent a set of activities, that if implemented would make a significant difference to river health and the recovery of threatened species. They align with and help to elaborate upon the key themes in the Mary River Catchment Strategy and can provide a rallying point to bring landholders, scientists, landcarers, decision makers, planners and concerned citizens together around catchment management and rivercare activities. The table below summarises the five major actions advocated by the plan. Each of these is broken down into numerous sub actions and sub-sub actions. The priority listed in the right column reflects the urgency, significance and foundational nature of the action for the recovery process.

Draft Mary River Threatened Aquatic Species Recovery plan actions	Draft Priority
Action 1: Manage direct threats to priority species and to overall river health	High
Action 2: Manage threats to and improve habitat quality	High
Action 3: Conduct research essential for future management	High
Action 4: Coordinate implementation	Very High
Action 5: Secure resources for implementation	Very High
Action 6: Communicate effectively with partners, and engage stakeholders and the community	High
Action 7: Involve and engage indigenous people	High

The MRCCC has continued to drive this project through staff drafting and reviewing revisions of the plan, collating and providing species distribution data, and providing technical advice and logistical support. We have also maintained a public profile for the plan that builds on the earlier community engagement activities we have undertaken, establishing a facebook page. Meetings have also been held with BMRG to highlight links between the actions identified in the plan and BMRG's activities across many areas of natural resource management and community engagement. Updates have also been provided to other significant and interested stakeholders such as HQPlantations and the Australian Macadamia Society.

The MRCCC Executive has confirmed that they wish for MRCCC to continue to take a leadership role in the implementation of the plan. Steps needed to effectively implement the plan have been outlined in the document. Two crucial elements in this process are the ongoing operation of the Recovery Team and employment of a coordinator to facilitate implementation and track progress. One of the topics up for discussion

at the recovery team meeting in October 2013 was the ongoing operation of the recovery team. We are keen to ensure that this group includes a wide representation of people from across the spectrum of stakeholders who have an interest or stake in river health and threatened species recovery.

It is a credit to key staff at the Department of Environment (formerly Department of Sustainability Environment Water Populations and Communities) that they have kept the momentum going on the plan despite considerable change and upheaval in Canberra. We would also like to acknowledge the contribution of the members of the recovery team, technical advisory group, indigenous working group and other individuals who have shared and in many cases donated, their knowledge and expertise, to improve the quality of the document.

Here's hoping that at the AGM in 2014 a representative of the recovery team will be reporting on the first year of implementation of the endorsed plan!

You can follow the Recovery Plan facebook page here:

https://www.facebook.com/pages/Mary-River-Threatened-Species-Recovery-Plan/247122825325354

Keeping the community involved

One of MRCCC priorities has always been to raise awareness and encourage participation in Rivercare activities. The importance of this priority has been strongly reinforced by the feedback that was received in 2012 from the Caring for Mary Forums held as part of the development of the Mary River Threatened Species Recovery Plan. During these forums a focus was placed on identifying the actions that need to take place and the support mechanisms that are needed to maintain and enhance current levels of concern for the river, and help this concern translate into actions to improve the health of the catchment. As a result of these and other discussions MRCCC applied for and received funding for three different projects that will help address some of the issues identified.

The first of these was the Something about Mary publication, produced in collaboration with Glenbo Craig and partly funded through a Be Natural Landcare Grant. Two thousand copies of the booklet have been printed. They have been distributed throughout the catchment and are on sale at locations ranging from the Discovery Sphere in Hervey Bay to Barung Landcare in Maleny. A lesson plan based on the book has also been developed. We envisage making the lesson plan, book and associated resources available to local schools in the near future.

