



Watery Sauces Oldies and Boldies

Newsletter No 103

November 2023

NEWSLETTER OF THE WATER RESOURCES RETIREES ASSOCIATION

Coming Up ...

Port of Brisbane & Fort Lytton Visit

Wednesday, 8 November 2023 – 9.30am to 1pm

By the time this Newsletter goes to press, bookings will have closed for the next WRRRA event. Our visit to the Port and Fort Lytton will start at the Port of Brisbane Visitor Centre at 9.30am. From the Observation Deck, which gives us a good view over the Port, the visitors will see the daily activities of the Port and learn from the tour guide how an efficient and sustainable port operates. They will also see how the environmental values of the area are protected.

A one hour bus tour around the port will be in a 25 seater bus organised by the Port Authority for the WRRRA group only. Bishop Island lies somewhere under where the Port now stands. There will be a good view of Brisbane's Cruise Terminal across the river at Luggage Point.

At around 11am the tour will head off to Fort Lytton. The site has an interesting history with Fort Lytton constructed in 1881 to protect Queensland from the possible invasion by the Russians or French (Noumea was only three days sailing away) but the area has also served as a Quarantine Station, Customs and various military functions from the Boer War, World War I and World War II.

A guided tour around the site will take about 1½ hours so it is expected to finish a bit after 1pm which will give time for lunch at nearby hotels.

From the Editor's Chair

A fellow retiree told me recently that advancing age must be making him stronger – he now finds it much easier to lift a \$200 grocery order than before. Cost of living pressures are clearly having their impact and while higher interest rates may be unwelcome for borrowers, low interest rates do not go down well with self-funded retirees. Worker shortages may be relieved by increased migration, but that won't help the housing crisis or the infrastructure gaps. Who'd be a politician who won't understand that what is needed to solve all our problems is more spending and lower taxes?

But, mustn't complain.

Until next time, au reservoir.

Ian Pullar, Editor

*Best wishes
from WRRRA
for Christmas,
New Year and 2024*



Christmas Luncheon

After having found the German Club in Vulture Street where we held our mid-year luncheon, ever-vigilant Gary Corbett has continued his investigations and has located what appears to be an attractive option at the Coorparoo RSL and Community Club.

A booking has been made for a Christmas style luncheon at that venue for **Tuesday 28 November**. Secretary Peter McMahon has circulated details to members and will be making final bookings on behalf of potential participants. Invitations have also been issued to our Co-Patrons and both have the event in their diaries.

These luncheons are always enjoyable with good company and good memories, so it would be good if this one attracted a strong attendance.

Regional Events

Following the success of the centenary events organised last year (mostly by Bruce Pearce and Gary Corbett) the Committee is very keen to see follow-ups. As part of the leadup to these events last year, Bruce and Gary had put together a fairly extensive list of associates and members. In recent months, the Committee circulated to them an offer to provide financial support for any Regional Group prepared to organise a get-together. Central Region members, who have already been holding such events, will be given such support.

Some Toowoomba members have now put their heads together and have decided to proceed with an event, which has given the Committee a real thrill. We are absolutely delighted and look forward to receiving the details once they have been formulated.

We would also love to have other Regional groups taking up the challenge – and the sponsorship dollars!

Theodore Centenary

On the last weekend of June, 2024, the Theodore Chamber of Commerce and the Theodore Historical Society will be hosting a series of events to mark the Centenary of the first irrigation scheme in Queensland. Information is available on their websites for any members who would be interested in participating.

2023 WRRR Annual Golf Day

This year's WRRR Annual golf day was held at the Wynnum Golf Club with a field of nine players with some new faces in Ken Ward, Mick Neubecker and Peter Simson from the former Construction and Laboratory sections of the Commission.

Once again the field competed for prizes under the 9 hole stableford format and this year's champion was another Tony, this time Tony Farrell a guest from the Pacific Harbour Club on Bribie. Tony won with a commendable 20 stableford points from yours truly with 17 and Mick Neubecker with 15.

This year's encouragement award went to Peter Simson who won on a countback from Jinaraj and Ken Ward. Tony doubled up by winning the nearest to the pin.

The field was limited by the unavailability of some of our regular players so hopefully we will have a better roll-up next year as we intend to return to Wynnum which is a wonderful venue.

Special thanks go to our secretary Peter McMahon for organising the day and to the Wynnum golf club for their hospitality.

Former President Pete

In my hand I hold a ball,
White and dimpled, rather small..
Oh, how bland it does appear,
This harmless looking little sphere.

By its size I could not guess
The awesome strength it does possess.
But since I fell beneath its spell,
I've wandered through the fires of Hell.

My life has not been quite the same
Since I chose to play this stupid game.
It rules my mind for hours on end;
A fortune it has made me spend.

It has made me curse and made me cry,
And hate myself and want to die.
It promises me a thing called par,
If I hit it straight and far.

To master such a tiny ball,
Should not be very hard at all.
But my desires the ball refuses,
And does exactly as it chooses.

It hooks and slices, dribbles and dies,
And disappears before my eyes.
Often it will have a whim,
To hit a tree or take a swim.



From bottom left: Ken Ward, Peter Simson, Peter McMahon, Graham Young, Terry Loos, Jinaraj Rajakaruna, guest Tony Farrell, Peter Gilbey and Mick Neubecker.

With miles of grass on which to land,
It finds a tiny patch of sand.
Then has me offering up my soul,
If only it would find the hole.

It's made me whimper like a pup,
And swear that I will give it up.
And take to drink to ease my sorrow,
But the ball knows ... I'll be back tomorrow.

Stand proud you noble swingers of clubs and losers of GOLF balls.

