



# WATERY SAUCES OLDIES and BOLDIES

Newsletter No 84

December 2017

NEWSLETTER OF THE WATER RESOURCES RETIREES ASSOCIATION

## All Systems “Go”

What a busy time we retirees have had since the beginning of the financial year – the “Back to Bribie” expedition, the Annual Golf Day, the Central Queensland reunion, the Graeme Milligan Address and the Christmas luncheon. Brief accounts of all these events can be found in later pages of the Newsletter.

And there is plenty more to come once we have all recovered from our own private activities over the Festive Season. It is hoped that the traditional February luncheon get-together will feature another technical talk – various options are being explored – and the AGM in April will include, as usual, information on the activities of the departments whose CEOs are our patrons.

Bill Eastgate, who now resides near Tenterfield, has proposed a visit by members. The tentative proposal is that on 22 May 2018 members make their own way to Tenterfield to accommodation at the Golf Club or nearby. Next day they visit Glenlyon Dam and possibly a winery by bus, followed by conviviality at the golf club that night. On the third day, golfers play a-round while others can please themselves – there’s plenty to see in the area or they can just come home. And all the stayers make their way home on 25 May. We expect there will be plenty of takers. More details to come.

And no doubt the incoming committee will have plenty of other options beyond that for the year ahead.

## From the Editor’s Chair

*Recently reported in the press was a survey of people in their 50s who were asked their opinion of what age was ‘old’. The consensus was 83.*

*This is certainly a far cry from the ‘olden days’ when people struggled on to compulsory retirement at 65 and then moved on to the next stage within a few years.*

*This new definition gives new meaning to our association’s nickname. Only those members over 83 are the oldies. Those of us who have not yet got there are boldies – and we certainly need to be. As one of my friends opines, “Old age is not for the faint-hearted!”*

*Until next time, au reservoir.*

**Ian Pullar, Editor**

## A “New” Government

As this edition goes to print, it is almost certain that the ALP will be returned to government following the State election on 25 November. It could therefore be expected that existing policies in relation to water, such as QBWOS (discussed on page 5) will remain in place. There is, however, the possibility of a ministerial reshuffle.

WRRRA has no view on this outcome, simply reporting the result as history. This is consistent with our former role of faithfully serving the government of the day.

## Class Action

Almost seven years after the flood events of January 2011, a court in Sydney will hear the Class Action against Seqwater, SunWater and the State of Queensland as operators of Wivenhoe and Somerset dams, with the claim that operations of the dams led to widespread flooding downstream. The case was scheduled to get under way on Monday 4 December. After a Christmas recess, the matter is expected to continue well into 2018.

## New Members

WRRRA welcomes two new members:

**Leanne Barbeler** started working in water in 1997 as a Stream Control Officer. She subsequently took on a number of roles including Integrated Catchment Management Coordinator, Director of Water Planning and A/Director Strategic Water Policy. She has now transferred to DEH.

**Rob Craig** started work in 1966 in Records Branch. He served as clerk to Assistant Commissioner Learmonth before becoming a relieving clerk where he served in numerous country and Head Office postings. He served as District Clerk St George and then as Branch Clerk in Underground Water before leaving to take up a post as Hospital Manager, Mossman in 1982.

## SEASONS GREETINGS

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



## “Back to Bribie”

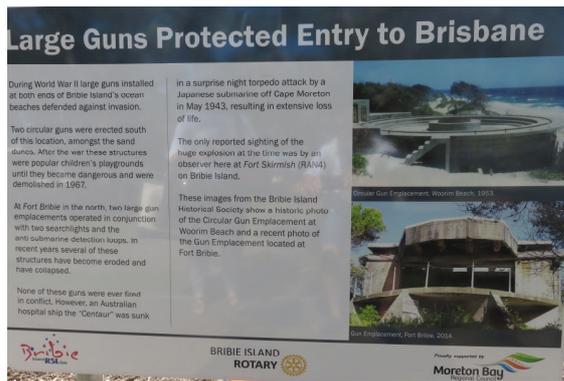
**Peter Gilbey**

On a bright winters morning 21 association members and guests travelled to Bribie Island to enjoy a day out and take in the history and some iconic features of an area on the northern threshold of Brisbane.

Organised by our very own Vice President Daryl Bridgen, the group met at the new Sandstone Point Hotel before travelling on to the Bribie aquaculture centre which had ties to several of our members including Bob Geddes who was asked to help in the design of the sea water intakes for the aquaculture ponds back in our DPI days.

Here we were given an introduction to the history and current activities of the centre which includes the breeding of tiger prawns, cobia (otherwise known as black kingfish) and jungle perch by the centre manager Mike. A copy of his presentation will be posted on our web site.

Following this visit we travelled to one of the coastal defences which still exists on the eastern side of Bribie and where allied forces trained prior to the Pacific Island landings in World War II. Some of this history can also be found on our website.



We then travelled to the Bribie Sea Museum where we saw material associated with the early days of Bribie including descriptions of the coastal ships which carried visitors from Brisbane to the island before the bridge was constructed in the 1960s, the trips beginning in 1922. We also saw some of the works of world famous artist, Ian Fairweather, who lived for a time on Bribie after the Second World War in quite meagre circumstance.

After the visit to the museum, Daryl took us to the site of John Oxley’s landing in 1823 where he met up with Thomas Pamphlett who showed him to the mouth of the Brisbane River which was missed by Matthew Flinders when he surveyed the region 24 years earlier. This was also the site of the very large camp used by our troops and the American forces while training in the area.

We then returned to the Sandstone Point Hotel where a very enjoyable meal was had by all before we went our separate ways.

Daryl and I would like to thank all for coming to enjoy a day at our beautiful island and to thank our wives Lesley and Lyn for providing a lovely morning tea.