Next came the Looking Forward Looking Back project. After a first attempt at a Blueprint for the Bush grant from the State Government, we were successful with a Your Community Heritage grant from the Australian Government and were able to commission local film maker Luke Barrowcliffe, from Goorie Vision, to create a film about the people and thought provoking stories around the catchment. This proved to be a mammoth task, and to help refine the storyline, MRCCC and Goorie vision held six workshops throughout the catchment in early 2013. These workshops dodged the numerous floods and identified significant stories and 'talent' for the film. Our list of 'talent' currently consists of about 120 people and very difficult decisions had to be made to select 35 people to interview. What was going to be a short documentary has now grown into a longer film which we will be showing at seven locations throughout the catchment later this year.

Brad Wedlock and Eva Ford with the new Mary River brochure

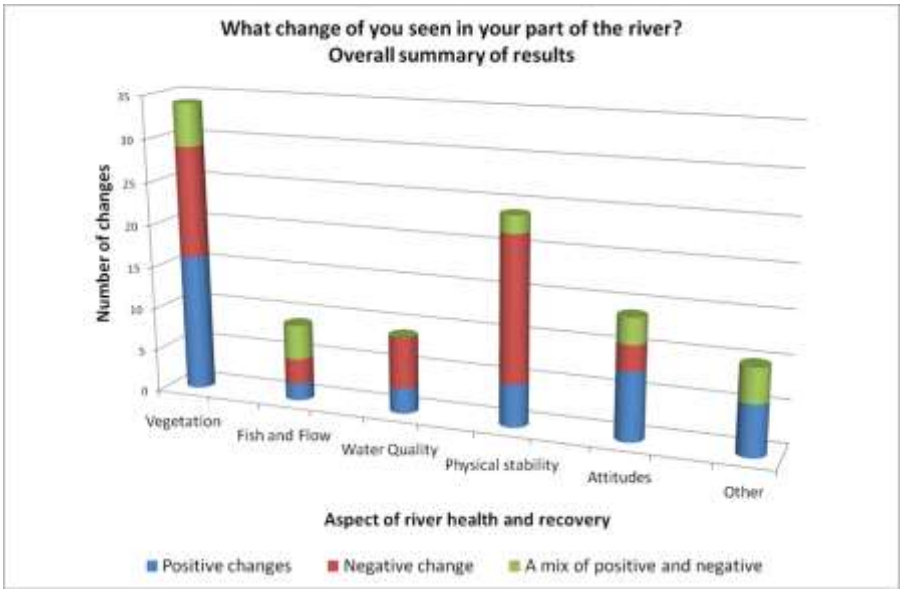
Finally, the Mary River Restoration Stories: Lessons from 20 years of Rivercare project started in earnest in early 2013. This was funded by a Community Action Grant from the Australian Government's Caring for our Country program. The purpose of this project was create opportunities for Rivercarers, past present and future, to come together and celebrate what had been achieved and identify the things needed to be done differently. The first step in this project was the creation of the beautiful "Riparian Health is River Health" brochure in collaboration with local graphic designer Liz Capelin. This brochure provides a snapshot of the significance of the riparian zone, what has been achieved and some of the issues and challenges we need to address.

The floods of 2013 knocked the wind out of the sails of many rivercarers and the project was redesigned slightly to address a need for deeper understanding of how rivers work and how fluvial geomorphological processes impact on riparian restoration projects.

The Widgee Rivercare Forum on 18 July was attended about almost 40 people covering the entire length of the catchment from Hervey Bay to Postman's Track. This first forum aimed to both celebrate past activities and identify factors that help and hinder riparian restoration activities. The forum began with a recap of the last 20 years of Rivercare, presented by both Brian Stockwell and Brad Wedlock. People were then asked to share their stories of their "best moments in riparian restoration" among small groups of fellow Rivercarers. These stories show how we are all motivated by slightly different things, but in the end it generally comes back to making a positive change or being part of the process of making a positive change.

The "What helps?" word cloud was created from statements people made about what they believe helps with Riparian Restoration activities. Larger words were mentioned more frequently than the smaller words. Another word cloud, called "What hinders?" was created from statements participants made about what hinders riparian restoration. Not be taken too literally, these word clouds serve the purpose of providing a quick overview and general sense of what the most important issues are. Evidently knowledge is a key factor, as well as groups and networks to provide advice and to share experiences with. Funding, time and weeds also feature fairly prominently.

