



WATERY SAUCES OLDIES AND BOLDIES

Newsletter No 78

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NEWSLETTER OF THE WATER RESOURCES RETIREES ASSOCIATION

Too Busy to Go to Work

Almost invariably, we hear retirees comment that they are so busy in retirement that they don't know how they ever managed to find time to go to work. WRRRA has always attempted to provide its members with activities of interest and this keeps the members of the Committee on their toes. Over the past months we have managed to provide a number of activities and members have availed themselves of opportunities. The main benefit of course is the chance to socialise with former work colleagues which is always very pleasurable.

We can always hope for more participation, but we do appreciate that if we don't have time to go to work, we don't always have time to have fun. Nevertheless, WRRRA will continue to offer opportunities such as the ones we have organised of late and which are reported upon on this and subsequent pages.

The committee is also very interested to receive suggestions for future activities.

From the Editor's Chair

I was recently asked by a new acquaintance why I had chosen to become an engineer - an interesting question as I had a very limited involvement during my career in the traditional activities of design and construction. Instead I moved into planning with as much involvement in economic, environmental and social issues as traditional engineering issues. All I can really say is that I enjoyed it all and can think of no other profession I would have liked as much.

His follow-up question was why did I stay with the Public Service instead of seeking fortune in the private sector. This is a much easier question. I certainly valued the opportunity, if only in a modest way, of contributing to the advancement and well-being of my home state. I'm sure that most of my fellow workers shared that sentiment and are very proud of what we did.

Until next time, au reservoir.

Ian Pullar, Editor

Golf Day

Keperra Country Golf Club was at its best for the club's annual sports day on 7 August. There were seven starters for the 9 hole stableford event including John Morse who celebrated his 90th birthday only a month earlier. John still plays regularly and completed the day without using a motorised cart. The event was won by Graham Young with a score of 17 points. Graham started slowly but a birdie, par, par finish ensured his win on a countback. Although numbers were small it was a great day out, finishing off with a drink and lunch at the clubhouse.

Geoff Eades

Water Forum

Members were invited to attend a Forum on "Ways to integrate flood risk management into resource management, regional land use planning and infrastructure delivery" on 27 October. I was the only member of WRRRA who attended, but I was glad I did. The other attendees came from government agencies, councils, academia, the insurance industry etc and numbered around 50. The MC was Piet Filet, (of QUT), Convener Flood Community of Practice, who is Hein van der Heide's brother-in-law. The principal speaker was Rob Drury of Seqwater who gave an overview of the extensive studies being undertaken to coordinate the activities described in the title. The bonus address was from Nanco Dolman, an expert from the Netherlands, who described remediation studies carried out in New Orleans following Katrina and in New York following Sandy.

Visit to Hinze Dam

A small group of us participated in a most enjoyable field trip to Hinze Dam on 29 October. As there were insufficient attendees to justify bus hire, the twelve of us car pooled. We rendezvoused at the Hinze Dam café for morning coffee before moving back to the Molendinar water treatment plant, operated by Seqwater. ... *continued on page 2.*

SEASONS GREETINGS

to all our members and friends
with best wishes for Christmas and
the New Year



We were given a very comprehensive tour of the treatment plant, which basically treats water supplied by gravity from Hinze Dam. This supply is supplemented from the Tugun desalination plant (which needs to remain able to be operational at relatively short notice), and from the regional water pipeline which delivers water from Wivenhoe. Many thanks to our guide who was so obliging and informative.

Then back to Hinze Dam café which had an extensive menu of excellent luncheon options, before meeting up with our Seqwater guide, Barton Maher. Again, he gave us a very comprehensive coverage of the raising project (in which both Geoff Eades and Daryl Brigden had been professionally involved.) It was most enjoyable day out.



The attendees: Rolf Rose, Don Gardiner, Hein van der Heide, Maria Rose, Lyn Brigden, Errol Beitz, Ross Walduck, Geoff Eades, Jim Mienert, Ross Stewart, Ian Pullar, Daryl Brigden.

Christmas Luncheon

COTAH was once again the venue for our annual Christmas luncheon. There was a healthy attendance of 47 members and wives and, as usual, a good time was had by all. The food and service were excellent at what was COTAH's last function for the year.

We were delighted that our SunWater Co-patron Peter Boettcher joined us again, although this will be the last event he will attend as patron. He has announced his resignation after eight years as CEO, and will finish up next March. We thank him very much for his support and openness with us and wish him well as he seeks a new career. A brief summary of his address appears on page 9.

President Geoff Eades was unable to attend, so Vice President Mike Merrin acted as host of what was, as usual, a very enjoyable function. Terry Loos provided his regular baffling Trivia questions, most of which can be found on page 11.

It was good to catch up again with former colleagues, some of whom travelled some distance to be with us. John Palmer (who is currently on leave pending his retirement from the Mackay Board) and his wife Coral joined us. George and Merle Beran again came down from Bundaberg. There was a discussion between George and Allen Seabrook about which was the older: it was concluded that George was younger but had served longer.

Sheila Lynch had booked to come to the luncheon, but at the last minute she had to drive to Lismore to help her sister in a medical emergency. As she is now 96, she stays off the highways, taking more remote back roads! She promises to back with us next time.

Kev Devlin came down from Maleny where, after three year's residence he and Narelle feel settled in – except that he has been spending quite a lot of time in New Zealand, currently working a couple of irrigation schemes. And the Brigdens and the Gilbeys came down from Bribie Island.

Out and About

As usual, members have been travelling. The Stewarts have recently returned from USA. The Eades have cruised in Croatia (see page 6). Peter and Dianne Jones have returned from a trip which covered parts of Scotland, England, France and Belgium. Michael and Hjordis Marley went to London for the wedding of their daughter Fiona and Ian and Helen Pullar were there for the same event. The Marleys then toured Sicily and the Pullars took in France, Spain and Portugal.