*As one of the participants, I would like to add my thanks to the Bridgens and Gilbeys for organising such an enjoyable ‘Grand Day Out’ -Ed.*

## Golf at Keperra

**Peter Gilbey**

A good day was had by all with Trevor Sleep winning with 19 Stableford points followed by Geoff Eades and Terry Loos on 17 which wasn’t bad for occasional golfers. Unfortunately Bill Meredith, Mike Merrin and I were unable to reach double figures – but we still had a lovely morning at Keperra! Others to come along were Graham Young, Ken Watson and a mate of Ken’s.

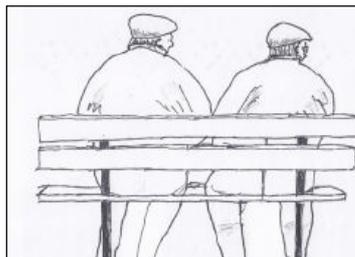


*Mike Merrin putting under the watchful eyes of Peter Gilbey and Geoff Eades*



*Playing the nineteenth: Peter Gilbey, Geoff Eades, Trevor Sleep, Ken’s mate, Ken Watson, Graham Young, Bill Meredith. Terry Loos, Mike Merrin.*

*- photos pkf Terry Loos*



*“Prime time television is so bad, I can’t be bothered with it any more.”*

*“I don’t know. If it wasn’t for prime time television, I wouldn’t get any sleep.”*

## CQ Reunion

Mike McKenna

Central Queenslanders got together for their annual catch up in Yeppoon in October and again it was well attended with nearly 40 people present. Folk from Mackay to Brisbane showed up including Rolf and Maria Rose, Dudley McIntosh, Bruce and Jennifer Pearce, Warren and Joan Hutton and Ross Wheeler. It was lovely to see a continuous stream of southern and northern visitors attending our annual party and to hear the often made comment, "I haven't seen you in thirty years."

Doyen of the group is Bob Gray, Officer in Charge of Theodore for many years and whilst Bob has sight difficulties he's still as perky as ever.

Mick Williams and Kel Roberts were absent through illness but we hope and trust they will recover to roll up next year.



The show will be on again in 2018 and is generally timed for early to mid October. Advance warning will be provided and all interested parties are welcome. It is totally informal so we're sure all visitors will enjoy themselves.

## The Milligan Oration

Terry Loos

On 19 October I attended a talk given to the Water Resources Retirees Association by Graeme Milligan of the Queensland Reconstruction Authority on the recent work of the QRA.

Four points I caught were:

1. All of the work undertaken by the QRA is 'open data' (available on its website).
2. The BCC flood mapping has been updated to take account of this 2017 modelling work.
3. 'Australian Rainfall and Runoff' has been updated to take account of climate change.
4. There are several actions that could be taken for the ground floors of high-set houses in high risk areas: e.g. furniture made of marine ply, and portable; doorways designed to facilitate wash-out of muddy water.

Other than these four points Graeme's talk was too interesting, and he spoke too fast, for me to take reproducible notes. So here FYI are paths to the QRA website on what he discussed.

You might appreciate the flood mapping and the imagery.

<http://qldreconstruction.org.au/>

<https://www.dnrm.qld.gov.au/mapping-data/maps/flood-mapping-program/floodcheck-map>

*Graeme's talk was certainly very interesting and the attendees were impressed by the amount of and effectiveness of the work done by Graeme and his team. - Ed.*

The popularity of these talks means the committee is keen to continue the series. Any suggestions for topics would be welcomed.

## Out and About

Daryl and Lyn Brigden recently joined a tour of Cape York which, despite the extreme dryness, was extremely enjoyable. The lack of water up north was presumably unconnected with the wetness which greeted them when they returned home to find their house flooded from a burst flexible hose. Fortunately insurance mollified their hardship. But there is a cautionary tale in this. The insurance assessor informed them that he deals with frequent such breakages and recommends that flexible hoses be replaced every two years. Be warned!

Overseas trips continue to prove popular. President Pete and Lesley have been to Scotland and Switzerland, Rolf and Maria Rose have done the Canada/Alaska safari, Michael and Hjordis Marley have ventured into Patagonia and Bruce and Jennifer Pearce have been cruising (again). And these are only the ones I have been told about. The Pullars, having gone to the UK, cruised the Danube from Budapest to the Black Sea (we'd gone the other way before), but had to abort our coach tour of the Balkans when Helen fell ill in Bucharest

As readers may remember, Ipswich Little Theatre hosts tour groups to our historic incinerator theatre – Probus Clubs, Garden Clubs, Seniors Groups, etc. During the year I have had the unexpected joy of meeting among these groups, Eileen Rossi, Lindsay White and Anne Woolley. And in August, we hosted a meeting of the entire Heritage Council of Queensland at our venue. The newly installed Chair of the Council is none other than Debbie Best, now retired.

*I keep hoping for more news of members, but appear to be permanently doomed to disappointment -Ed.*

## Christmas Luncheon

The annual Christmas Luncheon at COTAH this year was attended by a total of 38 members and wives, all of whom had the usual good time. The meal was certainly up to its usual high standard and the company was, of course, outstanding.



*Hein van der Heide, Kev Devlin, Ross Stewart and Francoise van der Heide enjoying a pre-lunch beverage*



*Margaret Corbett, Lesley Gilbey, Maria Rose and Beverley Robinson also getting ready*

Among the attendees were John and Coral Palmer who were down from their home in Mackay. It is always a pleasure to welcome country members. We were also pleased to welcome Graeme Milligan who had entertained us not long before with his talk on flood studies.

While the attendance was quite strong, the absence of the 'oldies' (as defined in the editor's note) was a slightly dampening note, but unfortunately fairly inevitable.

The lucky door prizes were again decided by the 'heads and tails' competition conducted with verve by Secretary Rolf Rose and Treasurer Gary Corbett. Rolf also whetted the appetites by outlining planned (and completed) activities of the Association.

Once again, the diners were challenged by Terry Loos's trivia. At first glance the questions seemed a little easier than on some other occasions, but the relatively low scores proved this not to be the case. Those not in attendance on this occasion will have to wait until a later edition to meet the challenge, by which time most of the attendees will have forgotten the answers!