A highlight for participants was the walk down Widgee Creek guided by Eva Ford, Brad Wedlock and with input from Brian Stockwell and Glenda Pickersgill. During this work important instream and riparian features were identified and the MRCCC's Riparian Condition Assessment tool was used to explore aspects of this part of the creek.



Top: ***Aspects of River Health***
Middle: ***Gail Smith at the Cooran forum***
Below: ***The "What Helps" word cloud***

Day 2 of the Rivercare Forum in Cooran was attended by about 30 people. The concept of a Mary River Restorers network emerged during the course of this forum and this is an important idea that MRCCC is keen to support and foster. This second forum focused on building social networks and capacity as a result of feedback received at Widgee. We were joined by Robin Clayfield from Earthcare Education who facilitated a session which culminated in identification of a series of project ideas for which there was support among the group. These were revisited at the end of the day and individuals have put their hand up to progress the following ideas:

- creation of subcatchment weed identification resources,
- collection of restoration stories from long term restorers,
- river open days and
- increasing responsible public access to the river.

In addition, the value of social gatherings among river restorers, establishment of an online network and an annual review of progress were discussed. MRCCC would like to help progress these ideas and invite restorers who are interested in helping out to get in touch.

Brian Stockwell (aka Doc Stoc) expounds on river processes on the banks of the Mary River near Cambroon

The group also spent time focusing on the changes they had observed in their part of the catchment. We broke into smaller groups based on subcatchment and discussed changes in vegetation, fish and flow, water quality, physical stability and attitudes. The Mary Valley, Six Mile Creek, Kandanga Creek, Deep Creek, Glastonbury Creek, Kin Kin, the Gympie reaches, the Lower Mary (Tiaro- Maryborough), Cedar Creek and the Upper Mary were considered by the group as a whole and comments regarding Wide Bay Creek were sent in via email. The graph provides a summary of all these responses and whether the changes identified have been positive, negative or a mixture of both. Most positive change has been seen in vegetation and attitudes. People referred to successful revegetation and regeneration projects that have been well established and the greater awareness of the community regarding the river. The greatest negative change has occurred in terms of physical stability associated with bank slumping, landslips, 4WD access, Cats claw creeper, floods and long term change in the fluvial geomorphology.

Overall the stories shared at these forums have shown that the restoration activities over the last 20 years really have made a difference – both in terms of building support networks and social capital and in the amount of vegetation and habitat that has been reestablished, especially at the subcatchment level. In the future, we need to continue to support riparian restorers both with opportunities to connect with each other and to learn new strategies and techniques. We also need to continue to get more people involved and do more monitoring of activities so that we can better assess the effectiveness of our strategies.

Like the Widgee Forum, the Cooran Forum included a walk, this time along Six Mile Creek. Eva Ford and Brad Wedlock guided participants through a specially adapted version of the Riparian Condition Assessment that highlighted key features of the creek system. This work also traversed an established revegetation site that has been a long term project of Noosa and District Landcare.

The final stage of the Mary River Restoration Stories project was the “Learning to Work with Rivers” bus trip around five sites in the Kenilworth area which were selected to illustrate river processes. This bus trip was very popular and was attended by almost 60 people from local and state government, landcare and community groups and individual landholders. The issues, strategies adopted and levels of success were discussed at each site by Brian Stockwell, Brad Wedlock and Eva Ford, with input from Graeme Elphinstone and Peter McAdam.