A recent study found that the average golfer walks about 900 miles a year.

Another study found that golfers drink, on average, 22 gallons of alcohol a year.

This means that, on average, golfers get about 41 miles to the gallon!

Kind of makes you proud. Almost makes you feel like a *hybrid*.

Sent in by Chris Robson – thanks, Chris. My personal knowledge of golf is limited to the wonderful Golf stories by P G Wodehouse who wrote (among many other things) “A woman is only a woman but a hefty drive is a slosh.” And of course Mark Twain wrote “Golf is a good walk spoiled.” – Ed.

No one knows for certain how golf began. Most scholars think the name derived from the German or Dutch word for club *Kolbe* or *Kolf* and that some form of the game came from primitive times when men, particularly shepherds, hit stones with a stick. The modern origin is supposed to be in Scotland near St Andrews when a shepherd was idly hitting pebbles with his crook and one went into a rabbit hole. When he tried to repeat the shot, a friend who was watching challenged him. The first golf match in the land of the heather resulted with each player trying to sink his pebble in the rabbit hole.

This tadpole won't disappear- St George office

When they built the Water Resources building at St George all those years ago, they must have built it in the mistaken belief that 'water' as we know it would be around for years as the emblem looks like it was never intended to be removed. I have not seen an emblem of such permanency before but it certainly brings back many treasured memories.

Gary Corbett (photo by Mal Irwin)



Chris Robson found this photograph of IWSC officers c 1975 among his memorabilia. The competition, dear reader, is to see how many of them you can identify.

Sadly, we report the deaths of several former colleagues.

Dave Dewar was a Works Clerk at Wuruma, Beardmore, Fairbairn, Gooburrum and Fred Haigh (twice). Married to Kaye who also worked in the office at Fred Haigh, Dave followed his last posting there by taking up a position with the Bundaberg Regional Hospital. He also worked in Head Office in the late 60s in Accounts Branch. Dave and Kaye retired in Bundaberg.

John McHugh worked his way up through the ranks to achieve the important position of Works Supervisor. His vast experience was achieved with his work at Borumba, Coolmunda, Perseverance (Toowoomba Council), Beardmore, Fairbairn, Wivenhoe, Fred Haigh & Bundaberg. John's wife Val worked in the role of cook in the single quarters. John and Val retired in Gympie.

Ron Barff passed away in July aged 88. He worked in the Mechanical and Electrical drafting area in Head Office.

Jennifer Pearce, widow of Bruce, died in her sleep on 8 October.

President Chris Robson recently underwent shoulder reconstruction surgery which rendered him a 'one-handed computer keyboard warrior'. Despite this handicap, he has also enjoyed a holiday in Victoria.

Vice President Greg Claydon has undergone triple bypass heart surgery and has reported, "All the medicos keep telling me my surgery and recovery have all been 'fairly routine' and I have been progressing 'very, very well'. It hasn't always seemed that way to me and triple bypass open heart surgery is a 'once in a lifetime experience', best avoided I suggest."

DRDMW News

Kate Ryan

Kate is the Executive Assistant to the A/Director-General, Linda Dobe.

It has been a busy few months in the department. Below is a snapshot of Water accomplishments and key project updates.

Water Act amendments pass

In September the department reached an important milestone in parliament when the Water Legislation Amendment Bill was debated in the “house” and was successfully passed. The main purpose of the amendments is to provide a regulatory framework to implement a stronger non-urban water measurement policy. In practice, the new legislation creates a framework for increased transparency and assurance that water is being appropriately shared and managed. It will support both water users to meet their water entitlement obligations and water markets to drive regional economic growth.

The department’s role as a regulator

This role is vital but often not well understood. A new ‘Our role as a regulator’ video is helping to address this, clearly explaining DRDMW’s role as an environmental, public health and safety regulator – all in under 2 minutes. You can watch the video [here](#).

WRM regulatory staff recently attended a conference of the National Regulators Community of Practice in Melbourne. This group of government regulators gets together regularly to share insights on best-practice regulation. [Find out more about the conference.](#)

A western Queensland quarry operator pleaded guilty to various charges in the Queensland Magistrates Court today and was fined \$630,000 in total and ordered to pay \$66,358.90 in royalties plus court costs. Read more [here](#).

From QBWOS to Queensland Water Strategy

Earlier this month a draft Queensland Water Strategy was released to community and industry for review. The strategy brings together the sector-wide effort and initiatives that communities, government and industry are undertaking now, along with planning for the future. Building on the foundation of Queensland’s Bulk Water Opportunities Statement, it will be complemented by the Strategic Water Infrastructure Plan and a pipeline of projects to be finalised in 2024.

Climate change chat at Qld Water Symposium

At the Queensland Water Symposium Director of Dam Safety, Chris Nielsen, delivered a keynote address jointly with Dr Conrad Wasko, an Australian Research Council DECRA Fellow at the University of Melbourne, focusing on climate change and flooding. They discussed their contributions to an upcoming revision of the ‘Climate Change’ chapter of *Australian Rainfall and Runoff*, a national guideline for estimating flood characteristics. The presentation included draft projections of increasing rainfall intensities as temperatures rise, and the revision will help water professionals factor in climate-change impacts when preparing for flooding.

Rookwood 98% milestone

A concrete pour for the crest of Rookwood Weir was completed in September, bringing the weir to 98% completion. A final concrete pour of the structure is due in coming weeks. DRDMW is the weir’s owner, with Sunwater working as State’s agent to deliver the weir package. We celebrated the pour milestone with Sunwater at 1 William Street which included a ‘Lessons Learnt’ wrap-up. The weir is due for completion in November 2023.

Many thanks, Kate, for this contribution – Ed.