As has been the custom, we were privileged to hear addresses by officers representing our co-patrons, outlining some of the activities being undertaken within their organisations. Representing SunWater was Executive General Manager Operations, Colin Bendall. Colin is the son of former Stream Control Officer Rowly Bendall, who was well-known, particularly to our officers who served in north Queensland.



Colin's address on the activities of SunWater was very informative. Some brief notes can be found on the next page.

**Roy MacArthur** died in November, aged 90. Roy was a much loved Supervising Draftsman in Design Branch for many years. He is survived by his wife June, three daughters, grandchildren and great-grandchildren.

Before joining the then Irrigation and Water Supply Commission, Roy worked as a draftsman in Mt Isa where he became friendly with Greg Norman's parents – this is, possibly, where his great enthusiasm for golf started.

Roy joined the Commission and spent some years as the senior draftsman in Construction Branch but on Ted Taylor's retirement was appointed as the Supervising Draftsman, Designs Branch. This was during a very busy period of development and hundreds of drawings would have reached Roy's desk for approval every year.

Roy was always very involved in the recreation club's activities, social golf days and for many years played tennis with the commission group. But golf was his main passion; he was a member of the Ashgrove club for many years.

On retirement, Roy and his wife June relocated to the Gold Coast to enjoy a long retirement and many, many rounds of golf.

**Ted Dunlop** passed away in June. Ted was well-known and highly regarded as a mechanical/electrical technician. He was also the brother of geologist Bob Dunlop.

## Christmas Luncheon (continued)

Among the items Colin spoke of were:

- Paradise Dam spillway improvements
- Repairs to the spillway at Boondooma Dam
- Dam safety improvements to the spillway at Fairbairn Dam where the anchors are severely corroded and are being replaced by much deeper, sheathed anchor bars
- Lower Fitzroy Infrastructure Project (Rookwood Weir) for which the business case has been completed and environmental impact statement approved
- Possible raising of Burdekin Falls Dam with the preparation of a business case in progress
- Completion of the approved environmental impact plan for Nathan Dam. The scheme is now ready to go once sufficient customers are on board.

The future could, of course, be affected by the outcome of the imminent State election.

Representing DEWS was Simon Hausler who is the Director, Regional Water Supply Planning, having recently transferred from Natural Resources and Mines. Simon is the son of Greg Hausler who was a senior hydrologist in the Commission/Department for many years and, now in his late sixties, is still practising his craft (or is it art?) in private enterprise. Simon's talk was also of great interest and well received by his audience.



Hearing addresses from very senior officers who are the children of our contemporaries (or even junior colleagues), certainly makes us very conscious of the passage of time.

Simon's address concerned the *Queensland Bulk Water Opportunities Statement* (QBWOS) recently issued by the Department.

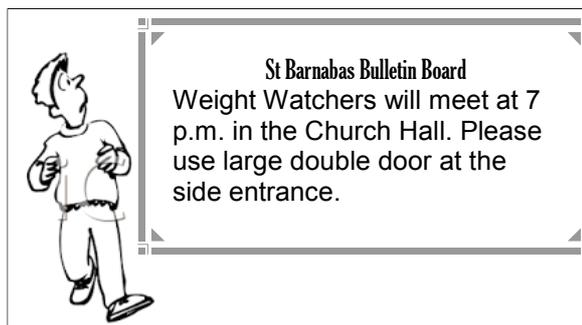
The objectives of QBWOS) are:

- Ensure safety and reliability of dams and urban water supplies
- Use existing water resources more efficiently
- Support infrastructure development that provides a commercial return to bulk water providers
- Consider projects that will provide regional economic benefits

He made available copies of the statement. Further information can be found on the DEWS website.

The document "provides a timely reminder that the approaches to bulk water infrastructure projects in the past may not be the most appropriate into the future. There have been, and will continue to be, new and innovative approaches to addressing water needs across the state."

"It is intended that Queensland's priority list for new water infrastructure will be provided in future versions of the QBWOS."



## Employment Opportunities

WRRA was recently contacted by Simmonds and Bristow, who are looking for staff and are offering opportunities for experienced people as you can read below. - Ed.

Simmonds and Bristow (Est 1965) is a well-recognised Registered Training Organisation, environmental and engineering consulting service, based at Rocklea in Brisbane. We service the water and environmental industry throughout Australia, with special emphasis in looking after small and remote communities, from mines, industry and resorts, to rural towns and indigenous communities. We also offer plant operators on either turn-key (on-going) or as relief operators. We offer competitive compensation based on skills and experience.

Ours is an industry which values experience and we see retirees as fantastic candidates for some of the positions we have going. We've got both permanent and casual trainer and operator opportunities.

We are seeking a trainer who has a flair for instructing and coaching teams in practical, hands on water/sewage treatment/network operation and the patience to teach the theory behind it.

We are also seeking water/wastewater operators to form our pool of "relief operators". Relief operators get approached to take on roles that could range from a few weeks to a few months. We match up what the Operators want in terms of duration, location, etc., with what our clients are looking for. (We also recruit for longer-term "on-going" assignments).

Anyone who may be interested can contact

**Kelly Patrick**

Marketing and Sales Manager

Mobile: 0475-966-552

[Unit 2A, 40 Reginald Street, Rocklea, QLD, 4106](#)

P.O. Box 849, Archerfield, QLD, 4108

T: **+61 7 3434 3800**

F: **+61 7 3434 3899**

[www.simmondsbristow.com.au](http://www.simmondsbristow.com.au)

## Around the World in 104 Days

### Part 3

#### Bruce Pearce

The ABC islands gained autonomy in 1986. They have a population of about 105 000 people who commonly speak Papiamentu, a combination of Spanish, French, Portuguese, Dutch, African and English. Aruba has a beautiful landscape, covering the island with rocky deserts and sandy beaches, colourful cacti and secluded coves.

Our tour consisted of a submarine ride about five feet below the surface where we saw the wreck of the *Antilla*, a German Freighter sunk during World War II. We then returned to dry land and visited the California Lighthouse and Casibari, a landscape formed by boulders the size of small houses, then visited the Baby Natural Bridge and the original Natural Bridge.