A booklet was prepared for participants which provided an explanation of the fluvial geomorphological processes affecting each site, the common pitfalls to be avoided if rehabilitating such a site and how the issue was actually addressed. This event met a need for more knowledge about how river processes impact on rehabilitation. Given the very positive response, MRCCC plans to hold similar events in the future which will address the suggestions made on the day. Participants on the bus trip also expressed interest in being part of a network of people who need knowledge about river processes in their job. The MRCCC is particularly grateful to the landholders who allowed us to visit their properties including Elizabeth King, Kacey and George Walker and Mark Needham and Alicia Eugene

Considerable material has been collected through this project, which will be made publicly available early in 2014. Most is likely to be a website where the videos, photos, materials and summaries of participant feedback can be viewed. In the meantime, copies of the Learning to Work with Rivers Booklet are available from the MRCCC in electronic form. You can follow updates on the release of information on the Mary River Restoration Stories facebook page.

The first major riparian rehabilitation project on the Mary River near Conondale – King's site established 1997

MRCCC Representations 2012-2013

Mary Valley Renewal Team	On-going
Mary Valley Economic Development Stakeholder Reference Group for the Mary Valley Lands	On-going
Representation to Qld Minister for Environment & Heritage – Mary River Aquatic Threatened Species Recovery Plan	Sept 2012
Representation to Qld Minister for Agriculture, Fisheries & Forestry – Gympie District FarmFLOW project	Sept 2012
Representation to Member for Wide Bay, Hon Warren Truss MP – Biodiversity Fund project	Apr 2013
Representation to Member for Gympie, David Gibson MP - MRCCC Resource Centre options	May 2013

Policy and Project submissions

Policy or submission	Date
Mary River Threatened Aquatic Species Recovery Plan development with SEWPaC (Fed Govt)	On-going
Qld Government Everyones Environment Grant for Revitalising Waterwatch - successful	September 2012
Qld Government Agricultural Strategy, discussion paper submission	December 2012
Funding submission to Carbon Farming Extension & Outreach program - unsuccessful	December 2012
Submission to Federal Government Senate Inquiry on Effectiveness of Threatened Species and Ecological Communities' Protection in Australia	December 2012
Submission to Federal Government Senate Inquiry on EPBC Act (retaining Federal Government Approval powers)	January 2013
Sunshine Coast Council Rural Futures strategy submission	February 2013
Qld Government 30 year Water Strategy discussion paper submission	March 2013
Funding submission to Community Landcare Grant for publication of Western Mary Grazing Land Type booklet - successful	May 2013
Reef Rescue #2 Grazing Land Program funding submission – not decided	May 2013
Sunshine Coast Council Community Partnership Funding Program 12 month funding submission - successful	June 2013
BMRG Organisation Reform submissions	July 2013
Queensland Plan – a 30 year vision, submission	Aug 2013

Workshops, Festivals & Field-days

Pasture field day, Long Flat, Gympie	Sept 2012
Mary River Festival, Kandanga	Nov 2012
Mary River aquatic threatened species for graziers workshop, Kandanga	Dec 2012
Suncoast FarmFLOW pasture field day, Kin Kin	Feb 2013
Something About Mary workshops, Maryborough, Gympie, Kenilworth, Conondale, Maleny	Feb 2013
Maleny Precinct streamfrog workshop, Maleny	Feb 2013
Looking forward, Looking back – historical stories workshops, Kilkivan, Teebar,	
Suncoast FarmFLOW pasture field day, Kureelpa / Mapleton	Mar 2013
Pasture field day for Mackay Rural Production Society, Long Flat Gympie	Apr 2013
Water quality & fauna field-walk, Cooloola Coastcare, Cooloola Cove	
Love Mary day, Tiaro	May 2013
Showcasing Reef Rescue Grazing Land Projects, Widgee	May 2013
Festival of Water, Lake Macdonald	June 2013
Mary River Restoration Stories, Rivercare Forum Widgee	July 2013
Mary River Restoration stories, Rivercare Forum, Cooran	Aug 2013
Tiaro Waterwatch workshop	Sep 2013
Gympie Waterwatch workshop	Oct 2013
Kenilworth Waterwatch workshop	Oct 2013