Terry Loos visited an incredible number of places in England, Scotland and France including sporting events at Wimbledon, St Andrews, Lords and the Tour de France. Sounds wonderful!

Hein and Francoise van der Heide have returned from their seven month of touring even more of Australia. Highlights of their odyssey included being two of the 4000 people on the hill in Albany for the Dawn Service on Anzac Day to commemorate the setting out of the Anzac fleet for Gallipoli; flying over the Horizontal Falls near Broome and joining a land tour to the Bungle Bungles.

Keith Bedford, former hydrogeologist, passed away in September, in Brisbane, aged 67. He is survived by his wife Robyn, his two sons and four grandchildren.

Max Goodwin passed away on 18 October in St George. Max was one of many St George locals who signed on for the Irrigation Area Extension exercise and was one of George Toone's chainmen during that period. When George transferred to Monduran, Max moved into a storeman's role in the District Office. He is survived by his children Peter (also a one-time Watery) and Lynn and his grandchildren. His wife June predeceased him several years ago.

Bill Sticklan passed away in November in Mackay at the age of 94. Bill worked in hydrographic sections in both Rockhampton and Mackay. He is survived by June, his wife of 64 years.

I must have been asleep at the wheel – I missed two milestone birthdays. In April both Cliff McLeod and Malcolm Pegg turned 80. Congratulations and best wishes to both.

Daryl Brigden recently informed me with some glee that he had been in the Bribie Island Recycling Centre and had seen the original *Mark Twain* for sale. This was the dinghy built by our own David Morwood for use as a tender for the larger *Mark Twain*. In typical David fashion the dinghy was clearly identified by stencilled lettering on the stern showing the boat's name and that the dinghy was registered to D.L.MORWOOD and his phone number. Unfortunately photos taken on the day were not successful (new phone and self confessed lack of technological ability!) Not long after, Daryl returned for more photos and reported that the vessel had been sold. We can only hope that the new owner will lovingly restore it to its former glory and get as much pleasure from it as Dave did.

I am always more than happy to receive news of members so I can keep everyone informed - Ed.

Patronage

As reported in the July newsletter, Dr Paul Simshauser is now the CEO of the Department of Energy and Water Supply (DEWS), replacing our former co-patron Dan Hunt. A meeting has been arranged between him and President Geoff and Secretary Peter in early December at which he will be informed of our function and activities. Assuming he accepts the position of co-patron, it is hoped that the next newsletter will include information on him and his outlook.

Advance Notice

Unfortunately, Ross Stewart has informed us that he will not be able to continue as Treasurer after the AGM in April, so we will be seeking a replacement.

In addition, Geoff Eades intends to stand down as President and become Past President. This will create a vacancy for President and/or a consequential vacancy on the committee.

Would members, particularly the younger ones, give serious consideration to taking on these vital roles.



"Remember that stuff they used to put in our food during the war to try to make us stop thinking about sex? I think it's beginning to work."

Answers to Terry's Trivia (page 11)

1. (i) Scaramanga 2. (i) Man with the Golden Gun
3. (iv) Winston-Salem 4. (i) Dutch 5. (iii) 67% 6. (i) Please Release Me
7. (iv) Beethoven 8. (ii) Shall We Dance 9. (iv) Qld 10. (iv) Chichester 11. (v) 100K

Continuing the series of invited articles on the activities of members - Ed.

Mike McKenna

When Mike was asked to write around 300 words on his activities post-retirement, his reaction was, "Fishing, swimming, drinking, travel - only 296 to go." - Ed.

It is now some 13 years since I was last in harness and I wonder how I had the time to be there. After walking out for the last time and making a conscious decision to make a complete break from the world of water, forestry, lands, mines and everything else, I decided to follow some of my other interests with some vigour.

Fishing was my first priority not only as a pastime but as a scientific interest. I have been collecting data from about the last 30 years on my catches including tides, moon etc to demonstrate diminishment/improvement in fish/crab stocks as well as helping myself to target catches at the right time or place. Those in the research area have an interest in the data. There are many old water resource boys here at the Capricorn Coast and I have no shortage of assistants.

My wife and I travel frequently to places in Australia that are to some a little remote but you don't really know what exists in our country until you go looking. I have enjoyed the many visits to all of the States and Territories, just exploring in our own way the things and areas of interest. Most of the travel has been in other States for having lived in 27 houses around this State I feel I know it reasonably well.

We in CQ have begun to get together for a bit of a reunion each year now, involving past WR employees. The last was on 7 October and almost 40 people showed up to swap yarns, experiences and lies. Our oldest attendee was Bob Gray [ex Theodore] and people came from quite a distance, from Mick Neubecker in the south to Peter Wheeler in the north. Interest is significant and we will be continuing with this event.



Some of the participants at the reunion: Mick Williams, Maurice Clewley, Shane Warner, Kel Roberts and Kerry Marler

I, with a couple of others, will make the journey south next year with the intent of catching up with many of your members.

Thanks very much, Mike. I enjoyed the other 296 words and hope to catch up with you next year - Ed.

Greg Claydon on Water in the West

Continuing from last issue ...

We have needed to take a very systematic, risk based approach to our consideration of groundwater recharge, surface water flows and environmental water requirements in our 7-10 year cycles of (non-statutory) water allocation plans. It has also caused us to have an even greater emphasis on diverse, climate independent water supply options, water use efficiency and recycling, and reducing demands in our medium and long-term water supply strategies.

Unlike the eastern states, there is no debate about the importance of having seawater desalination and waste water recycling (including for drinking purposes after groundwater replenishment) in the WA capital city's water supply mix. The corresponding key management question here is not when or if to switch desalination and water recycling plants on or off, but how to make them run as efficiently as possible around a 24/7 necessity.

Existing desalination and groundwater replenishment plants have the capacity to provide about 50% of Perth's drinking water supplies. This proportion will increase as additional groundwater replenishment plants are built and the take of groundwater and supplies from dams are reduced as the climate dries.