Sunwater Snippets

Julian Murphy

Julian is a Senior Media and Communications Adviser

Rookwood Weir

Construction of Rookwood Weir, on the Fitzroy River 66 kilometres south-west of Rockhampton, is close to completion (*see also DRDMW News*). The spillway comprises 13, 16.2 metre-high by 15.5-metre-long monolith structures, each with an ogee-shaped crest for ease of water flowing over the weir. The weir structure requires 131,000m³ of concrete, with 53,500m³ of that used in the spillway.

Burdekin Falls Dam Raising and Improvement

Improvement works will ensure the dam’s long-term viability by increasing resilience to extreme weather events, bringing it in line with modern engineering design standards, and ensuring it meets safety requirements.

A raising of two metres would increase the storage capacity by approximately 574,240 megalitres, or 31 per cent, to support North Queensland’s agriculture, aquaculture, mining, and energy industries. An environmental impact statement will assess potential environmental, economic and social benefits and impacts.

Industry briefings in Brisbane and Townsville for consultants, contractors and suppliers, provide details about future business opportunities and contract packages.

Mareeba Dimbulah Water Supply Scheme Efficiency Improvement Project

Sunwater has completed the construction component of this project to deliver more than 8,000 ML of additional water for customers. The improvement work took place across six areas within the scheme and included the replacement and installation of 14 km of pipeline, the installation of 125 automated control gates in irrigation channels and the upgrade of 157 water offtakes.

Once the savings are confirmed, by Sunwater and DRDMW new water allocations will be made available for sale. The project will enhance water delivery to more than 17,000 more hectares of farmland.

Coolmunda Variable Counterweight

A range of activities will enhance the dam’s reliability and improve the catchment’s flood warning network. Upgrades to counterweights in the dam’s gates will ensure their ongoing reliability, while downstream bank erosion damage caused by flood events will be addressed to prevent further bank loss.

Sunwater Snippets *(continued)*

A custom-designed lifting frame has been constructed to extract four 15-tonne weights from their vertical gate chambers as a traditional crane is unable to complete all the required lifts. The counterweights have been in service since the gates were installed in 1968.

Repairs are also being delivered to flood-affected areas downstream of the dam, filling them with rock and concrete to strengthen the banks for future flood events.

Wet season preparedness – sirens testing

Audible testing of emergency sirens at Kinchant, Teemburra, Paradise, Coolmunda, Callide and Fairbairn dams was carried out in October as part of our annual wet season preparedness. The sirens are only activated in the unlikely event of a dam failure as part of its Emergency Action Plan, ensuring downstream communities receive urgent warning alerts. The sirens are not activated during water releases or standard flood operations.

A Murray Darling Basin Oral History Margaret Cook

The Murray Darling Basin (MDB) has had a long history of human occupation by First Nations' people for thousands of years. Since British colonisation the rivers' waters have provided overland flows, potable supplies for towns, and irrigation that have fed Australia's population and developed towns and agriculture. The water flows play a vital role in Australia's social and cultural life. People living within the Basin have complicated relationships with this water that are shaped by local geographies, politics, climate, and other factors within changing historical contexts. Important research questions are how has the MDB changed over time and how can lived experience and stories told from past generations inform Murray Darling Basin Authority (MDBA) management policies in the future, particularly in light of the impending revised Basin plan?

As an historian and working through Latrobe University, I am part of a four-person team interviewing people in multiple sites in the four states within the Basin to record these lived histories and these relationships over time. Around 150 interviews will be conducted over twelve months with First Nations' people, irrigators, dryland farmers, fishers, birds and environmentalists to record multiple perspectives and viewpoints.

So far, the interviews are providing fascinating material that reveals the complexities in the MDB and raises many challenges for future management. How do you manage competing interests of those who want to maximise water use for agricultural production with those who want to increase environmental flows to preserve wetlands and RAMSAR listed bird habitats? How much water should be regulated and released upstream to maintain flows for those downstream? How have water policies in the MDB affected those living in the Basin and impacted in the river? Interviews have revealed multi-generational histories of living on the same parcel of land through drought and floods, changing agricultural practices and fluctuations in on-farm economics.

Water levels and announced allocations

During the last wet season many of our dams reached 100% providing a welcome boost to water security. However, drier weather is forecast. All water supply schemes with high priority water have been allocated 100% of their entitlement for 2023-24. This is the case for the second consecutive year. Only six water schemes will start the water year with medium priority allocations at less than 100% but all are above 50%. Current Sunwater storage levels can be found here:

[Sunwater: Storage Levels](#)

Irrigation Price Path

Sunwater provides irrigation services to 22 bulk water supply schemes and four distribution schemes. We are required to submit a proposal to the Queensland Competition Authority of proposed services, expenditure levels and irrigation prices for each service contract area for the period 1 July 2025 to 30 June 2029.

Many thanks, Julian, for this contribution – Ed.



The interviews will be transcribed and analysed thematically to provide input to the decision-making process for future policies in the Basin.

In less than six months the overwhelming revelation has been the complexity of issues and the challenges of meeting the competing needs. But the project has been invaluable in capturing the rich stories, life experiences and multiple voices to record the lived histories and memories of the Basin.

Recently, Margaret interviewed a number of people in and around Moree, Bourke and Cunnamulla. When I say 'around', they were often 60 km or so outside of town and often outside telephone coverage. Helen flew to Cunnamulla to provide her with a companion for the very long drive back to Ipswich (and a bit of mother-daughter time). – Ed.

Lifesaving

Rolf Rose

Lifesaving season started again on 16 September 2023 at the start of the September school holidays. My involvement started when my daughter, Erika, commenced under 8 Nippers in 1999 with the Sunshine Beach Life Saving Club. From about 3 or 4 years old she said she was going to do Nippers.