School Activities

Activity	Location	Date
St Patricks College (Years 11/12), waterway assessment	Gympie Weir	**Sept 2012**
Sustainable Schools Symposium	Gympie South	**Oct 2012**
Rainbow Beach SS - Waterway Health	Rainbow Beach	**Mar 2013**
Senior biology Gympie SHS aquatic ecology field trip	Amamoor Ck	**May 2013**
Kenilworth Homestead, annual Hong Kong student outdoor education program	Kenilworth	**July 2013**
Smart Steps Expo, University of Sunshine Coast	Gympie	**Sep 2013**
Mary Valley Sustainable Schools Symposium	Imbil	**Sep 2013**
St Patricks Year 9 Mary River Information Day	Gympie	**Sep 2013**
University of Qld -Social Impact Assessment - Guest lecture	**St Lucia**	**Oct 2013**

Noosa Landcare celebrates 21 years since incorporation. Image courtesy of Luke Barrowcliffe, Goorie Vision

Landcare in the Mary

Noosa Landcare

Noosa & District Landcare Group [NDLG] continues to work closely with the Mary River Catchment Coordinating Committee [MRCCC] to look after the health of the Mary River catchment. NDLG has a Waterwatch arm, 3 Nurseries producing local endemic species for revegetation and also has considerable capacity to engage in on ground work. With a contract crew of 15 experienced staff, we can kill the weeds and plant the trees to help restore our special region. This year saw the celebration of 21 years since the incorporation of the group, which has grown from humble beginnings to become a strong part of our community with 250 members. For more information about Noosa Landcare, visit www.noosalandcare.org.au

Some of Tiaro Landcare's dedicated band of Mary River turtle nest protection volunteers

Tiaro Landcare

Tiaro Landcare's focus has continued to be on conservation of the endangered Mary River turtle (*Elusor macrurus*) and its habitat. In the past year, twelve nesting banks were monitored (Tiaro, Traveston, Kenilworth reaches) with 32 nests protected resulting in 305 hatchlings successfully emerging. The project attracted volunteers from USA & Brazil.

Mary River turtle support scholarship holder, Mariana Campbell was awarded her PhD at The University of Qld. Her thesis was "Habitat requirements for nesting and early life stages of the endangered Mary River turtle" with four papers published in international journals.

Record crowds attended the Tiaro Farming and Lifestyle Field Day in July 2013

$5,000 was donated to the Eco-lab of UQ to support research into the movement patterns and habitat usage of the Mary River turtle and white throated snapping turtle.

Eleven hydrophones (listening stations) were installed in the river. Thankfully six hydrophones survived the 2013 floods which, when the data is analysed, will improve our understanding of what happens during major floods.

Sales of chocolate turtles are a valuable source of funds for our turtle project. A major coup for our Group was the Australia wide fund raising campaign run by Australian Geographic during May and June 2013 for Tiaro Landcare's Mary River turtle project.

The fishing competition was held in October 2012 at Tiaro. The theme is catch for fun and release for the future. It is a great opportunity to interact with and increase their awareness of the aquatic creatures with many who regularly use the river for recreation.

Record crowds attended the biennial Tiaro Farming and Lifestyle Field day in July 2013. The event continues to grow in popularity with a record crowd of approx. 2,500 and 93 stalls. The combination of presentations, workshops and demonstrations in addition to trade displays and stalls seems to attract the crowd. It injects considerable dollars into the Tiaro economy as well as having a high educational and social contribution. The success is due in no small part to the commitment of the organising team from Tiaro Landcare and the Tiaro Chamber of Commerce. For more information about Tiaro Landcare, visit www.maryriverturtle.com

Gympie Landcare

Gympie and District Landcare Group's revegetation nursery at the corner of Old Maryborough Road and Groves Road is the organisation's flagship and central hub. Volunteers and Landcare members contribute over 300 hours each month to provide the community access to 250 local native species. The addition of aquatic plant displays, vine arbors, nesting boxes and Valley Bees' solitary bee wall and social bee hives have added educational value to the site. The nursery facilities have successfully hosted events by the Gympie Field Naturalists and Valley Bees and are used on a regular basis by several local community groups.

