Watery Sauces Oldies and Boldies

Newsletter No 105 **July 2024**

NEWSLETTER OF THE WATER RESOURCES RETIREES ASSOCIATION

Annual General Meeting

The AGM was duly held on 14 April in the Community Meeting Room in Brisbane Square Library. The attendance was disappointingly small, but those who came enjoyed meeting up again and the subsidised lunch.

Secretary Peter McMahon stood down after his meritorious three years of service – thanks Peter – and Rob Ayre was elected (voluntarily) to take his place. All other retiring members of the Committee were re-elected unopposed (see back page), but there was a resulting vacancy for a committee member. Phil James volunteered to fill it and was duly elected. Welcome, Phil. A brief biography of Phil can be found on page 2. Ian Pullar will be continuing as Newsletter Editor and Jon Henry will remain as Webmaster.

The Committee continues to meet in the SunWater offices in Fortitude Valley. We are grateful for the continued sponsorship and to Glenn Stockton, our Co-Patron.

Our other Co-patron, Linda Dobe has recently been promoted to the position of CEO of the Department of Regional Development, Manufacturing and Water. Congratulations, Linda.

From the Editor's Chair

Another bumper edition. There has been such a lot of activity that it is obvious that the Boldies outweigh the Oldies.

Speaking of which, President Biden has pulled out of the US Presidential race because of his age, leaving an almost equally ancient competitor in the field.

No doubt all our members will be watching the outcome of that election, which can be of such consequence in our troubled world. And no doubt they will also be very interested in the more local election on the near horizon.

Until next time, au reservoir.

Ian Pullar, Editor

Heading towards Retirement

Recently WRRA was asked by the DRDMW DG Linda Dobe to participate in a Department wide seminar on Planning for Retirement, on the basis of members talking about their real life experience of planning for and being retired. On 27 May, Tony Clarey and Jim Weller participated in a Webinar (Rob Ayre had to withdraw at the last minute). Tony reported, "The facilitator was hoping for up to 80 attendees, however in the end over 100 attended. The talk was well supported by DG Linda Dobe who dropped in to say that she thought such events were vital to the healthy wellbeing of the staff and hence the Department. Given that support, and the number of attendees, I am sure a another Webinar will be held later in the year."

Jim added, "I think was a very worthwhile exercise as is always good to hear of other's experiences and knowledge they have picked up in their journey. Attendees were keen with plenty of questions."

Coming Up

Thursday 5 September: Technical Session from Department of Regional Development, Manufacturing and Water *(see page 9 for more information)*

Monday 16 September: Golf Day Wynnum Golf Club. Organiser Peter McMahon will provide more information.

1, 2, 3 October: WRRA Field Trip to Granite Belt *(see page 9 for details)*

October *(date to be advised)* Annual informal get-together in Yeppoon organised by Mike McKenna.

November *(date and venue to be advised)* WRRA End of Year Luncheon.

New Members

WRRA welcomes new members:

Emeritus Professor Colin Apelt, Tanya Boyle, David Burton, Peter Butler, Jon Chapman, Ed Donohue, Mal Fernando, Greg Hausler, Craig Johansen, Phil M^{c}Kone, and Lawrie Pappin.

New Committee Member – Philip ("Phil") James

Phil was born in London, UK in the early nineteen ("swinging") sixties. His family moved out to Wiltshire when Phil was three so that's where Phil grew up, and he was educated at the local schools.

Phil was awarded a state scholarship to study Mechanical and Electrical Engineering at Edinburgh University in Scotland. Having successfully completed half of this course, Phil transitioned over to Electrical and Electronic Engineering, his Honours studies specialising in real-time digital signal processing, microelectronic chip design, software solution design and programming. He graduated with a BSc.(Hons) in Electrical and Electronic Engineering.

Following graduation, Phil was accepted into the Edinburgh University Masters Program where he studied advanced courses in the Computer Science and the Artificial Intelligence (AI) Departments focusing on machine vision and AI programming languages and techniques. His Masters Thesis provided research that was incorporated into the prototype of one of the world's first "silicon compilers", and Phil was awarded a MSc. in Computer Systems Engineering.

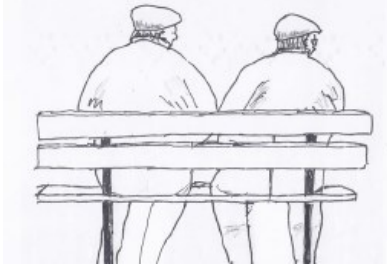
He began his career working as a graduate Analyst/ Programmer in the Software Engineering Section, Defence and Aerospace Division, of Scicon UK (Europe's largest Software House). He worked on a number of large projects utilising cutting edge software and system technologies. In 1987 Phil got caught stealing a sheep, and (as was customary at the time) was sentenced to be transported to Australia! Fortunately he did manage to get his sentence deferred for 6 months while he travelled through the USA, French Polynesia, and New Zealand en-route to Australia. He arrived in Sydney at the beginning of the bi-centennial celebrations, before moving to Brisbane in April 1988 (just in time for Expo'88).

Phil joined Queensland Water Resources Commission in early 1992 to create a single, statewide computer based drawing register, and to automate drawing registration and on-going management. Working closely with Barry Edgley and Helen Dodd, and incorporating earlier work done by Bob Bell and Peter Sinclair, Phil undertook an analysis of key drafting and Planroom business processes, leading to the specification for the Drawing Information System (DIS). He designed and programmed the DIS using relation database technology to produce a system with powerful and sophisticated drawing search functionality, along with drawing registration, approval, amendment, 'as-built' and transmission capability. He completed the initial data conversion of the Planroom's "index card" register, and DIS Version 1 went live in the Head Office Planroom in February 1993 just before Phil took up a position at the Department of Lands working on the development of the Integrated Valuation and Sales (IVAS) database system.

