



WATERY SAUCES OLDIES and BOLDIES

Newsletter No 107

March 2025

NEWSLETTER OF THE WATER RESOURCES RETIREES ASSOCIATION

41st Annual General Meeting

Once again this year the AGM will be held in the Community Meeting Room of the BCC Brisbane Square Library on the ground floor of the Brisbane Square Building on **3 April 2025**.

Formal notice of the meeting is in the hands of the Secretary, so this is an informal notice from your editor. We certainly hope there will be good attendance of members and their partners keen to participate in hearing reports on the years activities and the election of the management committee. But you don't have to be there to be there. Through the wonders of modern technology, you can 'zoom' in.

To book an 'on line' link to be part of the meeting, please register with Secretary Rob Ayre before Monday 31 March

Mail: Hon. Secretary WRRRA Inc
41 Armentieres Street
KEDRON Q 4031

Phone: 0418 151

E-mail: secretary@watersauces.org.au

As an extra incentive to come in person, WRRRA will provide a \$15 subsidy to lunch with colleagues at a nearby venue.

From the Editor's Chair

As an octogenarian, I can reflect on the fact that life is a kaleidoscope with an ever changing view. Last century when I was commissioning economic studies on possible schemes, Treasury insisted that we had to use a WACC (weighted average cost of capital) of 10-12%. Long term interest rates then, and now, average out at around 6%. Now interest rates of 4.35% are considered unbearable (they were around 18% in the 80s) and have been reduced – good for borrowers, not good for retirees.

Until next time, au reservoir.

Ian Pullar, Editor

The Year Ahead

2025 is a significant year for the Water Resources Retirees Association. In 1995 – thirty years ago – the Water Resources Commission was abolished and its functions were dispersed over a number of different entities. Reorganisations have continued ever since. There have been titles containing Water eg Sunwater and Seqwater, and titles containing Resources, but never have the twain been conjoined again.

Nevertheless the spirit of Water Resources has been maintained through our Association. The number of members has remained remarkably constant with new retirees joining.

Following the recent State election and a change of Government, there have been changes in departmental arrangements. We have retained our two patrons, Glenn Stockton who remains CEO of Sunwater and Linda Dobe who now presides over a new Department of Local Government, Water and Volunteers. We continue to be grateful for their on-going support which will feature in the program ahead.

The following draft schedule will need to be ratified by the incoming Committee.

- 3 April – AGM – BCC Brisbane Square Library
- May – Technical Session Sunwater – Paradise Dam Improvement Project Update.
- May (21 or 28) – Toowoomba Get Together – see p 2
- June – Half day Planning Workshop – details to be confirmed.
- July – Sunwater Rocklea Hydraulics Laboratory Visit and on-site BBQ mid-year lunch – Borumba Dam Pumped Hydro and Burdekin Raising Models.
- August – WRRRA Field Trip to South Burnett (Murgon/Kingaroy). Timing to coincide with Bacon Fest (15/16 August).
- September – Technical Session DLGWV – topic to be advised.
- September – Annual social golf event – 22 September at Wynnum Golf Club 18 holes.
- October – Annual CQ Get-Together at Yeppoon.
- October/November – Technical Session Sunwater – Burdekin Falls Dam Raising Project.
- November/December – End of year luncheon – Merthyr Bowls Club, 26 November or 3 December (to be confirmed).

Regional Events

Our men in Toowoomba are planning a successor to last year's highly successful Regional get-together. David Free and Adrian Mackay held a summit meeting over coffee and unanimously elected Jim Weller (in his absence) to the positions of chair of the organising committee and MC of the event. Jim is also the newest, very welcome member of the WRRRA.

The gathering will be held on either 21 or 28 May and the search is on for a topic and discussion. Any suggestions and expression of interest in attending would be welcomed.

james.weller@bigpond.com

Mike McKenna will also be hosting his traditional CQ get-together in Yeppoon in October – more details later.

WRRRA is keen to support regional events and will again offer sponsorship to local organisers.

Last year, members of WRRRA travelled to the Granite Belt where they overnighted for a couple of nights and explored the area. The participants thoroughly enjoyed themselves. So this year we plan a similar field trip to the South Burnett where members will visit Bjelke-Petersen Dam and associated works as well as taking in local features. The tour is planned to coincide with Kingaroy's Bacon Fest in August.

A Parting

On 20 February, Linda Dobe hosted a luncheon at the German Club to mark Richard Priman's transition to retirement. This was significant because Richard was the last remaining one of the 120 or so staff of the old Local Government Department who were transferred to the Water Resources Commission in 1988. (Our Trivia King Terry Loos was the second last.)

Linda described Richard as "the last of people who knew all the options for water resource development in SE Queensland and elsewhere in the State."

We wish Richard a long and happy retirement.

Alf Loveday passed away on 20 February. He was a long term Construction man who worked on Borumba Dam among others. Alf had been unwell for about four years suffering from asbestosis and silicosis, possibly from years of mixing cement on dam construction.

Brisbane Events

Obviously the Brisbane area has the greatest concentration of members and other ex-wateries and all the members of the committee live in the south east. And because of the tyranny of distance, most of our activities take place there.

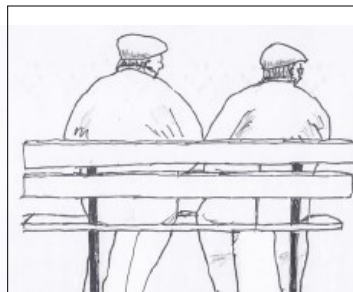
First up will be the AGM.

Because of some interest by retirees in current activities within Government, the Committee, through the beneficence of Sunwater and DLGWV, arranges technical presentations by serving officers. Several are planned for this year. More details will be supplied as they become available.

Since one of the association's aims is to foster contact between former work mates, it is customary to host lunch events. This year, again through the generosity of Sunwater, we plan to combine a technical event with a social gathering at the Rocklea Workshops with inspection of hydraulic models and a barbecue.