Despite this, groundwater remains a vitally important water source for Perth and across most of the state. More than two-thirds of all water use across the state comes from groundwater. Mining is the biggest water user, followed closely by agriculture, while cities and towns account for about 20% of the state's total water use. Mining iron ore below the water table in the Pilbara alone results in about 160GL/year of excess groundwater being available for other uses - if only some really productive and economic uses could be found! Some irrigation trials on pastoral leases are currently being undertaken by mining companies and by the Government using Royalties for Regions funding (RfR).

An extra \$25.3 million of RfR funding over four years has enabled us to significantly accelerate our water resource assessment program using new airborne geophysics, seismic, digital modelling and other techniques to make new data and information available on a very fast web-based portal (see www.water.wa.gov.au/wir).

Additional RfR funding is allocated to groundwater assessments and irrigation trials in prospective areas. Expansion of the Ord Irrigation Area is also underway with the possibility for another raising of the Ord River Dam spillway and extending the scheme across the border to the Northern Territory.

The Department of Water covers almost all things water in the one department (rather than about four or five departments like in Queensland at the moment) - data, information, science, policy, planning, advice and regulation for water resources quantity and quality and the water industry.

The Water Corporation provides by far the majority of the drinking water, sewerage and drainage services to most of the cities and towns across the state. There are a couple of smaller water corporations and some mining companies provide drinking water and sewerage services to some cities and towns. The Water Corporation has more than 3000 staff, though it is selling off its in-house engineering and construction services team (about 150 staff) and has made another 300 staff redundant recently.

By comparison, the Department of Water has about 470 staff, down from 630 five years ago due to redundancies and other "efficiency measures". The mining construction "boom" has drastically slowed in the last year or so and WA's economy is feeling it with the loss of AAA credit ratings and increasing debt (the highest per capita in the nation).

Despite this, the population in the Perth-Peel region continues to grow, while most of the easily developed land has already been built on. So we are pushing more and more into areas with increasing water challenges.

On the other hand, urban development is moving into low lying places subject to high water tables and/or inundation from "wet" winters. The traditional approach to urban development on the Swan Coastal Plain has been to modify the landscape to suit the building form, being a slab on ground, with fill brought in to level up the site and create footing separation from groundwater levels. But the fill requirements are rapidly increasing in the low lying areas and the reserves of fill are running out. In addition, simple urban drainage of these low lying areas can accelerate movement of legacy nutrients and organic matter from agriculture into sensitive receiving waters in rivers and estuaries, adversely affecting water quality.

These factors provide the impetus for water sensitive urban design through coordination and cooperation between the Department of Water, and 23 other state government, local government, research, industry, natural resources management and consulting bodies in the nine year Cooperative Research Centre for Water Sensitive Cities. Perth is also fairly vulnerable to urban heat island effects, and the risks of these are increasing with not only a drying climate but also a warming climate, so we are working with the CRC and others on how to have green and blue corridors and other cooling (and "cool") features in our urban precincts.

At the risk of boring you silly, I will close my comments at that. While many things are different with water in WA, there are many interesting and exciting things happening with water in the west. And I still haven't found any instance where water doesn't flow downhill under gravity and uphill towards money!

Thanks Greg for this interesting account. Greg can be contacted at greg.claydon@water.wa.gov.au - Ed.

Vale Ross Wayne Krebs 21-07-1955 – 28-07-2015

Steady, constant, grounded, level-headed, warm – these words are the real essence of Ross. Part of his solid character came from his upbringing. He grew up as one of four sons in the small town of Beenleigh – a four hotel, two bakery town. The drive to Brisbane or the Gold Coast was through the bush. He was very fond of his wonderful Mum, Phylly and of his Dad, Jim, who passed away when Ross was in his twenties.

Ross's Dad was the Head Distiller at the famous Beenleigh Rum Distillery and, as a youngster, Ross often went to visit or work at the Distillery. During his Beenleigh High School days, he worked at the Rocky Point Sugar Mill – he cleaned vats, moved cane bins and shovelled cane waste. He would do a late night shift at the Sugar Mill and go to high school the next day and he still managed to be dux in 1972. He received a Queensland Government Scholarship to do engineering at what was then QIT and he qualified as an engineer in 1976.

It was about this time that he met Sue – at a football match. He was a strapping, athletic front rower, and she, one of the Hayes' girls from Waterford, had come with a friend to watch the local game. According to Ross, their eyes met and the rest is history. They each found the love of their lives, sharing an enduring deep partnership throughout 35 years of marriage.

Ross developed a deep interest in water engineering and management – an interest that developed and strengthened throughout his long career. He started work in 1977 in what was then the Queensland Irrigation and Water Supply Commission. After roles in Bundaberg and Mackay, he took his new bride to Mareeba in 1980. After several years in Mareeba, he became District Engineer in Goondiwindi and then in Emerald.

He and Sue moved to Toowoomba in 1992 and he filled a range of senior roles ending up as the Program Director for the Murray Darling in Queensland where he led Queensland's efforts in continuing water reform across the Queensland section of the Murray Darling Basin. He oversaw the development and operation of many irrigation schemes understanding the needs of irrigators, delivering efficient use of water resources and managing long term policy issues around the sustainable use of water.

Water resources were clearly something that he deeply understood and he had great passion for water policy and on-ground operations. His easy but professional way saw him build a vast network of lasting relationships with landholders, colleagues and policy makers in Queensland and nationally. He loved the people that he worked with. It was more than a job or a career – it was truly a passion for him. He relished dealing with practical problems and the real issues that water users faced. He had a real belief that government, industry and the community had to work together to solve complex problems like water allocation.

He also had great love for the people who worked with him in the Department and in other agencies – the policy makers, the implementers, the service providers, the regulators. His colleagues and staff were very special to him. He was a gentle leader, respecting the experience and knowledge of his staff and colleagues, offering advice and encouragement, and providing clear direction.