Initially my wife Maria and I helped out with the activities on Sunday morning but by the time Erika progressed to under 10s I ended up being Age Manager but the year before, I became an official for surf carnivals. Being an Official made for a long day with the water events being the most pleasant since they were at the water's edge where it was cool, but you were roasted further up the beach for flags and beach sprints. For flags the course was often hosed down since the competitors ended up being roasted while they lay on the hot sand at the start line. During this time, we went to State carnivals in Mackay and Kirra. The Mackay event was held at the harbour and at the visit to the Surf Lifesaving Club they showed us their rogues gallery of box jelly fish and stone fish just to name a few. For my daughter, nippers provided her with a range of skills in the surf, but also life skills for dealing with a range of issues.

In 2006 Erika completed her Surf Rescue Certificate and we both started patrols at Sunshine Beach. With twelve patrols rostered in the Club we ended up being on patrol on average once every three weeks. The morning patrol, from 7am to noon, is the best since all you have to do is take the equipment down to the beach and set up, and weather wise, the morning is the best. The afternoon patrol is from noon to 5pm and then you have to pack and wash down everything and store it in the club house and the weather often is more miserable in the afternoon. Often tourists go for a swim after the patrols have finished and get into difficulties and then some patrol members have to go back down and rescue them.

The Surf Rescue Certificate was nearly a Bronze Medallion but you only have to swim 200 metres in 5 minutes whereas the Bronze was a 400 metre swim in 9 minutes. This was a major step from my 1960 Department of Education *Swimmer's Certificate* which stated I passed the following tests, "swim 20 yards in deep water; swim 10 yards on the back, tread water (10 secs) and return to starting point; and plunge head first from water level". With this early swimming training I was never fast and for the 400 metre swim I usually had 1 to 3 seconds spare. I used to mention to the time keepers to stop the timing before the 9 minutes as I would get there in the end. I found doing the surf swim an interesting experience since I was the slowest swimmer and out there alone in the deep green ocean I would start humming "da dum, da dum", the *Jaws* theme music as I swam back into shore.

The Bronze is a Certificate III qualification and includes run, swim, run in the surf, first aid, CPR, tube and board rescue, signals, radio and in addition I obtained qualifications in Advanced Resuscitation Techniques (defibrillator and administering oxygen) and operation

of Side by Side Vehicle (formerly known as All Terrain Vehicle, ATV) and tractor. It is easy to bog the tractor and SSV in the soft sand especially when towing a half tonne jet ski. There is a high level of accountability in surf lifesaving especially since we deal with the public. Patrols on average have about 14 members which includes a number of juniors, a Patrol Captain and Vice-Captain, Jet Ski operator and IRB (inflatable rubber boat) operator and crewie. The number of members is reasonable since often members have commitments and often cannot obtain a replacement for their patrol. Patrol members come from a varied range of professions including engineers and doctors.

Sunshine Beach can be quite dangerous and at most times there are rips on either side of the flagged areas and in particular at the headland at the northern end of the beach (about a kilometre from the patrolled area) depending on the wind and wave direction a serious rip exists and unfortunately there have been a few drownings over the years. The danger from a rip is that the water seems quite calm enticing people to swim there. Most of our rescues are of people who are either too lazy to walk to the flags or think the calmer water in the middle of the rip is the best place to swim. They generally try to swim straight back and become exhausted instead of swimming at right angles to the rip and then come in to shore. Fortunately, there have been no deaths in the patrolled area. During patrols, roving patrols are carried out to the headland and further to Alexandria Bay. In the seventeen years I have been patrolling our Patrol has not witnessed any shark sighting except for a four metre Tiger Shark which was caught on the drum lines. Sunshine Beach only has four baited drum lines about 300 metres offshore but they do catch sharks.

Most patrols are uneventful with only preventative measures undertaken to keep people within the flagged area but this becomes difficult especially when there is a strong sweep either northerly or southerly depending on the wave or wind direction.

A couple of the more notable events over the years highlight the range of actions undertaken.

(i) While you expect most of the issues to occur out in the water, a young chap came to us asking to look at his father. He was lying on the beach having a heart attack. After about half an hour undertaking CPR, while administering oxygen, together with three shocks with the defibrillator, the last of which was by the ambulance officers, he came around and was taken to hospital. A week later the Club received an email from the patient thanking us for our efforts saving his life.

(iii) The rescue helicopter made an emergency landing on the beach at Alexandria Bay so we had to go to determine how we could assist. One of the Club members operates a helicopter training school at the Maroochy Airport and was able to obtain the necessary part to have the helicopter operational by the next morning. The pilot stayed with the helicopter overnight.

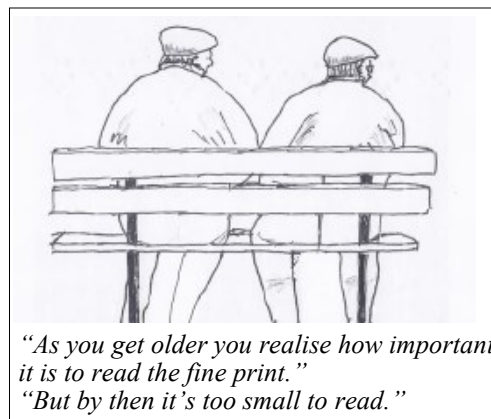
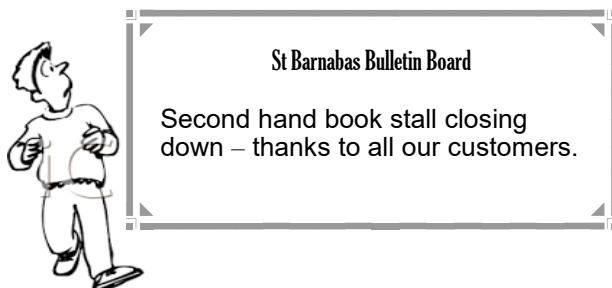
Continued next page