Those keen golfers who gather together each year will be relieved to know that the annual event is planned for August.

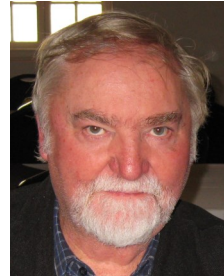
As Socrates reputedly said, "The unexamined life is not worth living". So after more than 40 years of the existence of WRRRA, the committee has decided it is time to think about our role, our activities and our future. Accordingly, there will be a meeting of minds at a half-day workshop to address these issues. It is hoped that input can be obtained from present and former committee members, country and new members and representatives of our sponsors. Assuming the AGM supports the idea, invitations will be issued soon with the event to be held in June. And of course the AGM itself will provide a forum for comments from members regarding the Association and its *raison d'être*.



"Eternity's a terrible thought. I mean, where's it all going to end?"

Vale John Ridler 13 February 1947 – 16 December 2024

John Ridler started work as a cadet Hydrographer in the Irrigation and Water Supply Commission on 22/2/1965 and retired on 24/5/2012. John would often joke that he had the same job for 47 years but worked for eight different departments; starting with the name change from IWSC to the Queensland Water Resources Commission (QWRC) in 1978, then shortened to WRC in 1979. In 1989 it became a business unit within the Department of Primary Industries (DPI). Water departed DPI in 1995 and was included in four other departments up until 2012; he said he had forgotten the names since 1996, as they all meant nothing to him – or the public!



John went to Cooma in the Snowy Mountains (SMHEA) for two months of mandatory training in 1965 as part of his hydrographic cadetship. He served in Mareeba in 1967 and then on to Bundaberg in 1972. The staff in Bundaberg changed around a lot in this period as the office was only established for hydrographic staff in 1968, so people would often come and go for short periods. John would say he was in and out of rum territory many times and was lucky to have his burnt yellow '66 Mustang to get him quickly there and back.

He did the Gulf wet season camp in 1972 and 1973, which entailed living in Mt Isa from January to Easter and measuring any floods that occurred in the Gulf area; the accommodation and funding was provided by Mt Isa mines. John also pioneered the early plane trips to western Queensland, which covered the area west of Mitchell to the NT border and south from Boulia to the SA/NSW border, maintaining the gauging stations in the six catchments – Warrego, Paroo, Bulloo, Cooper Ck/Barcoo/Thomson, Diamantina, Eyre Ck/Georgina/Burke/Hamilton – in that large part of the state.

Operating from the Brisbane office, John then worked in the Border Rivers, mid-west and far-west areas from the late 1970s through the 1980s and measured record floods on big rivers, including the Condamine, Balonne, Macintyre/Dumaresq/Barwon, Weir, Moonie, Maranoa and Bulloo. The resident senior engineers in Toowoomba, St. George, Charleville and Longreach through this period would remember giving him assistance (and counselling) through this period.

From 1990 he primarily looked after the Brisbane, Logan and Albert Valleys and the streams on the Gold Coast to the NSW border, where more days of gauging station operation and maintenance, catchment inspection and of course – flood measurement – followed! He was well known and liked by the older storage supervisors, where many hours were spent assisting each other with reciprocal repairs, advice, or first-hand news of who was doing what in the “Commission” – the information flowed both ways.

John also worked outside of the normal hydrographic water quantity data collection area, where he was heavily involved in the monitoring of water quality, sediment transport and outbreaks of blue-green algae – particularly in storages. He further ventured into the world of charting river health through the collection and identification of macro invertebrates as an indicator of the biological health of a river. This work took his fancy but he would often declare that “all this stuff is good but it is the floods that are important.” A true hydrographer to the end.

John and his future wife Wendy met in Bundaberg around 1972. They had three children, Cathy, Scott and Cameron. John was a car lover and owned an Austin Healy Sprite in the 60s, a '66 Mustang and V8 Valiant Ute in the 70s/80s and a 911 Porsche in the 90s, among the more notables. He also had several boats and spent most week-ends in the bay when the children were growing up.

John was partners with Ralph Baker in a motor-bike shop on Grey St, South Brisbane; it was inundated in the 1974 flood – some of the hydrographers chipped in to move the stock – we really just wanted the chance to ride some of the bigger bikes. Ralph was a designs engineer in Surface Water branch and died while he was still working – although not on the job. We think that was about 1983 but someone may know more.

John claimed he had the speed record for a Willy's Jeep Gladiator series that was the vehicle used by SWR in the 70s. He reckoned he got one up to 110 mph; I don't know if that's true but entirely believable as we often got them to 100mph. Harry Stark used to say there was no reason to speed even if we were rushing to catch the peak of a flood event. Meanwhile I have included a snap of John, Alan Seabrook and the local copper having a beer at the Stonehenge Hotel temporary bar, soon after it burnt down in 1966.



Tribute provided by Paul Martin.
See next page for a Gladiator



Gladiators at work circa 1974 (pkf Paul Martin)



Town Planners of Theodore

Last year, Theodore – “The Town that Water Built” – celebrated its Centenary (as reported in Newsletter 105). The question was again asked, “Who designed the town?” Because there are certain similarities between the layout of Theodore and the two irrigation towns of Griffith and Leeton which were designed by Walter Burley Griffin, it was thought that perhaps he may have had a hand in the design of the Castle Creek township (as it was originally named). However, no amount of research, including the resources of the Burley Griffin Society, discovered any connection between Griffin and the town that was later named after Edward “Red Ted” Theodore, Premier of Queensland, Deputy Prime Minister and Treasurer of Australia.

So if Griffin didn’t design it, who did? Our indomitable treasurer Gary Corbett is not one to give up easily. During our Q100 celebrations in 2022 Gary, along with Bruce Pearce, had undertaken a considerable amount of research into the history of the first Irrigation Scheme and the establishment of the Irrigation and Water Supply Commission. He was determined either to find out who designed Theodore or at least satisfy himself that he had explored every possible avenue.