Gympie Landcare has also relies on our volunteer base to further the biocontrol facilities, which now boast a facility manager one day a week. Tingid Bugs for Cats Claw Creeper are consistently available on order, and separate enclosures provide capacity for rearing the leaf eating Jewel Beetle (Cats Claw Creeper) and *Plectonycha correntina* for Madeira Vine control. Funding recently announced from the Everyone's Environment Grant Program will augment the biocontrol program, increasing insect production and providing a part time extension service.

Support from Energex and BMRG has enabled Landcare members and volunteers working on bush regeneration at Nils Buchanan Messmate Park, Kia Ora, to take work a step further with contractors helping with reduction of WoNS infestations and construction of access paths. Technical advice and contract landcare services are available to landholders on enquiry. Contact Gympie Landcare on 5483 8866 or email admin@gympielandcare.org.au

Gympie Landcare's Cat's Claw Creeper control volunteers take a break near Little Yabba Creek

Barung Landcare

The past year has been one of readjustment for Barung Landcare, closing the Riverside Plaza office and relocating to the Hinterland Business Centre, and moving all of our plant production staff, volunteers, contracting staff and advocacy services to our Landsborough facilities.

The Barung Nursery in Porters Lane

The Porters Lane site will continue as a Retail Nursery, albeit with a plan to make it more attractive and to better market out plants. Barung's aspiration continues to be that we establish an Education and Resource Centre on the Maleny Community Precinct (including a retail nursery), having an adequate area to display the unique flora of the Blackall Range featuring specimens of timber species, endangered species, bush tucker plants, butterfly plants, plants for fruit pigeons, etc.

Barung has been chosen as one of just seven community nurseries nationally to participate in the Village Nursery Project. This trial project, funded by the Westpac Foundation through Landcare Australia Limited, aims to provide job skills and training support to disadvantaged youth and community groups in regional areas through the provision of a range of ecological, social and economic initiatives provided by community nurseries. Barung has chosen to work with refugees seeking asylum in Australia. We have had up to four refugees volunteering in our nurseries one day a week so far.

As well as hosting and participating in community tree plantings, field walks, workshops, educational activities and Susie Duncan's Hinterland Links Bushcare project, Barung Landcare also hosted a very successful Wood Expo at the Maleny Showgrounds this year, with great weather and excellent attendance.

Barung now auspices three groups through a MoU so that their activities can receive insurance cover. The first is Range Bees, a group concerned about the future pollination of our food crops and the natural environment by honeybees, native social stingless bees and native solitary bees. The two new groups this year are the Children's FEASTival Garden Project, an educational program run by Kate and Madhu Kazony and introducing children to community gardening via after-school sessions, and the Mooloolah Valley Planters and Weeders, a group of land owners who meet regularly on their properties to do weeding and revegetation work.

For more information about Barung Landcare, visit our website at http://www.barunglandcare.org.au/

Cooloola Nature, Kelvin and Amelia Neilson

Our "Bird Trails of Cooloola" website is progressing well, with Brooloo Bellbird Habitat, Amama Picnic Grounds, Marys' Creek, Stirling's Crossing and other sites being added, to the "Bird Trails" web pages which can be accessed at http://www.birdingcooloola.org.au/bird-trails-of-cooloola.html. The Bird Trails website provides directions and accommodation information for some of Cooloola's local attractions, as well as providing information about a range of birds in the area.

Our first survey of Dagun and surrounds has been undertaken, with two more to follow, (Spring and Summer). Dagun will eventually have its own colourful brochure to promote its' local birdlife! Last month we camped at Cedar Grove and recorded a very impressive dawn chorus. Audio files of the dawn choruses and videos of sites will be added to the website next year.