(iii) As mentioned, many of our actions are outside the flagged area. Earlier in 2023 near our completion time of 5pm the patrol was advised that a person had slipped down the cliffs at Paradise Caves at the northern end of Sunshine Beach. It was interesting how the advice was received with the people initially contacting the Coast Guard. Our Jet Ski operator took off to the location to rescue the person who was clinging to the rocks with the waves washing over him. Since the inlet was too small to safely manoeuvre the Jet Ski to reach him, he swam out to reach the floatation mat attached to the ski. By the time he was at the club house the ambulance had arrived and given him the “green whistle” to suck on to relieve the pain. The ankle bones were exposed where he slipped down the cliff and he said his pain level was 9 out of 10, and it looked like excruciating pain. Floating around there with a bleeding ankle he would have been shark bait. *(But here he is, complete with moonboot, thanking the team who saved him – Rolf on right.)*



Over my seventeen years of involvement, it has been a rewarding experience in terms of learning new skills, friendships and assisting beach goers both Australian and international.

I was aware of Rolf's passion and finally persuaded him (through Maria) to provide me with this illuminating article.. I promised him, in return, my eternal gratitude, and here is my record of it! – Ed.



Damn Dams

Dams have been in the news a lot lately in far from flattering reports. Catastrophic failure of two dams in Libya resulted in enormous loss of life and property and calls for humanitarian relief. A similar failure in Nepal had a similar result.

In Victoria, there were severe criticisms of the operators of Lake Glenmaggie Dam for not releasing water before a major rainfall event (which incidentally doused bushfires). Who would want to be involved in investigating, designing, constructing or operating those damn things?

And we note that the proposed Urannah, Hells Gates and Emu Swamp dams are all on the back-burner again.

Stories

Last century, my daughter Margaret and I undertook to compile a *People's History of Water Resources*. We interviewed around 120 people and collected enough stories to fill a 480 page book.

It is now more than 20 years since the book was published and almost 30 years after the period covered by it. To judge by the dearth of stories submitted to me as editor of this Newsletter, life in the water industry since 1995 must have been extremely uninteresting. Where are the stories? And where are the story tellers?

I am no longer in a position to target and interview former and present staff members. I can only appeal for contributions to future editions, so please share your stories.

I am delighted that in this edition I have been able to include contributions from Sunwater and the Department once again, arranged through our patrons Glenn Stockton and Linda Dobe.

Answers to Terry's Trivia on page 11

1. (ii) Vomit Comet. 2. (i) Manx. 3. (v) Toothbrush bristles. 4. (iv) Hijab. 5. (v) over 50 000. 6. *American Pie*. 7. (iii) Beagle 8. (iii) Al Pacino 83. 9. (iii) Mauritius. 10. (iii) Ethiopia. 11. 35. 12. (v) nothing.

A Journey Down the River Part 2

Terry Malone

I had a month to settle in before an introduction to floods Queensland style. On 20 February 1992, heavy rain was forecast on the Sunshine Coast. Next day Tewantin recorded 732mm in the 24 hours to 9am. This rainfall extended into the upper Mary catchment which recorded event totals from 750mm in the east to 300mm in the west and resulted in a major flood peak of 21.40 metres, the highest since March 1955. This was certainly an eye opener for the engineer from Tasmania who had to multiply his Tasmanian experience by 100 to match his recent Queensland experience.

Just after this flood I met Don Carroll who worked at BCC. Don was working on the URBS network model which had its origins in the Department's WT42 model. Don was amenable to making modifications to the URBS model to suit flood forecasting. This might sound easy but, in those days, BoM's operating platform was QNX, a multi-user-multi-tasking system which was used to collect ALERT radio telemetry rainfall and water level data. The only QNX C-compiler available in Brisbane was at UQ. Don and I spent many hours at UQ, travelling back and forth and testing his modifications. The URBS model is still widely used for flood forecasting in BoM and several other water agencies nationally and internationally.

Early development of URBS models required the modeller to trace out catchment areas on paper maps and measure areas and stream lengths using a planimeter. I thought all my birthdays had come at once when we acquired a digital planimeter.

Australia Day 1996 in the Border Rivers (Goondiwindi) proved particularly challenging. Although rainfalls and river levels in the upper catchments were not as large as the record flood of February of 1976 when Goondiwindi reached 10.5 metres, it appeared that the river in the lower reaches was not behaving the same. BoM made a prediction of 10.6 metres for Goondiwindi which was met with some scepticism by locals. In the end, we were both wrong, it reached 10.62 metres not far below the flood levee at the time. The change in flood-plain behaviour was thought to be due to construction of agricultural embankments, realignment of roads and new ballast on railway lines – all these small changes could have made subtle changes to flow paths. Lesson 2: You can't rely on models.

The first few months of 1999 were extremely busy in the FWC. Starting in the first week of February, there were major floods in the Barron, Johnstone and Herbert systems in north Queensland. We had only just finalised warnings for these catchments when heavy rainfall commenced in SE Queensland affecting the Mary, Noosa,

Sunshine Coast and Brisbane Rivers.