His results – dated 2025 – can be found in the History section of our website under Collections and Recollections” (Volume 5). It makes fascinating reading as it covers the establishment of the Castle Creek Irrigation Scheme, the Irrigation and Water Supply Commission and the appointment of the first Commissioner, Archibald Partridge.

In 1919, Theodore became Premier of Queensland and it appears that the scheme was part of his Land Settlement aspirations; it was Theodore who introduced the enabling legislation in 1922, not the Minister for Lands. In 1920, two survey parties were despatched to the Dawson Valley by the Water Supply Department, so it is clear that plans were already being formulated for the proposed scheme.

In May 1922, a Vice-regal party set off for the Dawson Valley Among others, the party included Governor Nathan; Premier Theodore; Minister for Railways; and Water Supply Department representatives (Engineer Bowyer Shaw and Authorised Surveyor Eric Peart). Press reporting of the Vice Regal visit to the Castle Creek Junction area, including a statement that *‘the area has been subdivisionally designed with a proposed township in a central location’*.

In July 1922, Engineer Bowyer Shaw appeared before a Royal Commission on a proposal to extend the railway from Baralaba to Castle Creek, and displayed a map showing a possible township location, endorsed by A/Hydraulic Engineer, WS Dept. In September, Theodore introduced the Irrigation Bill.

The Town Plan of Castle Creek had been fully surveyed and endorsed by Authorised Surveyor Peart by 13 May 1923, just seven months after the October 1922 passage of the *Irrigation Act of 1922* and the appointment of Commissioner Partridge.

In September 1925, Commissioner Partridge presented the 1924 / 25 IWSC Annual Report containing a second conceptual Town Plan endorsed by Partridge, showing ambitious extensions beyond the confines of Castle Ck and the Dawson River. This version was referenced as ‘Queensland’s Model Garden City’ and recommended the change of its name from Castle Ck to Township of Theodore, to reflect Premier Theodore’s strong advocacy for the area. It also states that the ex-Premier *‘has consented to’* the recommendation.

Gary’s research has been unable to identify a single designer of the town, but personal involvement by Premier Theodore, coupled with major lead roles played by Engineer Bowyer E Shaw and Authorised Surveyor Eric L Peart is considered to be the most likely scenario for those involved in the planning of Theodore:-

The WRRRA would therefore suggest that Theodore could be both ‘THE TOWN THAT WATER BUILT’ as well as ‘THE TOWN THAT WATER PLANNED’



<https://www.waterysauces.org.au/history/theodore/theodorerecollections.pdf>

NOTE: ‘Town Planners of Theodore’ is available via the link above. The ‘Town Planners’ contribution is the 26th (and last) made to ‘Collections & Recollections’ as a ‘living document set’ since its first uploading in Jan 2024. The WRRRA has now symbolically stamped all 5 as being their ‘As-Built’s’ of ‘The Town that Water Built’.

Fred Haigh (Monduran) Dam

Michael Marley

The year 2024, being the fiftieth anniversary of the completion of Fred Haigh Dam, reminded me of the very significant part that the then Monduran Dam played in my life in 1971 and 1972.

On my final rotation as an IWSC Scholarship-holder in Construction Branch, I was also in the final stages of a part-time Masters degree in Geotechnical Engineering at UQ. The design of Monduran Dam was well under way and I was searching for a suitable topic for my thesis.

Monduran was to be an earth and rockfill embankment dam and it seemed to me that the conventional approach to the placement of rockfill in both earth and rockfill and concrete-faced rockfill dams suffered from a number of disadvantages. The then accepted technique in Australia, and Queensland in particular, was to end dump sound rock in quite high lifts while sluicing with high pressure water jets to remove fines and ensure direct rock to rock contact. The technique relied on the impact of the falling rock to achieve initial compaction, with the surcharge of subsequent rockfill lifts helping to achieve ultimate settlement.

As the height of dams increased, the significance of differential settlement of the rockfill zones and the water retaining elements began to emerge as a significant design concern.

Overseas, a “revolution” in construction technique applied to rockfill dams was beginning to emerge. Compaction of rockfill in thin lifts using vibratory rollers was being found to be superior, not only in terms of performance but also on the basis of economics. Rock which was unsuitable for use as dumped rockfill could be satisfactorily used in certain zones of a compacted rockfill dam and still provide superior performance characteristics. Compaction of rockfill zones was found to enable steeper slopes to be adopted with savings in volumes of rockfill.

However, the compaction of rockfill required the development of suitable techniques for compaction control to ensure that the properties of the material in situ met the design assumptions.

On the assumption that the Monduran design would be based on compaction of the rockfill zones, I approached Alan Wickham (then Chief Design Engineer) with a proposal to undertake a research project to determine the most satisfactory method of ensuring adequate compaction and hence adequate material properties for the rockfill.

To my great relief, Alan was supportive and with construction work about to commence, it was agreed there was potential benefit for this and future projects likely from the proposed research project.

Thus the proposal received the green light.

Compaction control methods for fine-grained soils forming the impermeable zones of the dam have been

long established. These tests are of small scale and hence cause minimal interference with the construction operations. For coarser grained rockfill materials, adoption of a similar test regime given the significantly larger scale could be problematic. In light of this it was decided to build a trial embankment to establish a method specification which achieved acceptable properties for the compacted material prior to commencement of dam construction.

The aim was to establish an optimum number of passes of a particular roller for various lift heights using measured surface settlement of each lift and in situ density of each lift in response to various numbers of roller passes.

The site for the trial embankment was a gully crossing on the alignment of the main irrigation water carrier-channel route from the dam, with the finished trial embankment to carry a bench flume section of this main channel.

Timing was to coincide with trial blasts in the proposed quarry which was located in relatively close proximity.