Ross and Sue's son James arrived in 1988. James and Ross didn't just have a father/son relationship. They were great mates, having a wonderful easy friendship and sharing an interest in rugby. James has become the strapping, athletic, strikingly good looking, intelligent front rower that his Dad was.

Ross coached junior rugby teams and took up rugby refereeing. He started out with a rule book and refing the under 6's. He went on to become a well-respected referee at the senior level in southern Queensland. He said that he loved to drive out to Dalby, Roma, St George, Goondiwindi, not only to referee, but to also have time with local people and feel that he was contributing. The deep regard people had for him has been recognised by the Darling Downs Rugby Union naming the annual best referee trophy, the Ross Krebs Memorial Trophy.

Another interest was bushwalking that developed, not just as an experience and a physical challenge, but as a chance to enjoy the company of great friends. Five old guys formed something of a rat pack – and did Kokoda, Queen Charlotte Sound, Hinchinbrook Island, the South Coast Track, the Cape to Cape Track and the Conondales. Together, they shivered in the sleet, munched on Kraft cheese, fought off leeches and waded through freezing creeks. Ross has insisted that the others do South America for him and they are planning to do just that..

Tragically, Ross developed Motor Neuron Disease and gently gave himself up to the illness while maintaining incredible courage and humour.

Our lives have been blessed by knowing him. A life well lived, a great love shared and an enduring friendship always.

- This tribute is an abbreviated version of the eulogy delivered by Ross's close friend Jim Cavaye at his funeral

Dalmatian Spots

Geoff Eades

Geoff and Helen recently returned from a wonderful trip, as you will see in this informative account.

For those who love sailing, the Dalmatian coast of Croatia has to be high on their list of destination priorities. On the mainland, rugged mountain ranges rise up from a narrow coastal plain. Off the coast there are numerous limestone islands separated by deep water channels that make sailing relatively safe and always interesting.

Our party had arranged a bare boat hire of a 12 m catamaran, the Maja V. It was a Lagoon 400 model with 58 m² of main sail area. Bare boat means it is a fully equipped sailing boat but it is your responsibility to sail it and to bring it back in one piece.



The Maja V

Sailing experience in our party of four couples ranged from good (2 members) to nil (remaining 6 members). So I was a little apprehensive being one of the six with no sailing experience; my only skill being the ability to tie a bowline because of my time in the Boy Scouts. Nevertheless, with encouragement from our ever optimistic skipper, we set off from the small port of Trogir for our two week adventure.

Trogir is a short distance to the west of Split. The old walled town dates back to the 15th century although its origins date back to Roman times. It contains numerous churches, cafes and apartments and is a World Heritage site. Its narrow cobbled streets form a maze where it is easy to get lost. Trogir was our introduction to Croatian seafood. This is based on squid and sea bass, usually grilled and with a delicious flavour. This can be washed down with the local white wine (usually posip) or the excellent local beer, all at very reasonable prices.

Our first major port of call was Milna on the island of Brac. Our trip to Milna was relatively uneventful, mainly because the breezes were so light that we had to motor most of the way. Milna is a small fishing port with a deep natural harbour reputedly used by the Roman emperor Diocletian on his way to Split. In common with other small coastal villages it contains an ancient church and many small restaurants, mostly family owned and operated.

This was our first experience at berthing in a marina and, according to our skipper, the crew registered a

fail. We did improve as the voyage went on but our experience at Milna was repeated several times later. Picture the scene at the marina where the port attendant shouts instructions in broken English. The skipper, in turn, shouts sometimes conflicting instructions to us, the crew, as he tries to reverse the boat towards the marina wall in the narrow gap between other boats. A small crowd gathers to watch the confusion. After more shouting and several attempts to throw the mooring ropes to shore, we eventually dock. Afterwards, we celebrate the successful docking in the usual way.

Brac is the largest island in central Dalmatia. A feature of this and other islands are the rock walls built by the locals over the centuries to prepare the land for cultivation. Being limestone, the island soil is very thin but it does produce wonderful wine, olives and vegetables. Brac, in fact, is famous for its limestone. It was used for Diocletian's palace and for the White House. The rock from its quarries is still being exported to this day.

Our next port was Hvar town on the island of Hvar. Here we were able to moor to a buoy in the small harbour, virtually in the centre of the town. There is an impressive town square above which is a maze of small cobbled streets dating back to the 13th century. We walked up through these streets to the Fortress Spanjol built as a defence from the Turks. The view from there takes in the town, its harbour and the nearby Pakleni Islands famous throughout Europe for nude sunbathing. The next day we travelled to one of these islands for a swim but did not encounter any nude sunbathers, possibly because the water was still



Hvar and harbour: Pakleni Islands in the background

cold after winter (it was mid-May).

By now we had developed an eating routine that allowed us to enjoy the local cuisine and keep to a reasonable budget. Breakfast included croissants bought from one of the local bakeries that morning. Lunch was usually salad made from locally produced tomatoes, cheese, olives and prosciutto and bread bought with the croissants earlier in the day. For dinner we usually ate out at one of the local restaurants. Because of the late twilight we followed the local practice of dining late, often after 9 pm. We found that no matter how small the village, a restaurant was always open. Tipping was appreciated although not demanded.

An Involvement in ICOLD

Michael Marley

I have been fortunate to be the nominated AN-COLD representative on the ICOLD Technical Committee on Materials for Fill Dams and its successor, the Committee on Embankment Dams, since 2005. During the period from 2005 to 2014, these committees have produced and published six Bulletins outlining currently accepted best practice in a range of aspects of embankment dam design and construction. Although much of the work in producing these documents takes place outside the regular annual meetings of Technical Committees, the opportunity regularly to meet with the Committee over a number of years has been enormously satisfying both from a technical and social point of view.