Just before we were due to sail that evening, the Captain advised that the ship had broken down with an electrical problem in one of the starter motors. We were due to sail at 6.30 pm but finally got under way at 9.30 pm. We learnt later that the ship was operating with only one propeller rather than the usual two as they were unable to fix the problem in Aruba. The *Dawn Princess* set a course northwards to our next port of call, West End in Bermuda and limped along at reduced speed.

Because of the late departure from Aruba and continuing starboard engine problems we did not arrive until late evening the next day and authorities would not let the ship dock in the dark so it anchored out from the port till the next morning.

Shortly after sunrise, with the pilot on board, *Dawn Princess* proceeded straight in through "The Narrows", which is the only entrance inside the reef surrounding Bermuda. Traversing the many coral reefs we arrived at 8.00 am. Royal Naval Dockyard, the western most point in Bermuda, has served many purposes, including the headquarters for the Royal Navy and a strategic defence post for the British in the North Atlantic. Most recently it has been redeveloped into a fascinating attraction offering visitors a glimpse into Bermuda's history, and a fun place to shop or explore including restaurants, art galleries, a crafts market, maritime museum and more. Bermuda consists of about 360 small coral islands. It is 21 miles long and 2.5 miles wide at its widest point. Its population is approximately 62 000 people.

For our excursion on Bermuda we enjoyed a scenic cruise through Great Sound to Hamilton, the capital. We then boarded a bus for a drive through town and along picturesque Harrington Sound. We visited the Bermuda Aquarium and then descended 80 steps to enter the Crystal Caves. The caves were wet caves and had a big pool of sea water in the bottom which connected directly with the sea outside and were lit up. Bermuda is a beautiful place but because of its isolation, it is very expensive. It was very much English and had lovely pastel coloured buildings. Prices for a good home started at \$2 million.

On the day we were in port, Princess Cruises officially changed its registration location from London to Hamilton in Bermuda. This meant that all items on the ship marked with London as the registration location had to be changed. It was all complete when we returned to the ship before sailing. That evening with the engine repaired, we retraced the tracks we used this morning, rounded the northern tip of Bermuda and, once clear of all reefs, set a north-westerly course towards New York, sailing for a further two days.

Early in the morning, *Dawn Princess* proceeded into the Ambrose Channel which led it underneath the famous Verrazano Bridge and on into the Hudson River, past the Statue of Liberty, to our berth at the Manhattan Cruise Terminal.



New York covers some 50 000 square miles with a population in New York City of about 7.5 million. In New York you can choose from more than 18 000 eating establishments, 150 museums, 400 art galleries, 240 theatres, 50 dance spots, 60 live music spots, 90 institutions of higher learning, and 10 000 shops and boutiques so there is plenty to do.

Our tour in New York consisted of a bus tour through Lower Manhattan and then a cruise under the Brooklyn Bridge and then out to the Statue of Liberty where glorious views of the Manhattan skyline were available. As part of the tour we drove past the Ground Zero site but couldn't see too much as they had started construction of the replacement buildings on the Trade Centre site. In the afternoon we went for a walk from the ship at Pier 88 up 48<sup>th</sup> Street to as far as 7<sup>th</sup> Street in Times Square. We also saw some of the Broadway theatres.

The sail away in the evening was quite spectacular with the full moon rising over the Manhattan skyline as we sailed down the Hudson River and then past the Statue of Liberty all lit up and the *Dawn Princess* set a course north-easterly towards Newport, Rhode Island.  
*To be continued*

#### Answers to Terry's Trivia (page 11)

- (v) 35%
- (i) Kim Kardashian
- All
- (i) \$10
- (i) Rhode Island
- (iii) 14 hrs
- (iii) \$58,350
- (iv) Ukraine
- (iv) 75
- (i) cactus

## Great Rail Journeys

Peter Gilbey

On previous visits to the UK and Europe Lesley and I had experienced the pleasures of touring with organisations such as Trafalgar and APT but having been given the opportunity to experience rail journeys in Scotland, we decided to do our own thing this time and extend the rail travel to Switzerland to see some more of that little country which sits atop much of Europe.

But first I will give you a run down of the rail journeys of Scotland which we undertook with a group of Aussies and Poms with a tour group called Great Rail Journeys of Scotland.

We met in Edinburgh and before we started off we had a day to familiarise ourselves with this World Heritage City – we did this by walking through the older parts of the town as we had previously visited the Edinburgh castle and other highlights such as the *Britannia*. Firstly we visited the Holyroodhouse Palace which was built back in the 16<sup>th</sup> century and was the residence of Mary, Queen of Scots and is still the official residence of the British royals who visit each summer to meet and greet worthy Scots and is used as a staging post for them when travelling on to Balmoral for their annual visits.

While not as large as other palaces we have visited the excellent presentation of its history and the part it has played in the life of Scotland makes it well worth a visit. We then visited the first of our old towns – for it seems most centres of note we visited have an older part which have the most interesting places to visit and shop around – the intimacy of the locales draws people to them and we met up with some really interesting people just walking from place to place.

The next day we were off on our rail journey when we travelled first to Glasgow before taking the west coast train to Fort William. This journey is listed as one of the most scenic journeys in the UK as it climbs up into the Western Highlands passing several freshwater lochs and skirts Ben Nevis, the highest mountain in Scotland.

For the next few days we stayed in an old country Hotel at Ballachulish on a tidal estuary which the Scots also call a loch which can be quite confusing.



*Ballachulish Hotel – a Scottish Pub where we stayed on the west coast of Scotland*

From there, we travelled by bus and train to coastal places such as Mallaig and Oban as well as Duart Castle on the Isle of Mull just off the West Coast of Scotland which once was used to hold Spanish prisoners captured while trying to escape back to Spain following their defeat at the battle of Trafalgar. On the day we visited it was a bright and sunny Autumn day yet the downstairs area where the prisoners were held for over 3 years was quite cold – so what must have it been like during the long Scottish winters? The next day we took the Jacobite train journey to Mallaig so named as it passes by the spot where Bonnie Prince Charles was said to have landed on his way back from France. The journey is also notable for the Glenfinnan Viaduct which features in the Harry Potter movies when he travels to and from Hogwarts by train.