The "Tin Can Bay Foreshore Birdwalk", (the first two sites on this walk with the other nine to follow), has been another recent addition to "Bird Trails of Cooloola".

Valley Bees , Athol Craig

This group continues to offer topics and activities to attract people interested in all-things-bees and pollination. Our meetings, held at Kandanga Hall on the 2nd Sunday of each month at 1-30pm, have been very well attended. The overwhelming support and popularity continues to surprise us. Workshops (in all aspects of bees) held throughout the year have all been filled to capacity.

We hosted our Native Bee day in April at the Landcare Nursery. Our presenters were led by Dr Tim Heard from CSIRO who was supported by numerous native bee experts and enthusiasts. The day was attended by people from as far afield as Emerald, Rockhampton, Toowoomba, Brisbane and the Gold Coast. All went home well informed on native bee entomology, hive management and the role native bees play in pollination. This will continue to be an annual event.

Valley Bees is constructing this impressive BeeWall at the Gympie Landcare Nursery.

Our Bee Open Day held at Kandanga Hall was attended by over 280 people, and the hall was packed to capacity by exhibitors (see image top right). A hugely successful day, the town was aBuzz! Once again, this will no doubt be an annual event, with the search on next year for a larger venue to cater for increased visitors and many more exhibitors showing interest.

We continue to support local events with colourful displays and manned stalls - shows, garden shows and festivals. These spread the bee message and attract an on-going interest from the public. The fascination continues.

The solitary bee wall and native hive display at Gympie Landcare has been constructed by a team lead by Vic Finney. This is very much an on-going project, so keep tuned in and watch the progress! We thank Landcare for their wonderful support. MRCCC has been a key element in the success of Valley Bees, and we look forward to more exciting activities in the coming years.

Donalee makes Standup Paddle boarding look easy

Lake Macdonald Catchment Care

Noosa Festival of Water

The Festival is the largest activity on the MRCCC's educational calendar each year. Held at the Noosa Botanic Gardens and Lake Macdonald Amphitheatre, this year's Festival took place on Sunday 30^{h} June 2013 attracting an estimated 2000 people.

The Lake Macdonald Catchment Care group stages the Noosa Festival of Water each year to raise awareness and improve understanding of biodiversity and ecological issues in the Lake Macdonald subcatchment and the Noosa and Great Sandy Biospheres. Activities, presentations and displays organised for the Festival are mostly associated with environmental care, sustainability and ecological issues.

The Festival also showcases Lake Macdonald and the Noosa Botanic Gardens as a high quality recreational destination with a wide range of facilities suitable for all age groups. The 2013 Festival was sponsored by the Sunshine Coast Council, Noosa Biosphere Limited, the Great Sandy Biosphere/BMRG, and Seqwater. In-kind contributions provided by MRCCC, Noosa Landcare, Sunshine Coast Council and a whole host of community organisations towards coordination and staging the Festival are significant, far outweighing the funding provided from sponsorships and grants. We were pleased to welcome Sunshine Coast Councillor Tony Wellington to open the 2013 Festival, and a number of new exhibitors including the Friends of the Noosa Botanic Gardens and the Dagun Farmers Market with loads of fresh Mary Valley produce.

Activities on the lake this year included a Catch and Release Bass Fishing Competition, which attracted over 30 entrants from across south east Queensland. The Fishing Comp was supported by Ed Van der Kruk from Hooked on Angling and Outdoors at Tewantin, with the major prize of an Esprit fishing kayak provided by Sunshine Coast manufacturer, Viking Kayaks. All funds raised by the Fishing Competition were donated to the Gerry Cook Hatchery at Lake Macdonald towards the cost of the breeding program for the endangered Mary River Cod. Thanks to BCF Noosaville who provided hourly prizes at the Kid's Fishing Clinic. Other watery activities included free trials from Noosa Stand Up Paddle Boarding, and the Noosa Yacht Club, who offered free sailing tuition in 12 foot dragon boats. Ian Harling of Imbil bike and canoe hire provided free canoe tuition, giving people an opportunity to explore Lake Macdonald.