The work of the Committee was well under way by the time I first attended one of its meetings in Tehran in 2005 and over the succeeding few years Bulletins on Weak Rocks and Shales in Dams; Geomembrane Sealing Systems for Dams; Concrete Face Rockfill Dams – Concepts for Design and Construction; Cut-offs for Dams; Tropical Residual Soils as Dam Foundation and Fill Material; and Internal Erosion of Existing Dams, Levees and Dykes and their Foundations (two volumes) were published. ICOLD's process of publishing is quite protracted and final approval for release of the published Bulletin requires not only that an English language draft be approved but that a French translation is completed and approved so that the final Bulletin is published simultaneously in French and English. Waiting for the French translation can take a significant time and result in delays of one to two years following completion of the technical input.

One of the great bonuses of regularly attending the Technical Committee meetings has been the opportunities for exploration and firsthand experience of widely varying cultures around the world with meetings in Tehran, Barcelona, St Petersburg, Sofia, Brasilia, Hanoi, Lucerne and Kyoto. In many cases Hjordis and I have extended our stay in the host country and undertaken our own exploratory trips to add another dimension to the experience provided by the host country's organising committee's technical and social programme. A few overall impressions of some of the more memorable meetings give a flavour of the richness of cultural and technical experience that accompanies these meetings.

Tehran, the first of the meetings I attended, was particularly interesting and memorable as a totally new experience, being the first opportunity for me to visit a middle eastern country and one that was very much at the centre of world political debate. In 2005 the Iranian Supreme Leader was Ayatollah Khamenei (not to be confused with the first Supreme Leader following the overthrow of the Shah in 1979, Ayatollah Khomeini) and the President of the country (very much subordinate to the Supreme Leader) was Mohammad

Khatani, shortly to be replaced by the firebrand Mahmoud Armadinejad. Relations with the United States were (and have been since 1979) at an extreme low and the entire US contingent of delegates to the ICOLD meetings were not issued visas to attend. This of course left a very big hole in the technical meetings of the various ICOLD committees, which nonetheless continued as planned. The overwhelming impressions from Tehran were:

- The enormous number of skeletal structures of incomplete multi-storey buildings, with attendant rusting tower cranes, abandoned twenty-six years earlier at the time the Shah was deposed
- The comprehensive motorway system which (without any additions during the time since the Shah) was now clogged for most of the day with a profusion of Hillman Hunters whose design dated from the 1960s and which were still manufactured under licence in Iran
- The equanimity with which our tour bus, en route to an evening function in downtown Tehran, executed a multi point turn in the midst of four lanes of heavy peak hour traffic when the driver missed a left turn
- The request from our hosts to draw the curtains of the bus lest the fact that the seating arrangements in our bus with men and women together, might draw adverse reaction from authority or passing local buses in which women were very definitely confined to the rear of the vehicle while their male fellow travellers enjoyed riding up front
- The presence in our hotel of a little wizened woman all in black seated outside the dining room reputedly acting as the enforcer of the wearing of the Chador by all visiting females.
- The early morning flight to London after completion of the meetings, when a large Iranian woman clothed in full but colourful Iranian dress took the seat beside me, unwrapped her lengthy headscarf and stowed it in the overhead locker before ordering a beer, and then another and another all the way to Heathrow.

Two years later the meetings in St Petersburg provided an opportunity for a private visit to Moscow prior to the meetings with visits to the Kremlin, Red Square, Novodevichny Convent and Monastery of the Epiphany as well as the Cathedral of the Assumption and St Basil's Cathedral. We also managed to see a performance of the Moscow Circus (old circus). The Russians have made circus an art form since the Bolsheviks decreed that it was "the people's entertainment" – more acceptable than the "bourgeois ballet".

The Moscow visit was followed by a shipboard cruise along the Volga and some of the inland waterways created by Stalin's Great Volga Plan (which eventually linked rivers and lakes by canals, ultimately allowing shipping traffic to travel between the Baltic Sea and the White, Black and Caspian Seas) to St Petersburg.

An Involvement in ICOLD

One of the highlights of the cruise was a visit to Kizhi Island at the northern end of Lake Onega with its museum of wooden buildings including the magnificent 22 dome church which was not accessible due to imminent restoration. These buildings apparently don't have foundations as we know them and just rest on a pad of rocks. The plan for the church was to jack it up and move it to a pre-prepared adjacent timber platform and then to replace the timbers progressively from the bottom up! Not sure whether the operation has successfully been executed but the whole plan sounds very Russian to me.

Overwhelming impressions of the St Petersburg meetings were of course:

- Visit to Pushkin to see the Catherine Palace (a simply stunning example of the lavish lifestyle of the imperial families, with its painted blue and gold façade, magnificent gilt and mirrored Great Hall, extraordinary Amber Room and the long series of galleries and dining rooms)
- The Peter and Paul Fortress and its stunning cathedral with tombs of more than thirty Tsars and Tsarinas, beautiful icons and chandeliers and incredible hordes of rude and raucous humanity
- Performances of *Swan Lake* (bourgeois Ballet) at the Mariinsky Theatre and the Bolshoi Theatre in the same week

- Motorcades of tour buses escorted by police cars and ambulances to take the delegates and accompanying persons from the hotels to the various functions scheduled throughout the week
- The Hermitage with its staggering collection of artworks. The Russians are particularly proud of their collections of the works of Van Gogh, Rafael, "the small Dutch Painters" and Renoir, Matisse and Picasso
- The Russian obsession with the "order of things". On one occasion the bus on which we had been transported to visit a tidal barrage and which was ninth in a column of ten buses, through some judicious manoeuvring by the driver ended up at the head of the cavalcade for the return journey. The organisers were singularly unimpressed with this and there ensued a good half hour of backing and filling by buses until we had resumed our rightful place at number nine in the column for the return journey. No place for initiative here!! The driver got his revenge though by going "off piste" on the return journey and getting back to the hotel ahead of the entire motorcade. There is hope!

The overall experience has been quite an extraordinary journey and one which has provided us both with wonderfully interesting opportunities to see life at first hand in a great many places we might not necessarily have chosen to visit otherwise.