The Mary was hit hard again. This time I think BoM were better prepared with improved flood warning network and models since the 1992 flood. We made a peak prediction of 22.5 metres at Gympie. Again, locals were sceptical and seemingly prepared for a repeat of a 1992 type flood. Next day after the river reached 22.36 metres, one of the locals was heard to say "the weather bureau said it would get to 22.5 and the bastards were right". Lesson 3: If you are going to be the bearer of bad tidings, make sure you get it right.

In 2001 while still at BoM, I was contracted as an Expert Reviewer of the Flood Modelling and Forecasting component of the Yangtze River Flood Control and Management Project, an AUSAID project to China. I remember arriving in Wuhan on Sunday evening on my first visit and being awe struck by the vibrancy of the city with its neon signs, bars and busy nightlife. Over the next few years, I spent one or two months each year on missions to the Chaingjiang Water Resources Commission working alongside such people as Ray Alford and Warren Shallcross in Wuhan, a small city of 10 million on the Yangtze River in the middle of China. I was fortunate enough to visit the Three Gorges Dam on a number of occasions. The photo shows a partly completed dam discharging 50,000m³/s during one of my visits.

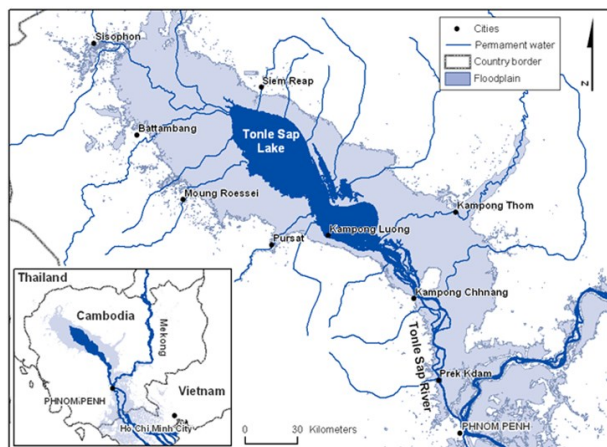
Three Gorges Dam July 2003



The year of 2006 was a year of great change for me. In May I was contracted to the Mekong River Commission (MRC) to review their Mekong flood forecasting system. I spent six weeks visiting Cambodia, Laos, Thailand and Vietnam and developed a road map for improvements to their flood forecasting system. This started a 10-year relationship with the MRC providing training to their flood forecasters in the development of URBS flood models which were incorporated into their new FEWS flood forecasting platform. Floods in the Mekong start with the onset of the rainy season in May. Water levels along the mainstream slowly build up over many months, peaking in late September/early October when water levels start to fall. The dry season takes over in December before it all starts again the next May.

A Journey Down the River continued

Two challenges stood out during this project. Firstly, in a catchment of nearly 750,000 km², just less than the Murray-Darling basin, there are insufficient real time rain gauges to define the rainfall. Daily satellite estimated rainfall provides a surprisingly adequate substitute. The second challenge was how to model the Tonle Sap, the largest freshwater lake in SE Asia.



During the rising stage of flood season, the water level in the main Mekong is higher than the water level in the Tonle Sap. As a result, flood water flows up the Tonle Sap River and the area of the lake can increase by as much as five times. After the water level has peaked and starts to fall in the main Mekong, water starts to flow down the Tonle Sap River and the lake area returns to its normal dry weather state. The reversal of flow is celebrated in the water festival in Phnom Penh each year.

Connection to Wuhan 1

Terry Malone was a participant in the WRRRA tour of the Ipswich Incinerator Theatre in July. He noticed the posters advertising the next production, *Twelve Angry Jurors*, which is a stage adaptation of the movie *Twelve Angry Men*, starring Henry Fonda. Terry told me that he had been booked to see that film the night before he flew to Wuhan. But when he came home late in the day, he found that his house had been burgled. His greatest fear was that his passport had been stolen. It hadn't, but he spent the rest of the day and night lining up glass repairers, locksmiths to change the locks and cancelling whatever needed to be cancelled.

He didn't get to see the film.

Connection to Wuhan 2

In 1981 Dean Koontz published a book *The Eyes of Darkness* which was eerily prophetic as it contained the following passage.

..... a Chinese scientist named **Li Chen** defected to the United States, carrying a diskette record of China's most important and dangerous new biological weapon in a decade. They call the stuff Wuhan 400 because it was developed at their RDNA labs outside of the city of Wuhan... Wuhan 400 is the perfect weapon. It affects only human beings. No other living creature can carry it. And like syphilis, Wuhan 400 can't survive outside a living human body for longer than a minute, which means it can't permanently contaminate objects or entire places the way anthrax and other virulent microorganisms can. And when the host expires, the Wuhan 400 within him perishes a short while later as soon as the temperature of the corpse drops below 86 °F....

"If I understand you, the Chinese could use Wuhan-400 to wipe out a city or country, and then there wouldn't be any need for them to conduct a tricky and expensive decontamination before they moved in and took over the conquered territory."

Thanks to Gary Corbett for bringing this to our attention—Ed.

By 2006, the millennium drought had taken hold in Queensland and flood activity was much reduced. However, there was a lot of state activity in the investigation of design flood hydrology of new dams at Connors River, Wyaralong and Traveston at Sunwater. Rob Ayre also introduced me to the world of dam operations in the Ross (Ross River Dam) and Molonglo Rivers (Scrivener Dam). Little did I realise that he was setting me up for the future!

The newly established Seqwater were looking for a flood hydrologist in early 2009 and I joined John Tibaldi there. The first few years were very busy building new systems and complying with the Commonwealth's new water regulations.

By October of 2010, the millennium drought was virtually over when Wivenhoe gates were operated for the first time in nine years. This was a practice run for what was to follow.