The Viaduct comprises 21 arches and its curve allows passengers to see the train engine as it passes over the crossing. We then travelled on to Inverness passing the famous Loch Ness and the Neptune Staircase on the Caledonian Canal which allows boats to traverse from one side of Scotland to the other without undertaking the arduous sea voyage around the northern Scottish coast.



*Boats passing through one of the 8 locks of Neptunes Staircase on the Caledonian Canal*

From Inverness we took the Kyle line back across to the west coast near the Isle of Skye and visited the beautiful Eilean Donan Castle which is the ancestral home of the Mackenzie and Macrae clans, although the castle was destroyed by the British in 1715 as part of the Jacobite Rebellion – it has been restored to its former glory by Colonel Mackenzie-Gilstrap a descendant of the clan who returned to the area following the First World War.

Following our return to Inverness we overnighted at the Palace Hotel before catching the train through the eastern highlands known as the Cairngorms back to Edinburgh where the first stage of our 2017 journey ends.

More to come later...

## Slip-Sliding Away?

(Some reminiscences from the construction of Maroon Dam circa 1972)

Ian Ferrier

Maroon Dam is located on Burnett Creek, a tributary of the Logan River and is located about 20 km S-E of Boonah. I transferred there in April 1971 as a site engineer responsible to the Project Engineer, John ('The Trump') Moreton. Just prior to this I had been involved in working on locating suitable borrow areas for sourcing the clay core and sand/gravel filter materials for the proposed Monduran (Fred Haigh) Dam and also for Maroon Dam – which was already under construction. I replaced Ross Stewart who became the Materials Engineer in Head Office (the IWSC's version of 'The Bag Man').

Maroon Dam was quite interesting in that it was designed without a conventional spillway, only an "Emergency Spillway" to be cut through a 15 metre (or so) thick layer of igneous rock (Rhyolite) that capped the right abutment of the dam site. This material was blasted away to form the spillway as well as provide the upstream and downstream rockfill shells for the dam which was of earth and rockfill construction.

In lieu of a conventional spillway, all irrigation, riparian and normal flood discharges were provided for by an intake tower and concrete conduit that was controlled by a valve house buried at the base of the clay core of the dam. The valve house was accessed by the downstream concrete conduit which was designed to provide for both (i) access for men and materials to the valve house; and (ii) the discharge of irrigation requirements as well as 'normal' flood flows.

Prior to my arrival on site, the foundation conditions had been causing considerable concern due to their low strength. This had resulted in a couple of increases in the length of the upstream conduit as a result of investigations into circular and (later) trapezoidal modes of slip failure by design engineers like Alan Kinder.

Large undisturbed blocks containing visible slip surfaces were carefully preserved in wax and taken to Rocklea Soils Lab for triaxial shear testing and QUT for shear box testing, causing a delay of six months. While in Head Office I spent some time designing a "tool" that could be lowered down a borehole to drill, cut-off and retrieve smaller undisturbed samples of the foundation from greater depth. (While I don't believe that patent rights were ever applied for, I was at least present when the tool was initially deployed.)

Just prior to my arrival as a site engineer in early 1971, the area had experienced a period of heavy rainfall and flooding. A small circular slip failure was evident in the left bank of Burnett Creek a short distance upstream of the dam site and construction camp. A month or so after my arrival at Maroon, on a weekend drive along the Burnett Creek Road and up the short connection road to the 'Teviot Brook – White Swamp Border Gate' Road, I was amazed to see evidence of a

massive slip failure on the left bank of the Burnett Creek Valley. Numerous 'tension cracks' ran for hundreds of metres along the valley wall and large old hoop pines were askew and dying as a result.

At the dam, further extensions had been decided as necessary for the upstream conduit and other work on the site comprised locating and sampling additional upstream borrow pits for core and filter materials, as Commissioner Fred Haigh had decreed that no materials were to be sourced from downstream of the dam (much to the relief of the Wruck Family whose dairy abutted the dam site). Materials were tested for suitability at the soils lab on site; borrow areas stripped; and a major haul road constructed from the site for about 1.5 km up the creek out of a clay/cobble material sourced from an ancient scree at the base of Mt Toowoongan. Form-setting for the valve house and u/s and d/s conduits continued and the excavation of the creek bed was undertaken through about 8 metres of gravel down to an old water-worn solid Dolerite 'Sill'. Dewatering of this area continued as the placing and compaction of core, filters and rock-fill commenced apace.

Drilling and grouting of the dam seepage cut-off curtain also continued progressively up the higher sections of the left and right abutments at this time and resulted in one of my most 'indelible moments' on site. I guess it was an early morning in Autumn 1972 and, after an inspection of the earthworks, I decided to take a look at the excavation for an extension of the concrete grout cap, through which all the cut-off wall drilling and grouting activities were undertaken. Claude Strickfuss was the backhoe operator – and, probably fortunately, a very measured one at that! As Claude slowly 'crowded' the bucket and removed a sizeable chunk of the foundation, I and a couple of workmen were blinded by the early morning sun reflecting off what appeared to be a mirror embedded in the foundation.

The 'mirror' was a tightly compacted, off-white, waxy clay which was completely planar and contained a few parallel, linear fine scratches across its surface. Alarm bells rang as it was obviously a 'slip surface' along which the creek abutments had been sliding. There were also fine black carbonaceous materials (something to do with coal measures I was later told) in close proximity to the slip plane. Photographs were taken and H/O advised as a matter of urgency. Consulting Engineers, Coffey & Hollingsworth, were engaged and undertook a detailed investigation of the dam site and the whole of the Burnett Creek area (including the major 1971 upstream slip mentioned earlier).