Initially two rollers were selected for comparison: a 4.5 ton drawn vibrating roller; and a 10 ton self-propelled vibrating roller.

As settlement of the foundation could not be ruled out, it was decided to install settlement gauges on the prepared base of the fill. To enable meaningful settlement readings to be taken, a surveyed grid was established covering all test sections providing for at least 10 measurement points for each section.

In an attempt to establish an instrumented monitoring system which might obviate the need for future pre-construction trial embankments, a technique involving measuring the response of two “dynamic pressure cells” (one at the base of the lift and one at the surface) to a dynamic shock was planned. This process suffered from the disadvantage that the buried cell needed to be recovered prior to an additional lift being placed. It was also decided to test the response of a roller-mounted accelerometer to increasing compaction of the fill.

The results of the conventional testing programme measuring surveyed settlement and in situ density of the fill, fairly quickly established that the smaller of the two rollers required unacceptably high numbers of passes to achieve adequate compaction even for the lower lift heights.

It was concluded that for each roller size and lift height there is an optimum number of passes above which the material properties tend to deteriorate, or at least show insufficient improvement to warrant continued compaction.

Also, for each roller size there is a lift height above which an uneconomically high number of passes is required to achieve optimum properties over the full depth of the lift.

Continued next page ...

Fred Haigh (Monduran) Dam *continued*

On the basis of performance of the two rollers tested, the recommended practice for compaction of the well graded rockfill material at the site was:

- Roller size: approximately 10 ton static weight
- Lift height: 3 feet
- Number of passes: 7.

The compaction of rockfill is accompanied by an increase in the elastic modulus of the fill material. Evidence for the increase in elastic modulus is provided by improved transmission of shock waves through the fill. It was concluded that this showed promise as a means of controlling compaction using the improved response of an electro-mechanical transducer placed at the base of the lift to shock waves originating at the surface of the lift. In practice however, the need to recover the transducer prior to placement of the next lift would result in significant interruption to placement operations unless a 'disposable' transducer could be developed. It was felt that this could be a fruitful avenue for further research.

Sunwater Snippets

Julian Murphy

Julian is a Senior Media and Communications Adviser

Paradise Dam

Planning is continuing for a new wall on the Burnett River near Bundaberg. This is a complex, multi-year project being delivered in a dynamic river system.

Sunwater is currently working to secure environmental approvals required for the construction of a new dam wall immediately downstream of the existing structure.

We are liaising directly with State and Federal agencies and are getting on with early works in order to quickly proceed to major construction once all approvals are received.

There are a range of activities and enabling works already currently underway, including road upgrades, geotechnical investigations and concept design.

North Queensland weather event

The Sunwater team has been busy over the last few weeks with the extreme rainfall event in North and Central Queensland. The heavy falls resulted in a number of dams filling and spilling, including Tinaroo Falls Dam, near Mareeba, and Eungella and Teemburra dams, west of Mackay.

However, the most significant event was experienced at Queensland's biggest dam, Burdekin Falls which is located south west of Ayr. The dam reached the third highest level in its history, hitting 218.12% capacity (or 6.725m over the spillway) on 11 February 2025 at 11.35 am. Peak outflow was 1,608,500 ML/day – or 18,617 m³ per second. The dam performed well during this event, safely passing large volumes of water over the spillway.

The trial to test the response of a roller-mounted accelerometer to increasing compaction of the fill showed promise, so it was noted as a potentially useful avenue for further research.

While the results of the test programme did not achieve this desired simplified control technique, the conventional test regime did provide a method specification which allowed uninterrupted construction of the rockfill zones of the dam.

Fred Haigh Dam was the first in Queensland to adopt compacted rockfill in its construction. It cannot be claimed to be the first in Australia as Cethana Dam in Tasmania had commenced construction using the technique a year or two earlier.

As a post script, sometime later I learned that one of the equipment manufacturers had incorporated a roller-mounted transducer and on board readout which effectively obviated the need for time-consuming and costly pre-construction testing.

Thank you, Michael, for the memory –Ed.

New Cloncurry office

Sunwater has opened a new office in Cloncurry. There is ongoing interest in increasing water availability for industry use in North-West Queensland, and this office will help service current and prospective customers in the area.

Sunwater stands ready to progress or advise on any project to enhance existing infrastructure, as well as to investigate and construct new infrastructure in this important region.

Future water leaders

The next generation of water industry talent is now providing valuable input to Sunwater's business. Our 2024 graduates have successfully wrapped up their second rotation, gaining hands-on experience across various teams..

Our two-year graduate engineering program provides exposure to a range of different work experiences and teams within Sunwater, with a variety of teams across the business and be supported by a network of leaders, mentors and graduate coordination team

Burdekin Falls Dam

Sunwater is progressing planning and enabling works for a two-metre raise alongside safety upgrades to increase the dam's water supply and long-term viability. The improvement work will:

- Increase the dam's resilience to extreme weather events
- bring it in line with modern engineering design standards to ensure it meets the safety requirements set out in the Water Supply (Safety and Reliability) Act 2008 (Qld).

Raising the existing dam wall would increase water supply in the Burdekin and surrounding regions. Planning for a raising is currently progressing through an environmental impact statement to assess the potential environmental economic and social benefits and impacts.

Departmental News

Notes provided by Kathryn Clear, *Executive Officer, Office of Director-General, Department of Local Government, Water and Volunteers*

Wamuran Irrigation Scheme

A new Irrigation Scheme will transmit and reticulate Class A recycled water from Unitywater's Caboolture South Sewage Treatment Plan to farms in the nearby Wamuran area.

This will provide a sustainable, consistent water supply for farms and divert nutrients from the Caboolture River, reducing environmental impacts. This great initiative has been developed in conjunction with Queensland Health and Unitywater.