Much has been written and spoken of the North Pine, Somerset and Wivenhoe Dam operations in December 2010 and January 2011 and I do not propose to revisit it here. Suffice to say this period and following years until April 2022 were both the highlight and low light of my professional career.

Along my journey down the river, I have been fortunate to have been mentored by, and worked with, many clever dedicated engineers. I hope that similarly I have been able to provide such stewardship to the many clever young engineers I worked with over my later working life.

Many thanks, Terry, for this very interesting contribution—Ed.

HEALTH *and beauty*

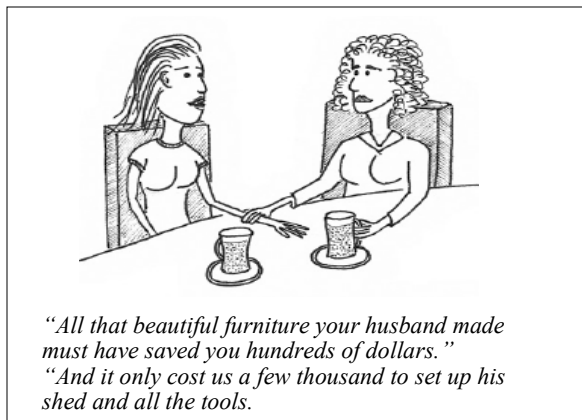
The Health of the Nation

According to a recent article in the press, there are currently 4.6 million people around Australia aged over 65. This number is expected to grow to 7.1 million by 2043 – a 54 percent increase in only two decades. This will place considerable strain on the health system, the social services budget and the stressed housing market.

The article, however, postulated that there is an affordable housing option available to deal with this rapid growth in plain sight. Retirement communities could provide the answer. There are already more than 2500 retirement villages across the country that can allow residents to maintain independent lifestyles as they age.

The article was penned by the Executive Director of the Retirement Living Council.

I was told recently of the chap who was asked if he would rather develop Parkinsons or Alzheimers (some choice). His immediate response was, "Parkinsons. I'd rather spill half my wine than forget where I'd put the bottle!"



Exercise those Brain Cells

A student found a note on which a Maths lecturer had scribbled the following numbers

7 2 14 11 5 4 12 13 3 6 10 15 1 8

He noted that every number from 1 to 15 bar one was included. He also noted that there was a certain logic to the arrangement which would have been the same if the order was reversed.

So, what was the missing number and where should it be placed to maintain the logic?



Frederic McCubbin 1855—1917.
The Lost Boy



"If that kid doesn't find me soon, I won't be 'up' when it's my turn at hide and seek!"

Aging

Ipswich Little Theatre is currently in rehearsal for a season of short plays to be presented early in 2024. All of the plays deal with issues relating to aging and I will be appearing in two of these. In the first, *Heading for Home*, an elderly man and his daughter are coming to the end of a beach holiday and he is reluctant to go back to his own home, let alone a home for elderly people. "I don't want to go to an Old People's Home. They're full of old people." In the second ten minute play, *Away from Home*, the same man and a fellow resident of the home plot to escape, drawing inspiration from all the war escape movies they have seen. When I wrote these plays ten years ago, I thought they were funny. I'm not so sure now.

The Bathtub Test

The following was sent to me by a correspondent who wants to remain anonymous –Ed.

During a visit to my doctor, I asked him, "How do you determine whether or not an older person should be put in an old age home?"

"Well," he said, "we fill up a bathtub, then we offer a teaspoon, a teacup and a bucket to the person to empty the bathtub."

"Oh, I understand," I said. "A normal person would use the bucket because it is bigger than the spoon or the teacup."

"No," he said. "A normal person would pull the plug. Do you want a bed near the window?"

ARE YOU GOING TO PASS THIS ON OR DO YOU WANT THE BED NEXT TO MINE?

Answer to last Issue's Teaser

Tom is 26, Dick is 8 and Harry is 16.

The Man Rules

At last a guy has taken the time to write this all down Finally, the guys' side of the story. We always hear 'the rules' from the female side. Now here are the rules from the male side. These are our rules! Please note: these are all numbered ' 1 ' ON PURPOSE !

1. Men are NOT mind readers.
1. Learn to work the Bog seat. You're a big girl. If it's up, put it down. We need it up, you need it down. You don't hear us complaining about you leaving it down.
1. Sunday sports. It's like the full moon or the changing of the tides. Let it be.
1. Crying is blackmail.
1. Ask for what you want. Let us be clear on this one: Subtle hints do not work! Strong hints do not work! Obvious hints do not work! Just say it!
1. Yes and No are perfectly acceptable answers to almost every question.
1. Come to us with a problem only if you want help solving it. That's what we do. Sympathy is what your girlfriends are for.
1. Anything we said six months ago is inadmissible in an argument. In fact, all comments become null and void after seven days.
1. If you think you're fat, you probably are. Don't ask.
1. If something we said can be interpreted two ways and one of the ways makes you sad or angry, we meant the other one.
1. You can either ask us to do something or tell us how you want it done. Not both. If you already know best how to do it, just do it yourself.
1. Please say whatever you have to say during adverts.
1. Columbus did NOT need directions. Nor do we.
1. ALL men see in only 16 colours, like Windows default settings. Peach is a fruit, not a colour. Pumpkin is also a fruit. We have no idea what mauve is.
1. If it itches, it will be scratched. We do that.
1. If we ask what is wrong and you say 'nothing', we will act like nothing's wrong. We know you are lying, but it is just not worth the hassle.
1. If you ask a question you don't want an answer to, expect an answer you don't want to hear.
1. When we have to go somewhere, absolutely anything you wear is fine.... Really.
1. You have enough clothes.
1. You have too many shoes.
1. I am in shape. Round IS a shape!
1. Thank you for reading this. Yes, I know, I have to sleep on the couch tonight; But did you know men really don't mind that? It's like camping. Pass this to as many men as you can to give them a laugh. Pass this to as many women as you can BECAUSE THEY NEED TO KNOW !!