The slip surface we had uncovered is known as a "Slickenside" or "Fault Mirror" and is a polished and striated rock surface resulting from friction along a fault or bedding plane that had been uncovered. The waxy clay was a 'Montmorillonite' which Geoff Eades informs me is a by-product of the alteration and weathering of thin layers of volcanic ash interbedded with the coal measures.

### Slip-Sliding Away? (continued)

The upshot of this was more stability analyses for Maroon Dam which resulted in major “weighting zones” being constructed on both the upstream and downstream rockfill shells of the dam. From memory, I believe this almost doubled the volume of earthworks for Maroon Dam from about 1.2 million cubic yards to 2.3 M yds<sup>3</sup>.

Geoff Eades advises that further works involving the spillway and weighting zones were undertaken as a result of the 2012 (?) dam safety studies conducted on

### More Adventures of Young Ian

It all began for me when I was awarded a scholarship with the Irrigation and Water Supply Commission. Towards the end of my secondary schooling, I had to decide on a possible future career, and thought Civil Engineering was a serious possibility. My father had a work colleague by the name of Geoff whose brothers Len and Don Redmond both worked for IWSC. Dad enquired of Len if the Commission offered work experience. The answer was “No” but they did offer scholarships. So I applied, and after an interview with a cross-departmental panel that included Harold Mortley, I was awarded one. This paid my fees at UQ (the only university in Queensland at the time), gave me a small book allowance and a living-away-from-home allowance of £6 per week – exactly the cost of residence in St Johns College. The only problem was that the allowance was taxed, so my father still had to shell out.

My income was partly augmented by payment for work experience on Commission projects. I had the good fortune to spend one Christmas vacation at Leslie Dam where I was assigned to the survey team. At the end of the first day, I accompanied them to the wet mess. I was never sure whether Project Engineer Alan Taylor was more upset by my drinking in the mens mess rather than the officers mess, or by the fact that I was not yet 21.

I did eat in the officers mess. On the first Friday night, I asked the lass who was serving the meals what was for dinner and she replied “Seminary Souls.” Perhaps appropriate, I thought, in those days of religious observance of Friday diets, but I remained puzzled until I was served with salmon rissoles!\*

I thoroughly enjoyed my stay at the camp, which is where I first met John Moreton and John Ready. The story goes that one day storekeeper Reg Guthrie in the mess asked his famous riddle “What’s round and red and goes putt putt?” And he delivered the answer “Alan Taylor playing golf” just as Artie walked into the Bar!

Ian Ferrier and I also shared work experience at Coolmunda Dam where Norm Rossi was the PE and where both Johns, Moreton and Ready, were on the staff. The technical challenge of the day was the installation of the ELSE cut-off. The wonderful story of the boat over the spillway post-dates our experience (it can be found in the People’s History on page 209).

Maroon. This involved extending the existing grout curtain, installing additional pressure relief drains downstream of the grout curtain and extending the downstream weighting zone. Also, the downstream area of the spillway was widened and the material used in the new weighting zone.

*Many thanks Ian for this interesting account of things that might have gone wrong. And of course another result was that the Full Supply Level was deliberately kept low while pore pressures were carefully monitored - Ed*

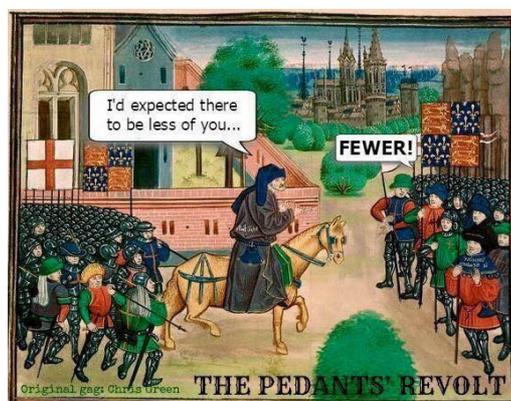
In our final year at University, all the civil students were taken on a field trip which included inspection of Coolmunda, still under construction. The four IWS scholarship holders – Ian Ferrier, Michael Marley, Rob Robson and I – were given accommodation at the camp which involved a session at the Inglewood pub over which I must draw a veil. We were at least now of legal age!

On graduation, I had a five year bond which, with hindsight, is quite laughable after my fifty year association (in work and retirement) with a most remarkable organisation.

\* This is a classic example of a Mondegreen, the name given by an American woman to mishearings because she was familiar with a Scottish ballad which she thought included the words “they’ve slain the Earl of Moray and Lady Mondegreen” which were actually “the Earl of Moray and laid him on the green.” Another wonderful example of a mondegreen was noted in Newsletter 72 where the granddaughters of Banjo Paterson were intrigued by the stockmen “who had mustard at the station overnight”.

Footnote: One day in September, I was contemplating the possibility of an article on my work experience at Leslie and Coolmunda dams when I recalled the ‘putt putt’ riddle. The very next day, out of the blue with absolutely no prompting from me, came an e-mail from Ian Ferrier which included the same riddle.

“Who can explain it, who can tell you why?”  
“There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy.”



*As a paid-up member of the Pedants Society, I couldn't resist publishing this - Ed.*

# HEALTH *and beauty*

## Research

*I never cease to be amazed at the areas of research undertaken – and presumably funded – by institutions. Here are just a few examples culled from newspapers - Ed.*

### A Wee Advantage

According to certain Scottish scientists, boys have a natural advantage at physics because their ability to urinate up walls helps them to understand projectile motion. So-called “playful urination” gives them a headstart over girls at secondary school. As a result, pupils should be taught energy conservation rather than Newtonian motion to stop girls being disadvantaged, according to the (female) researcher.

*If indeed boys do do better at physics, I would have thought it just might have more to do with them being wired (as well as plumbed) differently.*

### It'smiles Better if You Do

Adults smile 11 times a day on average, and most of them are genuine. We smile more on sunny days than dull ones and compliments from strangers also make us grin. Old photographs and seeing a baby laugh also elicit a smile from more than a third of us.