Minister's Burnett Basin assessment report

Our South Region Water Planning and Science team recently published a Minister's Performance Assessment Report for the current Burnett Basin water plan. This water plan covers approximately 38,370 sq. km in a highly developed region and is home to environmentally significant plants and animals including the Australian Lungfish.

The five-yearly report helps us understand whether the plan is working to sustainably manage water resources in the area.

The Minister's assessment found that the implementation has been effective in achieving the water plan's outcomes and it remains fit for purpose. The report confirms that existing arrangements can continue until the replacement plan is in place in 2027.

QLD's water regulator on the world stage

Rachel Scalongne, Director of Strategic Compliance Intelligence and Investigations, was a speaker at an international regulators conference held in Brisbane. She spoke about the department's journey as a regulator at the AELERT-INECE 2024 Global Summit: Implementing and Enforcing Environmental Law. The summit attracted more than 350 attendees from regulatory agencies across Australia and around the world.

Gulf consultation in Mt Isa

Director of the Regional Water Assessment Program Chris McKenna was in town with the RWA team and staff from North Region for the latest meeting of the Gulf RWA Stakeholder Advisory Group (in-person and online). This was a chance to speak to stakeholders from local government, agriculture, conservation and the resources sector about the findings of a recent service needs analysis and next steps in developing the RWA. Fifteen stakeholders attended and conversation was constructive.

The Gulf RWA has a particular focus on balancing the water needs of the critical minerals industry and expanding irrigation sector with those of other water users and the environment.

Sentence handed down in bore drilling case

A resident of Ningi, near Caboolture, was handed down a sentence by Maroochydore Magistrates Court following a guilty plea. The man was unlicensed and drilled 11 water bores across the Wide Bay and North and South Burnett districts, many of which were defective. The man misled clients to believe he was licensed and bores would be constructed by certified persons.

The man was fined \$150,000 and ordered to carry out rectification works on the defective bores within 150 days. This requires a licensed driller to ensure the bores comply with national construction standards to provide resources protection from contamination. Legal costs were awarded to the department.

Consultation continues on CQ water plan

Consultation opened last August on a proposal to combine water plans for the Fitzroy Basin, Boyne River Basin and Calliope River Basin areas into one water plan for Central Queensland. The combined plan would also incorporate the coastal basins of Styx, Shoalwater and Waterpark, which do not fall under any water plans currently. Comments have been generally associated with the linking of the RWA and the water plan to ensure future demands are considered in this planning process. Submissions remain open until 4 November.

Power Trumps Knowledge

Followers of international news would be aware of the terrible fires in California where there was a shortage of water for fire fighting. President Trump ordered the US Army Corps of Engineers to release water from two of the State's dams. There goes next Summers irrigation supplies.

Water experts decried it as wasteful, ill-conceived – and an unnecessary risk factor for levees in the region. The mandate, said Nicholas Pinter, a professor of applied geoscience at the University of California at Davis who studies California's levees, amounted to "hydrologic insanity".

"The volume they were initially starting to release and the lack of warning to local officials – it's hard to characterize it as anything but insane," he said.



St Barnabas Bulletin Board

May your troubles last as long as your New Year resolutions.

Answer to Brain Cells (p10)

Anne picked 18 apples
(Alan picked 17, Alice picked 16 and Arnie picked 19)

Chappos Big Lap Part 5

Jon Chapman

‘ The Eyre is the drier peninsular, it has more bays, a rugged coastline, a long rich history of fishing and oysters, and now its carving out a future with tourism.

We camped for varying periods of time at Streaky Bay, Venus Bay, Elliston, Coffin Bay, Port Lincoln, Tumbly Bay and Whyalla. This is the first time we encountered the grey nomad tradition of jetty hopping. The regular grey nomad population come back year after year and move from jetty to jetty chasing predominately the King George whiting and the blue swimmer crabs.

Leanne is a fisher and had no real success on tour, but she started to try more here and beyond. This is where the cost of good old fish and chips first hit us hard. KG Whiting 1 piece and chips \$20, 2 pieces for \$30! KG whiting fillets \$90 / kg.

In between the jetties the drives along the coastlines are stunning and at Elliston a series of sculptures have been carved out on the cliffs. There is a drive at Port Lincoln called Whalers Way, private property that takes you along some of the craggiest cliffs on the mainland coast.

Port Lincoln has the tuna fishermen stories and stories of the boat builders. Now they have the tuna farms offshore, massive nets almost feedlot like farming of fish sent to Asia within hours of catching them. We did a Coffin Bay oyster farm tour, yummo and we drove in and around both Coffin Bay and Lincoln National Parks where emus in their hundreds roam freely.

The last stop on the Eyre was Whyalla, where the steelworks still operate under Indian ownership. This is the only place railway track steel is made in Australia and the owners have agreed to build an Electric furnace using hydrogen power and move away from coal in the next 10 years. The SA government has to build the hydrogen plant and a desal plant as part of this arrangement. Water comes from the Murray at present. As well as touring the steelworks we checked out the restored HMAS Whyalla and the industrial areas at Port Bonnython, where Moomba gas and diesel is exported.

Leg 15 South Australia (Port Augusta and The Yorke Peninsular)

Port Augusta sits between the two peninsulas and is the crossroads for road and rail. From here you go to Perth, Darwin, Sydney, or Adelaide either by road or rail. A major rail depot stacks the cargo containers two high when headed west across the Nullarbor.

Down the Yorke, we headed again to many a Port, Point or Bay. The jetty hopping nomads continued to appear as did the rugged but glorious coastlines. The Yorke has a few maybe we could live there spots as well.

Port Germein has the longest jetty, over a km to water at low tide, catches many a fisher out! Near here is Port Pirie, where the lead smelter still operates, a surprisingly clean town with its lead history.

Walleroo was our base for the copper triangle, Moonata, Kadina and Wallaroo. The copper towns are now tourist focused on the old mine history and ruins, plus the Cornish traditions that live on in the area, while the coastal towns, Wallaroo, Port Hughes and Moonta Bay are \$1M destinations.