2013 was the first year that the Festival was promoted through television advertising, which may have been responsible for a perceived increase in numbers on the day.

Top: The Amphitheatre on Festival Day
Middle: Ari Wedlock checks out macroinvertebrates at the MRCCC display
Below: Lucy Ricketts with friendly black headed python

Following on from the success of the 2013 event, the Festival Organising group is starting to plan for the tenth annual Festival on Sunday 29th June 2014. The successes and lessons learned from this and previous years' Festivals will be taken into consideration during planning and preparation to ensure the Festival continues to grow and evolve, and continues to meet its aims and objectives

Waterwatch volunteers 2012-2013

Gordon Agnew		Spencer and Lesley Innes
Eric Anderson		Tracy Jamieson
Keith and Christine Bagnall		Errol Janke
Susan and John Bailey		Rob and Kathy Kerle
Mick Bambling		Ross Kinbacher
Anette Bambling		Will Kingham
Matt Bateman		Mary-Ann Law
Matt Baxter		Max Landsberg
Malcolm Beresford		Christopher Lee
Mark Bews		Iain Lewis
Gary Buchanan (HQ Plantations)		Shane Litherland
David and Rosemary Burnett		Ian Mackay
Qld Parks & Wildlife, Kenilworth		Lorne and Ross Maitland
Jason Buckley, Nick's Readymix		Brett and Tammy Marsh
Jeff Clifton		Karyn Maher
Di Collier		Widgee State School, Robert Lonergan
Nina Cox		John Mayze
Gillian and Yvonne Crossley		Bec Owen
Kathleen and Steve Dennis		Cath and Colin Robinson
Graeme Draper		Kev and Helen Rogers
Noo Dye		Spencer Shaw
Geoff Farr		Des King and Colleen Ryan
Jo Ferrier		Brian Thomas
Bob Fredman		Neville and Joy Turner
Les and Inge Geigler		Dominic Tyrrell
Phil Grove		Kacey Walker
Janet and David Golding		Graeme White
Beverly Hand		Scott and Lyn Woolbank
Narelle Hall and Stephen Horseman		Bart Schneeman (HQPlantations)
Leslie and Craig Hanson		Elke Watson
Bob and Lorraine Hood		Don White (HQPlantations)
Cam and Lisa Hughes		David Wilson
Kent Hutton		


insight

















maryriverfestival

SATURDAY 9th NOVEMBER 2013

Kandanga Rec Ground, Spicers Park, Mary Valley, 12 noon - late

Cheap Fakes

$2 entry

Hat Fitz & Cara

Barry Charles & the Deeper Beat

Cleveland Blues,

Miss Katy & the Wise Fools,

Carl Lynch Trio, Insingc Choir,

My Current Addiction, Eb 'n' Flo

The Floating Bridges at the Kandanga Hotel 9pm

Muso's Jam Tent Food & market stalls
Children's activities Circus fun
workshops talks movies twilight parade
Tree planting evening Projection Art
re-created Mary River 'swim' project
and much more....

Overnight camping available

Contacts
Jane 5483 5273 (Stalls)
Jodie 0417424720 (Workshops)
Glenda 0411443589 (Tree Planting)

Funding received from [illegible] a Queensland Government partnership with Gympie Regional Council

Coordinated by CoolArts Gympie and Save the Mary River Coordinating Group

HANDY HIRE
GYMPIE REGIONAL COUNCIL
Bendigo Bank
Kandanga Hotel
Gympie Times
MARY RIVER CATCHMENT COORDINATING COMMITTEE
Classic Hits 107.1 fm noosa
4GY 558am

www.maryriverfestival.org.au

Your notes……

MARY RIVER

CATCHMENT

COORDINATING COMMITTEE