Many thanks, Michael for this contribution - Ed.

The Adventures of Young Ian

I have decided to document some of my work experiences, in part in the hope that other members may see fit to share theirs - Ed.

Following the change of government in late 1989, the potential dam at Wolffdene was abandoned and the Commission was given the task of developing a water development strategy for south-east Queensland. Under John Ward's stewardship, Warren Lane led the study while I volunteered to undertake much of the public interface. For the next eighteen months or so, I answered correspondence and phone calls from concerned members of the public - thank goodness this was before emails. As we had 72 possible sites on our list, there were a lot of potentially disgruntled people out there. I have always upheld the right of people to know, but I still feel equally strongly about their right to remain ignorant until they are actually affected. So we never published a list of sites being considered.

There can be no doubt that even investigations can have serious impacts. One man informed me that his business partner had absconded and the only asset he had to pay his debts was a block of land which no one was now prepared to buy.

One regular phone contact came from a man who had been invalided out of his job at an early age, who had retired to an isolated spot, whose wife had walked out on him and who had "nothing much to do and all day long to do it". He was consumed by conspiracy

theories, including the flights of spy-planes over his property.

One woman told me on the phone that developing dams was the wrong way to go and we should consider other options. I told her we were doing just that: we were considering rain-water tanks, desalination, recycling, regional pipe-lines and even towing icebergs and none of these options seemed to stack up. "Then think of something else," she said. "Like what?" "I don't know. You're the expert."

One day I took a phone call from Margaret Hockey who owned the historic homestead Ninddooibah adjacent to the Logan River. She asked was it true that we were investigating a site at Glendower which would flood her productive land (but not the homestead). When I told her we were, she said, "Oh dear. And to think I strongly opposed the Wolffdene site" (which would have had no direct effect on her property). Margaret was a very charming lady who, despite her anxieties, very generously hosted meetings between me and her potentially affected neighbours in her own home.

I received similar hospitality from landowners on Teviot Brook. The owners of the property Wyaralong were strongly opposed to a dam on that stream, but were keen that if the worst should occur, the name should be given to the structure. That wish came true many years later.

To be continued ...

SunWater Snippets

The following is my attempt to précis the excellent address delivered by retiring CEO of SunWater, Peter Boettcher, at the Christmas luncheon. - Ed.

When SunWater was corporatised as a Government Owned Corporation in 2000, there were considerable doubts about its future and whether it could succeed. In that year, it had a turnover of \$75 million with a profit of \$9 million. The vast majority of its income came from irrigators. In 2015 the turnover was \$208 million with a profit of \$55 million, with irrigators providing the minority of the income. This must be seen as a success story.

The SunWater Board is in the process of being appointed, with four directors now in place and a further two to be announced in the near future. The new Chair is Leith Bouilly, whose name will be familiar to many WRRRA members through her long-term involvement in the water industry, particularly on advisory committees. A meeting of the Board is scheduled to map out the future direction of SunWater. Peter will attend, but this time as an adviser, not as an operative.

SunWater is now in a position to self-fund its proposed \$700 million dam improvement program (no longer Dam Safety Program). The most urgent projects are: Paradise Dam with the ongoing remedial works; Fairbairn Dam where the anchor bars in the spillway slab failed during a major flood event; and Boondooma Dam where there are continuing potential problems due to flood discharges.

The Federal Government is in the process of setting up a National Infrastructure Fund (see adjacent article) which can be expected to provide opportunities. Nathan Dam on the Dawson River is getting closer to becoming a reality, even though it is approaching 100 years since it was first proposed. It is amazing that a snail could create such a hurdle!

The future looks good.

Flogging a Dead Horse - submitted by Marilyn Caton

Indian tribal wisdom says that when you discover you are riding a dead horse, the best strategy is to dismount. However Governments often try other strategies:

- Buy a stronger whip.
- Change riders.
- Appoint a committee to study the horse.
- Move the horse to a new location.
- Arrange to visit other sites (overseas) to benchmark how they ride dead horses.
- Create a training session to increase our ability to ride.
- Schedule a meeting with the dead horse to discuss his productivity problems.
- Do a Cost Analysis Study to see if contractors can ride it more cheaply.
- Promote the dead horse to a supervisory position.
- Appoint a committee to provide status reports daily on the dead horse.
- Provide an incentive bonus for the jockey.
- Add more managers/supervisors per dead horse.
- Rename the horse.
- Hire a consultant to give an opinion on dead horses.
- Hire another consultant to refute the first consultant's opinion that the horse is really dead.
- Bring in a motivational speaker to see if you can get the horse to rise from the dead.
- Form a committee, positioned to shift the horse's ideas.
- Finally, if all else fails, prop the horse up, put ribbons in his mane and tail, and see if you can find a buyer.

National Water Infrastructure Fund

Lee Rogers

On 19 November, the Commonwealth government commenced the process by which they expect to provide up to \$500 million for the development of water infrastructure projects. The funding was first announced in their *White Paper on Developing Northern Australia* and the *Agricultural Competitiveness White Paper*.

The fund has two parts – the feasibility component and the capital component which total \$50 million and \$450 million respectively.

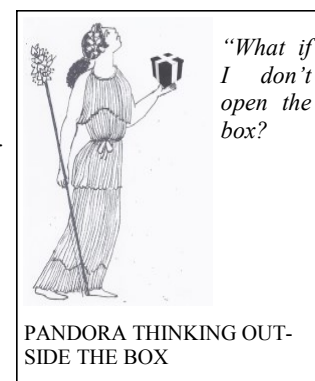
Of the \$50 million for the feasibility component, \$25 million has already been allocated including \$5 million for a detailed economic feasibility study of the Nullinga Dam proposal on the Atherton Tableland in far north Queensland and up to \$5 million for a water resource assessment of the Mitchell River catchment – also in far north Queensland – to determine the available water and the best locations for water infrastructure. Similar studies have been announced for the Northern Territory and for the Ord River area of Western Australia.