The Yorke is quite small in area, so we next based ourselves towards the bottom and drove to the sights of the southern Yorke. Our base was Minlaton and day trips saw us at several Ports (nice spots), Points (millionaires' rows) and same with the Bays, everything is relatively close to Adelaide. The highlight was a day trip to the Innes National Park near Marion Bay, a few lighthouses, rugged headlands and the views to Antarctica, actually we got our first glimpse of Kangaroo Island from here.

Leg 16 South Australia (Adelaide)

It's now late February and summer was making an appearance of sorts. Minlaton had delivered us a 40 degree day and it was regularly in the high 30s. We had hoped to have a week at Semaphore Beach and another at Aldinga, but a combination of summer, the Fringe Festival and nomads galore meant no vacancies, so we opted for the Adelaide Showgrounds. The equal most expensive stop (with Broome) at \$55 night, convenient to buses and trams just four stops to the CBD.

We did a day trip to Port Adelaide and visited the SA Maritime Museum and the National Railway Museum, saw a train made at Maryborough Walkers. We then toured the northern beaches down to West Beach passing Tennyson, Grange, Semaphore and Henley. Love Adelaide's beaches still too bloody cold though. On another day we did the southern beaches; Glenelg, Brighton, Kingston Park, Hallett Cove and Christies, need a good super to buy a house along these places.

Taking advantage of the showgrounds location we did a tour of the Adelaide Oval (bucket list), the Bradman Museum, National Wine Centre and the Adelaide Zoo and Botanic Gardens. Adelaide is still a big country town.

Driving in Adelaide with a 21 foot caravan is a nightmare by the way!

Leg 16 South Australia (the Fleurieu Peninsular)

We had already toured the McLaren Vale wineries, so we skipped down to Cape Jervis hoping to book a tour of Kangaroo Island. Sadly, the tours were booked 6 to 8 weeks ahead of us!

Still plenty to do with more beaches, and scenic drives around the southern coast. Again, the number of millionaire houses is staggering, must be some money in Adelaide somewhere, finance and IT I believe.

On to Victor Harbour next and a base to do Goolwa and the mouth of the Murray. First, we drove to Hindmarsh Island and looked out to the mouth, so small was the initial thought and then we did a cruise that passed thru the Goolwa Barrage and down to the mouth and beyond.

Chappos Big Lap *continued*

Lots of dead carp about, 100mm deep on Goolwa Beach, and lots of seals feasting on the rotten carcasses. Amazing to see that with all that water in Murray a rise of just 500 mm was all that occurred at Goolwa, the lakes systems absorb all that water and once the barrages open it slowly passes out to sea. The Murray Mouth itself was interesting, our guide explaining that the western side had moved almost a kilometre in this event, only for the eastern side to follow it. The mouth itself maybe 500 metres wide and while the flood had all but passed the flow rates were still high. In the millennial drought the mouth actually closed over and the river at Goolwa was dry! Our guide was low on Queensland bashing rhetoric, but the Vic's and NSW didn't get missed!

At Victor Harbour we did all the tourist things, including the Granite Island draught horse tram, the Cockle train and the Whale Centre. We also caught up to John Keating who now resides on Hindmarsh Island, they are looking at a place closer to Adelaide, but in no hurry. Good to catch up with an old watery even if he is an accountant and a Cockroach St George supporting man!

Leg 17 South Australia (the Coorong and Limestone Coast)

We drove thru the Coorong, would have loved to stay over but it was mid-March and winter was already setting in, cold, windy, raining and grey! Stunning part of the world with endless lakes, pelicans and swans.

The Limestone coast is a series of beachside towns with so much history, nostalgia and some lovely beaches that can only be swum in a wetsuit, perfect disguise as a seal so the sharks find you easily! We had stops at Robe, and Millicent before Mount Gambier, also visiting Kingston SE, Beachport and Southend, crayfishing heaven and the Tantanoola Caves. This cave is unique because you walk into the cavern, not down a 100 steps, only small but a magnificent gallery of formations in a small area. As we edged towards Mount Gambier, more limestone caves and sinkholes appeared as does the blue gum forestry areas.

We loved Mount Gambier. The blue lakes are truly blue, and the crater lakes are well catered for with 14 lookouts in and around town to see them from. Port MacDonnell is also a great spot and I took in Feasts Classic Car Museum, the only car museum dedicated to the Valiant.

After Mount Gambier we headed north along the border to the Coonawarra, Penola and Naracoorte. A tour through there cannot be done without visiting the Mary McKillop Interpretive Centre in Penola. Neither of us are religious in any way but this place moved us, a truly wonderful woman in very different times.

We toured the Naracoorte Caves, again very different to the WA caves. This place was mad about bats; not for us.

Leg 18 South Australia (the Limestone Coast to Murraylands)

Making our way north we stopped at Bordertown, home of Bob Hawke and family. It was also called a "Gold Escort Town" as gold from the Victorian goldfields was transported to Adelaide. It was absolutely freezing so we moved to Keith, Home to Andy Caldecott who won the Safari Rally (Dakar) 4 times before it claimed his life.

Next was Karoonda and the most amazing video presentation on their grain silos. By day there are murals to admire, at night a themed video that runs on a loop of about 45 minutes.

Now in the mallee country we passed through Pinnaroo and onto Loxton, our first look at the Murray. Built by soldier settlers, it's grape country by the mighty river. The recent flooding saw the Historical Village move over 10000 exhibits, only for the flood to stop 50mm below the levee. We took in Barmera and Lake Bonney where Donald Campbell did 384 kmh in the Bluebird in 1964. The flood damage and after effects were prominent as we checked out Kingston On Murray and Cobdogla where the Irrigation Museum was closed due to flood damage. More on the Murray flooding later.