A homophonic limerick

The Poet

I'll bequeath all my poetry ere
I die to my sole son and heir.
He'll treasure it e'er
like my Ode to Lake Eyre
that was owed to my soul, sun and air.

A Sign of the Times

Outside a Coffee Shop

The easiest way to find something is to buy a replacement.

Terry's Trivia (from the Mid-year luncheon - answers on page 7.)

1. NASA's reduced gravity plane is called The: (i) Puke Machine; (ii) Vomit Comet; (iii) Chew and Spew; (iv) Airy Fairy; (v) Floater.
2. The tail-less cat breed is: (i) Manx; (ii) Abyssinian; (iii) Burmese; (iv) Siamese.
3. The first commercial use of Nylon in 1938 was for: (i) Tyres. (ii) Clothing; (iii) Parachutes; (iv) Rope; (v) Toothbrush bristles.
4. A headscarf that covers a women's hair and neck is a (i) Niqab; (ii) Burka; (iii) Shukran; (iv) Hijab (v) Najma; (vi) Ma'an.
5. Britain exports how many boomerangs a year to Australia: (i) None; (ii) 5000; (iii) 10 000; (iv) 25 000; (v) over 50 000.
6. Which song?: *"But February made me shiver, with every paper I'd deliver..."*
7. Snoopy (Peanuts) is a: (i) Basset Hound (ii) Basenji; (iii) Beagle; (iv) Bulldog;
8. Film producer Noor Alfallah (29) is pregnant to (i) Mick Jagger 74, (ii) Bernie Ecclestone 92 (iii) Al Pacino 83 (iv) Robert De Niro 79; (v) Clint Eastwood 91.
9. Dodos were native to: (i) Sri Lanka; (ii) Indonesia; (iii) Mauritius; (iv) Madagascar; (v) Fiji; (vi) Galapagos. (vii) New Zealand.
10. Abyssinia now is: (i) Sudan; (ii) Tunisia; (iii) Ethiopia; (iv) Rwanda; (v) Djibouti.
11. What's the minimum age a US President could be: 20; 25; 30; 35; 40; 45; 50.
12. What does the 'S' in Harry S Truman stand for: (i) Simon; (ii) Silvester; (iii) Sanderson; (iv) Stalin; (v) nothing; (vi) Seattle; (vii) Shreveport.



*"My wife has a terrible memory."
"Really?"
"Yes. She's never forgotten any mistake I've made."*

Book Club

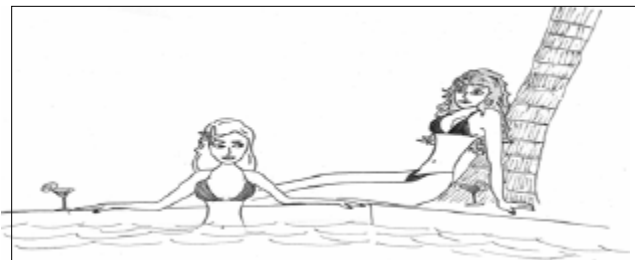
John Boyne is well known as the author of *The Boy in the Striped Pyjamas*.

In his more recent book, *All the Broken Places*, ninety-one-year-old Gretel Fernsby has lived in the same well-to-do mansion block in London for decades. She lives a quiet, comfortable life, despite her deeply disturbing, dark past. She doesn't talk about her escape from Nazi Germany at age 12. She doesn't talk about the grim post-war years in France with her mother. Most of all, she doesn't talk about her father, who was the commandant of one of the Reich's most notorious extermination camps. All her life she has tried to remain under the radar for fear she might be exposed as a collaborator at worst or at least someone who turned a blind eye to evil deeds. Is the latter a crime in itself? And now another young boy has come into her life.

The scene is not limited to London as it was not until some time after the war that she came to live there and there are interesting historical pictures of other societies including post-war Australia.

An enjoyable read though not all "sweetness and light".

Ian Pullar



Moses led his people through the desert for forty years. Even in biblical times, men avoided asking the way.

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If you were the Director of the FBI and were summarily dismissed by President Trump, what would you do? Would you write a crime novel? Well, that is exactly what James Comey did.

His *Central Park West* concerns two fictional murder trials in New York in which the FBI, the District Attorney's Office and the mafia are involved. Skillfully plotted with unexpected twists, the story is also informative about the American legal system and American society.

Ian Pullar

Recommendations from readers

(From Chris Robson) Elizabeth Gilbert *City of Girls*. Set mainly in New York during the 1940s, the book deals with the rights of women to express themselves. The themes echo the Women's Rights movements of later years. The author also wrote *Eat, Pray, Love*.

(From Helen Pullar) Pip Williams *The Bookbinder of Jericho*. A spin-off from Williams' wonderful *Dictionary of Lost Words*, this equally enthralling book centres on two sisters who work in the bookbinding in the suburb of Jericho, Oxford, where books such as the Dictionary were bound in the period around World War I.

The world has recognised a separate literary genre – *Outback Noir*. The number of contributors seems to grow exponentially with the likes of Jane Harper, Gary Disher and Chris Hammer being joined by numerous others such as Dinuka McKenzie, Nikki Mottram, James Delargy, Geoffrey McGeachin and Patricia Wolf. Quite a few are being translated into film.

I, and I'm sure readers, would very much appreciate other recommendations of good reads. Please! – Ed.



"I get terrible vertigo in lifts so I take steps to avoid them."