However, the researchers found that two of our eleven smiles were false and one in ten adults claim they “don't like smiling.”

*Earth-shattering results?*

### A Bounce Out of Bed

A night of passion in the bedroom can boost performance in the office by improving the mood the following day – even if sleep has to be sacrificed. The effect, which appears to last for at least 24 hours, is equally strong for men and women.

Sex releases the chemical dopamine, which activates the reward centres in the brain and positive emotions make us better motivated and able to cope.

The results of the study appears to contradict advice given to sports people to avoid having sex before an important competition. “A healthy sex life will help employees keep happy.”

*You can always try it for yourself.*

### The ig-Nobel Awards

*Each year these awards are made to recognise research which can only be regarded as a gross waste of time and money. If you want to raise at least one of those recommended smiles, try googling them - Ed.*

## Exercise those Brain Cells

Q: A castle is under siege. A mercenary has been delegated to infiltrate the castle in disguise, but to enter he will have to give the guard the right password. He hides himself in a position to eavesdrop on arrivals. A man arrives and the guard says to him, “Five.” The man replies, “Four” and is admitted. A second man arrives and to the guard's “Six” he replies, “Three” and is admitted. A third man when challenged with “Seven” successfully replies “Five.” The mercenary is now prepared and approaches the guard who says “Nine”. The mercenary's response gets him in. What was it?



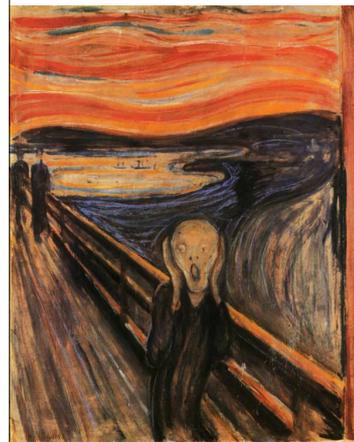
## An Artful Competition

*In the July edition of the Newsletter, I posed a competition, inviting members to submit a caption for a work of art.*

*As time went by, I successively wondered if there would be a flood of entries, a trickle of entries or any entries at all. To my great disappointment, there were none of the above.*

*So here is my reminder of something that might have been - Ed.*

THE SCREAM Edvard Munch



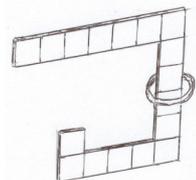
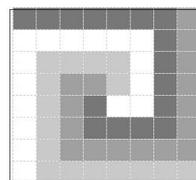
*“I just drank non-alcoholic wine by accident!”*



*“I'm very sad that Mummy died before my father. She was so looking forward to a long widowhood.”*

## Answer to last Issue's Teaser

Cut the plywood into four pieces as shown.



### It's How You Look at It

The optimist says, "A brand New Year!  
So last year's slate is now wiped clean."  
The pessimist says, "No need to cheer,  
It's just the way it's always been."

### What Year is That?

We are coming up to a New Year which, by convention, will be known as AD 2018. But the numbering is pretty arbitrary. In Aldous Huxley's *Brave New World*, years are measured from Our Ford (rather than Our Lord).

In earlier times years were dated in line with the reign of a ruler which was naturally pretty limiting. So, up until the 6<sup>th</sup> century, the numbering of years remained relatively unfixd. Then along came a monk named Dionysius Exiguus of Scythia Minor who introduced the AD system in AD 525, counting the years since the birth of Christ (Anno Domini). Dionysius devised his system to replace the Diocletian system, named after Diocletian, the 51<sup>st</sup> emperor of Rome (AD 284 to 305). The first year in Dionysius' Easter table, "Anno Domini 532," followed the year "Anno Diocletiani 247." He made the change specifically to do away with the memory of this emperor who had been a ruthless persecutor of Christians. Dionysius never said how he determined the date of Jesus' birth, but some authors theorise that he used current beliefs about cosmology, planetary conjunctions and the precession of equinoxes to calculate the date. Dionysius attempted to set AD 1 as the year of Jesus Christ's birth, but was off in his estimation by a few years, which is why the best modern estimates place Christ's birth at 4 BC.

It wasn't until the 15<sup>th</sup> century that all of Europe adopted the BC/AD system.

There never was a Year Dot – AD followed immediately after BC, although all of this was retrospective. The ancient Romans didn't count backwards as Sellar and Yeatman would have us believe in *1066 and All That*.

Fortunately, the rest of the world went along with the Christian calibration of time, although the modern trend is to use the nomenclature BCE (Before the Common Era) and CE (Common Era) to avoid offence.

And of course, the date of New Year's Day is purely arbitrary. It is a moveable feast for the Chinese; and the Persians still celebrate it in February.

In Norwich Cathedral, there is a memorial to the daughter of Frances Frank who was born on April 13, 1736 and died on February 20, 1736. No, the dates are not an error on the part of the mason. At the time, New Year's Day was celebrated on March 25, so February did come after April. Britain only adopted January 1 as New Year's Day in 1752 – 200 years after continental Europe had switched from the Julian calendar to the Gregorian calendar.

All of which rather makes a mockery of the hooha about the Millennium!

### A Sign of the Times

On a Stafford car wash

**Conjunctivitis.com** A site for sore eyes

### Terry's Trivia

From the 2017 mid-year luncheon. Answers on page 6.