Leg 19 South Australia (the Barossa)

Driving west again we landed at Nuriootpa in the Barossa for a week, taking in the architecture, the wineries and the plain picturesque countryside around Tanunda, Seppeltsfield, Greenock and Kapunda.

At Williamstown is the Barossa Reservoir and its infamous whispering wall, the curved design means you can stand at either end and talk to people at the other end.

So many churches, so many sects of Methodists, Lutheran etc. The wineries were everywhere of course and tastings start at \$10. Penfolds have varying sittings, but the top of the class is \$600 for 6 sips of Grange!

Kapunda is an old copper town to the north west where the Welsh traditions were again ever present. Love the Barossa.

Leg 20 South Australia (Murraylands)

Our next move was the Paringa, next door to Renmark on the Murray. Paringa has a suspension bridge that opens for the houseboats etc. Lots of locks on the river around these parts and at our time of visiting the signs of the height of the flood was amazing.

We checked out Swan Reach, Blanchetown, Waikerie and Remark. Parts of Swan Reach and Blanchetown were obliterated by the floods. The lower areas just disappear and the damage is 100%. Waikerie provided some of the best lookouts over the bends in the river, while Renmark is home of the Irrigation Trust and has the history of the first Irrigation Area in Australia.

To be continued...

HEALTH *and beauty*

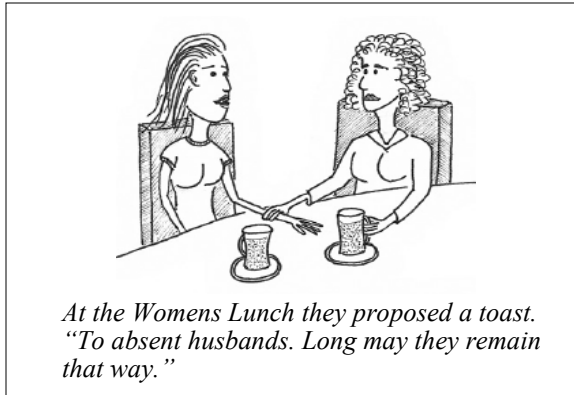
Re Cycling

By the late 19th century, with the invention of new machines, cycling had become very popular. Women had enthusiastically taken up the challenge even though doctors in America campaigned about the dangers, warning that it might lead to the frightening condition known as 'bicycle face'. Caused by too much cycling and almost exclusively affecting women, symptoms include bulging eyes with dark shadows beneath them, a clenched jaw, a pallid complexion and a constant expression of weariness. The medical community was divided on whether it was a permanent or temporary affliction.

There was also concern that bike saddles would overly arouse female riders and might sexually corrupt them. 'Hygienic' bicycles were invented with a dip in the saddle so that the genitals didn't touch it, thus averting the danger of accidental orgasms while riding.

Women were also discouraged from playing football on the grounds that the sport was unsuitable for the female body and – as specified by West Germany – 'soul'. The FA ban lasted until the 1970s while Brazil made it illegal for women to play football at all from 1941 to 1981.

The material above was borrowed from "A Load of Old Balls" by James Harkin and Anna Ptaszynski



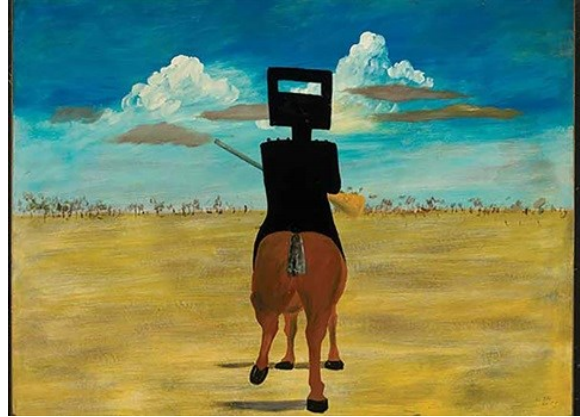
Exercise those Brain Cells

- Q. Anne, Alan, Arnie and Alice picked 60 apples between them. Anne picked one more than Alan. Arnie picked one more than Alice. Anne and Alan picked ten more than Arnie and Alice. How many did Anne pick?

Answer on page 7.



Sidney Nolan 1917-1992
Ned Kelly



"I'll teach those cops to call me an empty headed criminal!"

The Times They Are a-changing

Back in 1987, the Commission engaged a retired Power engineer from Victoria, David Gaff, to implement Value Engineering studies. These were extremely successful in producing improved performance and saving costs. I was privileged to take over from David as facilitator.

One of David's case studies involved a cinema complex already under construction in Canberra in the 1980s. The study resulted in significant redesign when the team realised that people didn't go to the cinema just to see movies. They went to socialise and in particular it was the popular venue for fraternising between the sexes.

But times appear to have changed. Recently on radio a movie reviewer, who has seen virtually every new release for decades, revealed that he almost never sets foot in a cinema these days. Many, many households are now equipped with enormous screens and the latest releases are available on line virtually immediately. It is much cheaper to invite your friends into your own home. So what is the future of the cinema? Will it go the same way as the Video Shop?

We thought of that recently when we went to the brand new Hoyts Cinema in Ipswich to see the excellent *Conclave* and were two of the only four people in the audience.

Answer to last Issue's Teaser

David is 40.
Simply add the value of the letters in each name (D = 4, A = 1 etc)

Democracy at Work

With yet another election around the corner, we should all be grateful that, although voting is compulsory in Australia, we are free to vote – or not – as we see fit. Australian women have been “allowed” to vote, although compulsorily, for much longer than their English or American counterparts and almost as long as the ladies “across the ditch” who were enfranchised in 1894.

But the tiny country of Corsica beat the rest of the world by a long margin. It granted universal female suffrage in 1755, almost 140 years before any self-governing nation. Unfortunately, France conquered the island in 1769, revoked this law and didn't return the vote to women for another 189 years.