The November announcement was a call for expressions of interest from state and territory governments for studies under the remaining \$25 million feasibility component of the fund which requires that any other organisation with proposals must partner with their relevant state or territory government to apply.

The \$450 million part of the fund is expected to be available to construct water infrastructure in partnership with state and territory governments and the private sector including approximately \$170 million for northern Australia. This funding will be available from 2017-18.

How Queensland is going to be involved in this process is currently being considered.

Watch this space.



HEALTH *and beauty*

It's No Lie

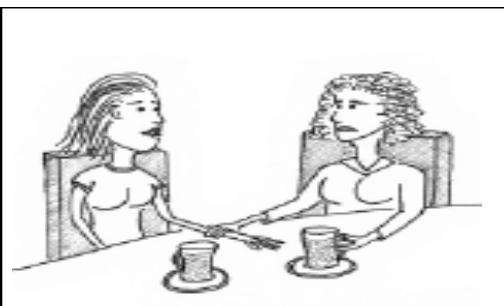
A recent study has concluded that the key to telling a convincing lie is to have a full bladder.

Researchers at California State University asked volunteers to drink different quantities of water, and then after a wait of 45 minutes asked them to tell the truth or lie about a strongly held opinion in front of an interviewer and a camera. Despite the urgent need to relieve themselves, those with full bladders were found to tell complex lies more comfortably and convincingly.

It is normally easier to tell the truth than lie because all the brain has to do is think, whereas lying requires the brain to work out what stories need to be modified as well as disguise anxious behaviour.

The researchers concluded that if the brain has to inhibit something else such as the urge to urinate, it is easier to lie. If a person is already using one type of self-control, it is easier to control other activities.

These conclusions should surprise none of our members. Perhaps it is natural selection at work. For any man who has come home from the pub with a full bladder, the ability to lie convincingly is imperative!



"I simply can't sleep through my husband's snoring. What can I do?"

"Just before he goes to sleep whisper, 'I know what you did' and he'll be the one lying awake after that."

Too Healthy to Be Healthy

As our guide at the Molendinar Water Treatment Plant was happy to inform us, our water supply is dosed with a cocktail of poisonous chemicals – chlorine, fluoride etc – in order to remove pathogens that could endanger the health of the consumers. This treatment is so successful that, ironically, it poses a health risk. We no longer are able to build up a natural immunity to many diseases because our natural exposure is so limited!

I'm sure, though, he is not advocating a return to the bad old pre-treatment days when drinking water was so unsafe that it could only sensibly be consumed if it had been turned into small beer or other 'safe' substances.

In those times, water wasn't even used much for washing – clothes were usually laundered in a nearby river and people only bathed once every six months – whether they needed to or not. In 15th century Portugal, per capita water consumption rates were around 5 litres per **week**!

No Flies on CSIRO

A year ago, we were in the Kimberleys. I commented that there seemed to be remarkably few flies for cattle country and amazingly one of our fellow tourists was able to explain. As a scientist she had worked for CSIRO on a dung beetle project. When cattle dung becomes too thick in a paddock, the cattle won't eat the grass. The Australian dung beetle has adapted to deal with kangaroo dung but has no hope with the introduced species, cattle. CSIRO imported dung beetles from Madagascar and after strict quarantine and experimentation released them. Not only have they cleared the surface of dung, but they transport a digested form into the soil which fertilises the grass. And reduces the flies!

Jack and Jill

The author of the nursery rhyme can't have been a hydrogeologist (or even a water diviner). The probability of finding a water well at the top of a hill is much lower than at the bottom. Though perhaps it was the illustrator who was at fault in drawing a well and it should be a reservoir!

Answer to last Issue's Teaser

31 OCT = 25 DEC

This has nothing to do with the calendar (the clue is a red herring). The equation is true because 31 in Octal notation (three 8s + 1) is the same as 25 in Decimal notation (two 10s + 5)

Exercise those Brain Cells

1		2		3
4			5	
		6		
7				

Complete the adjacent crossnumber according to the following rules:

- if an answer crosses one of the numbered squares, then that answer must be divisible by the little number in the square (e.g. the five figure number 1down must be divisible by 1, 4 and 7. Similarly the five figure number 7 across must be divisible by 7)
- In your answers, only two different digits can be used throughout, one of them odd and the other even
- The odd digit must be written at most once in any row or column of the grid



The Economic Pendulum

Up until the late 15th century, Venice was the economic hub of Europe because of the trade with the Far East. But then, intrepid Portuguese explorers found new sea routes to replace the slow, overland camel trains and the economic pendulum swung.

Next, Christopher Columbus, having sought sponsorship from England, Portugal and Valencia, persuaded Isabella,

Queen of Castile, to finance a voyage west to the East. As a result of his discoveries and the exploits of the Spanish Conquistadors, Spain became immensely wealthy. In particular, Seville became the centre of trade until cargoes were so voluminous that bigger ships were required. They could no longer sail up the river to Seville, so the pendulum swung again to move the wealth to Cadiz.

On the other hand, the Portuguese discoveries were catastrophic. The flood of cheap imports – particularly herbs and spices – caused the economy to nose dive while the exodus of managers and workers to the Spice Islands resulted in severe labour shortages at home, requiring the import of foreign workers with resultant social upheaval.

How Come - ?

In ancient times, when ships were launched it was considered wise to placate the sea gods with a human sacrifice whose blood was deliberately spilled over the bow of the ship. Later, red wine symbolically replaced the red blood. However, expensive champagne was later deemed far more appropriate for a formal ceremony.

Champagne, as everybody knows, is now only allowed to be produced in the French province of that name. Sherry takes its name from Jerez in Spain and there are current moves to limit the use of the name to the product of that district. The name “Apero” has appeared. Port, from Porto in Portugal, is likewise suffering with names like “tawny” appearing on bottles.