1. On ATO figures what percentage of Australian taxpayers donate to charity?: (i) 75%; (ii) 65%; (iii) 55%; (iv) 44%; (v) 35%.
2. Who was the most 'Googled' person in Australia in 2015: (i) Kim Kardashian; (ii) Adele; (iii) Barnaby Joyce; (iv) Donald Trump; (v) Stephen Hawking.
3. Which did William Hill UK rate at 5000:1: (i) Leicester City winning the EPL; (ii) Elvis being found alive; (iii) Yeti or Loch Ness Monster is proven to exist; (iv) Kim Kardashian becomes the U.S. president in 2020; (v) Barack Obama plays cricket for England.
4. If Australia's total Federal budget spending were \$100, how much would be spent on the age pension?: (i) \$10; (ii) \$20; (iii) \$30; (iv) \$40.
5. Captain James Cook's ship Endeavour is believed to have been recently found where?: (i) off Rhode Island in Newport Harbor; (ii) in the Solent off the Isle of Wight; (iii) off Slaughter Bay at Norfolk Island (iv) off Fraser Island; (v) in Tahiti.
6. What's the approx. flying time by Airbus A380 from Brisbane to Dubai? (i) 10 hrs; (ii) 12 hrs; (iii) 14 hrs; (iv) 16hrs; (v) 18hrs.
7. The ASFA Retirement Standard estimated at Dec 2014 that a couple, assuming they own their own home and are in reasonable health, will need to spend annually around (i) \$38,350; (ii) \$48 350; (iii) \$58, 350; (iv) \$68, 350; (v) \$78, 350, to live comfortably.
8. The Eurovision song contest 2016 was won by: (i) Russia; (ii) Australia; (iii) Sweden; (iv) Ukraine; (v) Latvia.
9. Bob Dylan's birthday is on 24 May. This year he was?: (i) 60; (ii) 65; (iii) 70; (iv) 75; (v) 80.
10. Tequila is made from: (i) blue agave cactus; (ii) potatoes; (iii) red kidney beans; (iv) juniper berries; (v) red rice.



"They said on TV that in India, some men don't know their wives before they get married."  
"Why did they limit it to India? Why only to some men? And why only before they get married?"

## Book Club

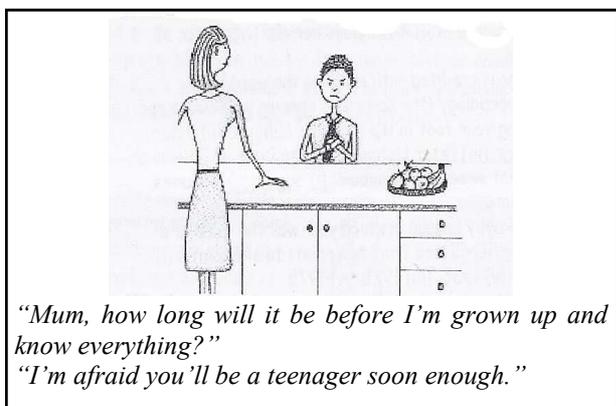
From 5 April 1992 to 29 February 1996, the City of Sarajevo was continually shelled from the surrounding hills. On 27 May 1992 a mortar shell into a breadline killed 22 people. These facts inspired Canadian author Steven Galloway to write a brilliant novel, *The Cellist of Sarajevo*.

On the day the 22 people are killed, the cellist watches from a window in his flat. He vows to sit in the square where they died and play Albinoni's Adagio once a day for each of the twenty-two victims. The Adagio had been re-created from a fragment after the only extant score was firebombed in the Dresden Music Library, but the fact that it had been rebuilt by a different composer into something new and worthwhile gives the cellist hope.

Meanwhile, Kenan steels himself for his weekly walk through the dangerous streets to collect water for his family on the other side of town, and Dragan, a man Kenan doesn't know, tries to make his way towards the source of the free meal he knows is waiting. Both men are almost paralysed with fear, uncertain when the next shot will land on the bridges or streets they must cross, unwilling to talk to their old friends of what life was once like before divisions were unleashed on their city. Then there is "Arrow," the pseudonymous name of a gifted female sniper, who is asked to protect the cellist from a hidden shooter who is out to kill him as he plays his memorial to the victims.

This beautiful and unforgettable novel speaks powerfully to the dignity and generosity of the human spirit under extraordinary duress.

**Ian Pullar**



### Office Bearers

President	Peter Gilbey	3408 8105	the_gilbeys3@bigpond.com
Past Pres	Mike Merrin	0437 005 707	michaelmerrin8@bigpond.com
Vice Pres	Daryl Brigden		darylbrigden@bigpond.com
Secretary	Rolf Rose	3269 2700	rolf.rose@bigpond.com
Treasurer	Gary Corbett	3398 8657	treasurer@waterssauces.org.au
Executive	Bruce Pearce Russ Robson	3289 6297	brucepearce@bigpond.com robson_judy@yahoo.com.au
Auditor	Vacant		
Editor	Ian Pullar	3281 4437	hpullar@bigpond.net.au
WebMaster	Warren Shallcross		webmaster@waterssauces.org.au

Robert Harris is a prolific author of extremely readable books, mostly with a historical context (eg Ancient Rome). His recent book, *Conclave*, was almost certainly inspired by the recent election of Pope Francis and certainly echoes the knowledge laymen have of that and earlier elections.

In *Conclave*, the protagonist is Cardinal Lomeli, dean of the College of Cardinals and the man responsible for presiding over the conclave. Among the papabile there is Tedesco the traditionalist, Tremblay the ambitious North American and Adeyemi the African with strong views on the role of women and gay marriage. Vaticanologists will doubtless be able to tell how far these various individuals resemble real-life cardinals – though even the most casual Vatican watcher should be able to identify the shady outlines of at least half a dozen well-known figures. Into this gathering there arrives a cardinal no one has heard of – Vincent Benitez, a cardinal *in pectore*, created by the previous pope in secret. The stage is thus set for a showdown.

*Conclave*, like its predecessors, is as much about the details as the drama.

In *Conclave* the sequence is very simple and straight forward: the pope dies, the cardinals gather, there is the first ballot, there is the second ballot, there is the third ballot, and so on, each stage being accompanied by another twist, some new mystery or complication.

An interesting and enjoyable read.

**Ian Pullar**

I have just finished reading *Secret Smile*, yet another admirable crime novel by Nicci French. This is a nom de plume of a husband and wife duo who have written many a well plotted yarn. Among them are a series featuring Frieda Klein – starting with *Blue Monday*, now through to *Sunday Morning Coming Down* with apparently more to come. I have to confess to addiction!

There must be some members out there who read and would like to share their experiences with others. Surely! - Ed.