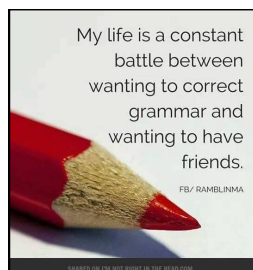
British women, of course, only got the right to vote after lengthy, sometimes violent, campaigns by the suffragettes and the suffragists. Queen Victoria was not a supporter. She declared, “God created men and women differently. Let them remain each in their own position.”

I note with interest that the current British government is proposing to lower the voting age to 16. I may be a trifle cynical, but I suspect that young people tend to vote Labour.

More Pedantry

I recently read an article in the paper bemoaning the fact that certain schools had achieved results in literacy testing less than the average. This in itself says nothing. By definition, around half the cohort must achieve less than the average. A school could still achieve well, as long as the others do too. You need the average and the range to make a deduction about the quality.

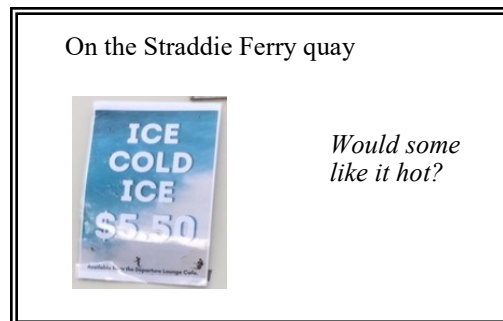
On the subject of literacy, between you and I, do you find this posh? After consideration by myself, I would call it ignorant of the basic rules of grammar where a preposition such as ‘between’ is followed by the objective case ‘me’. And ‘myself’ should only be used reflexively or emphatically as in ‘the ball hit me and I fell over and hurt myself’.



A homophonic limerick

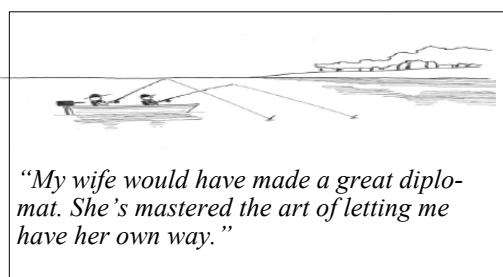
Working from Home

He sits on a spacious verandah,
he listens to Carmen Miranda,
kept cool by a beer and a
big jacaranda,
he sometimes e-mails memoranda.



Terry's Trivia (from the Barefoot Bowls luncheon. - Answers on page 12)

1. Historically avocados were known as: (i) Mexican Apples; (ii) Alligator Pears; (iii) Green Potatoes; (iv) Spring Bulbs; (v) Butter Fruit.
2. Who is the current Deputy PM: (i) Penny Wong; (ii) Bill Shorten; (iii) Richard Marles; (iv) Tanya Plibersek (v) Mark Dreyfus; (vi) Jim Chalmers.
3. Which Greek philosopher is regarded as the Father of western logic: (i) Plato; (ii) Aristotle; (iii) Socrates; (iv) Democritus; (v) Heraclitus.
4. Who is the youngest mens player to with tennis majors on all three surfaces: (i) Federer; (ii) Nadal; (iii) Djocovic; (iv) Sinner; (v) Alcaraz.
5. Which planet has 146 moons: (i) Saturn; (ii) Uranus; (iii) Neptune; (iv) Jupiter;
6. To which election did Mark Latham lead the ALP: (i) 2004; (ii) 2007; (iii) 2001; (iv) 2010; (v) 1997.
7. Which of these is not a failed Trump business: (i) Trump Magazine; (ii) Trump Vodka; (iii) Trump Steaks; (vi) Trump Coffee; (v) Trump University.
8. The longest river in Europe is the (i) Rhine; (ii) Danube; (iii) Dnipro; (iv) Volga; (v) Rhone; (vi) Thames.
9. The capital of Slovenia is: (i) Bratislava; (ii) Prague; (iii) Zagreb; (iv) Ljubljana; (v) Trieste; (vi) Dubrovnik; (vii) Kotor.
10. Julius Caesar wore a wreath because of: (i) Tradition; (ii) A Good luck Charm; (iii) Deodorant; (iv) To hide his baldness; (v) Impress the ladies.
11. Zero to the power zero is: (i) 0; (ii) infinity; (iii) 1; (iv) -0; (v) meaningless.



Book Club

Tim Marshall has reported on foreign affairs in 40 countries for over 25 years. His intriguing book, *Prisoners of Geography (Ten maps that tell you all you need to know about global politics)* really does that.

All leaders are constrained by geography with their choices limited by mountains, rivers, seas and concrete. Putin’s obsession with Crimea is driven by the fact that Russia has no warm water port. Europe developed ahead of other areas because it has huge areas of agricultural land and navigable rivers. America had to become “top nation” because it has ports on two major oceans as well as navigable rivers, agricultural and mineral resources. Africa has virtually no tillable land and its rivers have wonderful waterfalls but are not friendly to sailors. Africa and the Middle East suffer severely from the fact that they were carved up by invading European nations with no regard for geographical or ethnic conditions.

This is a fascinating book. The one drawback is that current affairs keep moving on. First published in 2016 and revised in 2019, the book cannot be entirely up to date. At the time, Trump was in his first Presidency. The day after I read “in the near future Syria looks to be ruled by the Assad regime”, a successful rebellion took place and Bashir al Assad fled!

Thoroughly recommended.

Ian Pullar



Recommendations from readers

Answers to Terry’s Trivia (page)

1. (i) Alligator pears. 2. (iii) Richard Marles.
3. (ii) Aristotle. 4. (iv) Sinner. 5. (iv) Jupiter.
6. (i) 2004. 7. (vi) Trump Coffee. 8. (iv) Volga.
9. (iv) Ljubljana. 10. (iv) to hide his baldness.
11. (iii) 1.

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