Christmas Cheer

Feel free to be merry
On wine, port or sherry;
The season is one of good cheer.
But in celebration
Please use moderation -
Don't get carried away on the bier.



The monument to the Discoverers in Lisbon

A Sign of the Times

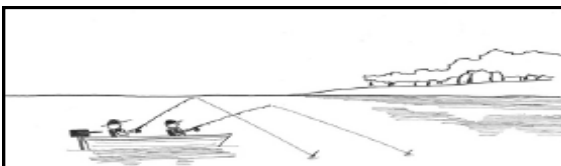
Outside a church in Stanthorpe

Whine is the product of sour grapes

Terry's Trivia

Answers on page 7

1. Which Bond baddie had three nipples? (i) Francisco Scaramanga (ii) Auric Goldfinger; (iii) Dr Julius No. (iv) Ernst Stavro Blofeld (v) Rosa Klebb.
2. Which Bond Movie was this in: (i) Man with the Golden Gun; (ii) Goldfinger; (iii) Dr No; (iv) Thunderball; (v) From Russia with Love.
3. Krispy Kreme Donuts originated in the US in: (i) Chicago; (ii) Nashville; (iii) Akron; (iv) Winston-Salem; (v) Atlanta; (vi) New York.
4. What nationality is the lager giant Grolsch? (i) Dutch; (ii) German; (iii) Belgium; (iv) Austrian; (v) Danish.
5. A decade of NASA satellite data have found that at any given time about: (i) 33%; (ii) 50%; (iii) 67%; (iv) 75% of Earth's surface is covered by cloud.
6. In 1967 'Strawberry Fields Forever' was kept from the No 1 spot by: (i) Please, Release Me (Englebert); (ii) Puppet on a String (Shaw) (iii) A Whiter Shade of Pale; (iv) Somethin' Stupid (Sinatra x2) (v) I'm a Believer (Monkees).
7. Who wrote 'Für Elise': (i) Chopin; (ii) Mozart; (iii) Bach; (iv) Beethoven.
8. What song did Anna and the King dance to in *The King and I*? (i) Rock Around the Clock; (ii) You're the Top; (iii) Shall We Dance; (iv) Hello Young Lovers; (v) Getting to Know You; (vi) People Will Say We're in Love.
9. The first Australian state to abolish capital punishment (in 1913) was: NSW; (ii) Vic; (iii) SA; (iv) QLD; (v) Tas; (vi) WA.
10. Windsurfing was invented in 1958 at: (i) Venice Beach LA; (ii) Copacabana; (iii) Bondi; (iv) Chichester UK; (v) South Beach Florida; (vi) Bali; (vii) Ellis Is.
11. How many light-years across is our Milky Way Galaxy? (i) One; (ii) 100; (iii) 1000; (iv) 10 K; (v) 100K; (vi) 1000K.



"Do you ever think about the future?"

"I try to, but technically every second, the future becomes the past."

"Then you have no future?"

"That's what my boss tells me."

Book Club

I had always just accepted that, sometime in the 15th century, a man named Gutenberg had invented a printing press which enabled everyone to read as much as they wanted to. It was that simple. That is, until I read *Gutenberg's Apprentice* by Alix Christie.

The apprentice in the (true though novelised) story is one Peter Schoeffer who was training to be a scribe in Paris when he is called back to his home town of Mainz by his adoptive father to join his partner, Johann Gutenberg. Peter is initially appalled at the thought of the loss of the beauty achieved in holy books by scribes, but he reluctantly joins Gutenberg and his team. They have to invent a type of metal alloy and cast huge numbers of letters, develop inks and a practical press. And they have to acquire stocks of paper and vellum. In the face of strong opposition from the church, they have to work in absolute secrecy. The decision is made to produce a bible, as this is the one holy work for which there is one accepted text.

For four years they labour in secrecy with great financial stress, before finally producing 180 identical copies of 1200 pages in two volumes. To add to their woes, during this period the Ottoman Turks capture Constantinople, cutting off vital supplies to Europe (including purple dyes for holy vestments).

We all know that this invention was one of the most significant ever made – even though it put a lot of scribes out of business! Peter Schoeffer himself went on to produce many publications and the world became full of books. So many books and so little time to read them!

A fascinating read, written in an intriguing style to match the period

Ian Pullar



"What would you like as your Christmas present?"
"A new nightie for you."

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Off the western coast of Scotland lies the island of Lewis – an unimaginably harsh environment, inhabited by only a few die-hards who eke out an existence. There are seven different Presbyterian churches, each resulting from an evermore proscriptive reformation.

This then is the setting for a trilogy of exceedingly well written and researched novels by Peter May. Peter May is a prolific writer who carved out a career as a successful writer of numerous television productions before turning full-time to novel writing, mostly in the crime fiction genre.

The central character in the Lewis trilogy – *The Black House*, *The Lewis Man* and *The Chessmen* – is Fionnlagh (abbreviated to Fin) Macleod who grew up on Lewis, originally as a speaker of Gaelic only. As an adult, he escaped to the mainland and became a police detective. In the first novel, he is sent back to Lewis to investigate a murder with remarkable similarities to one he investigated in Edinburgh. His knowledge of the island and its inhabitants is obviously a bonus, though not always appreciated by the senior officer sent from Glasgow. As well as trying to solve the crime, Fin has to confront the events of his past.

The book is beautifully written with chapters alternating between the present, narrated in the third person, and Fin's childhood, told in first person. It is a first-class yarn full of intriguing information about life and conditions on this outpost of civilisation.

A major event in the story is the annual expedition by a selected few to harvest the quota allowed by law of *guga*, the hatchlings of the sea-birds (a prized delicacy), from a craggy, almost inaccessible island. Throw in a Hebridean gale and the suspense is palpable.

The subsequent two books, in which Fin has retired from the police and now lives on Lewis again, are equally captivating.

Thoroughly recommended reading.

(Peter May has also written other series of novels which we are continuing to explore.)

Ian Pullar