In October 1994, he returned to WRC (now part of the Department of Natural Resources) who had just starting the PROSE PC roll-out, with every staff member being given a Windows PC. His first task was to design and build a Windows PC interface to the DIS system so that the DIS system could be rolled-out to all drafting staff statewide. The DIS was rolled-out across the state in April 1995, and he travelled to all drafting centres to train staff on how to operate the new system.

Following this, Phil joined Bevan Faulkner's Asset Management Group where he managed the Microfilm Scanning Project. He recruited a team of retired drafting legends including Eric Davis, Alan Vizer, Norm White, and Bob Dwyer to categorise and classify the entire Planroom microfilm catalogue as each one was scanned, digitised, and converted to PDF. Phil designed the Plans OnLine (POL) system to seamlessly integrate the scanned drawing images with the DIS database enabling users to search, view, and print any drawing to a local networked A3 printer. The team travelled to every office in the state rolling out the POL system and training all staff who used drawings. During the POL rollout the team took the opportunity to "repatriate" a large number of "local" drawings, and have them microfilmed, scanned, and registered into the system before returning the hard copies back to the regions. It was during this project, around 1997, that Phil joined the Water Resources Retired Officers Association, his application being endorsed and accepted by none other than President, Bernie Credlin! This subsequently made Phil the "Youngest Boldie" for several years, and now Phil perhaps holds the organisation's record for the longest continuous membership of any member still paying fees!

Phil left SunWater in April 2002, and worked for many organisations until he retired in 2019. During his career he has gained several professional IT qualifications in Business Analysis, and in Project Management. As an engineer, Phil has been a Member of the Institution of Electrical Engineers (MIEE), a Chartered Engineer (C.Eng), and a Fellow of the Institution of Engineering and Technology (FIET), the UK's largest engineering peak body, being reciprocally recognised as FIEAust equivalent. He is an active fisherman, and also has a keen interest in photography. He has two sons, his younger one hoping to study Chemical Engineering at QUT in 2026.



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

PARADISE DAM IMPROVEMENT PROJECT -
Presentation by Sunwater Project Director: Sam Waldron at Sunwater Green Square North 515 St Paul's Terrace. There were 20 WRRA members present (see picture) and another 19 on-line. Notes by Terry Loos.

Paradise Dam was built in 2005 on the Burnett River to a capacity of 300 000 ML. It was a roller-compacted concrete dam and built in layers each 310mm thick. The original FSL of Paradise Dam was EL67.6m AHD.

It was designed and built only 18 years ago by the Burnett Water Alliance under an Alliance arrangement independent of Sunwater.

Damage to the dam during the region's record flooding in 2013 exposed a failure in the spillway. An independent Commission of Inquiry found that the design of the primary spillway apron was not long enough. A 15m deep hole developed downstream of the stilling basin. In response Sunwater extended the apron from 20m to 60m. The Inquiry noted that, "if the 2013 floods had lasted longer, the erosion due to the insufficient downstream protection may have undermined the dam giving rise to a risk of a dam failure".

Much more importantly however, the inquiry found structural and stability issues with the dam wall and Sunwater has since found these structural issues to be hugely significant. As a first, immediate, step Sunwater undertook an *Essential Works Project* to lower the dam spillway by 5.8 metres (to 170 000 ML) resulting in an interim FSL of 61.8m AHD. The new lower concrete crest was completed at the end of January 2021. This work lowered the risk of dam failure from a 1 in 200 year event to a 1 in 5000-year event.

In December 2021, the Queensland Government announced that Paradise Dam will be returned to its original height, and so Sunwater has since been progressing the *Paradise Dam Improvement Project Detailed Business Case (Stage 2)* which has involved a program of intensive testing to inform design development. It is a bespoke and world-first testing program.

Sunwater has appointed CPB Contractors and Georgiou as construction partner and GHD as the ongoing design partner for the project. However, unlike with the previous Alliance, Sunwater will maintain a major ongoing involvement and oversight control with the project. It will be a Sunwater dam.

Through the testing program three unexpected new issues regarding the long-term strength and quality of the dam's concrete were identified.

The issues are: swelling clay; cement leaching; and carbonation.

Swelling Clay: The original concrete construction accessed a source of good quality basalt at the dam site however, it appears that for some reason some sedimentary rock containing clay was added to the concrete mix. The resultant swelling and shrinking of this clay has weakened the structure.

Cement Leaching: The RCC structure was not required to be waterproof because a waterproof membrane was installed on the dam face. Nevertheless, the use of only 63 kg of cement per cubic metre has been found to be among the lowest level of cementisation of all the RCC dams checked out across the globe, e.g. Wyaralong Dam 85 kg/m^3 and Cotter Dam 200 kg/m^3. Also, no fly ash was used.

Carbonation: A chemical reaction has been taking place in the concrete lowering the pH and reducing concrete strength.

The lower parts of each layer of RCC has now been found by core sampling to have degraded to rubble. Sunwater had difficulty even accessing core samples from the structure. After ten test wettings/dryings of cores (with Burnett River water) their strength was found to have *decreased* by 60%. These issues are unprecedented – concrete strength normally increases with age and dams are usually not tested for long-term strength loss. The dam design was trumpeted at the time as being 'innovative'. No RCC dam globally, has experienced the same strength loss problems.

While the dam is now safer at its current lower supply level, there is no doubt that it is compromised and no amount of improvement work will repair the existing structure. So, it has been decided to build a new dam, to the original FSL, at a site about 70 m downstream.

Features of the new design are:

It will again be of RCC, and the new wall will have a slightly wider spillway.

The concrete will be of 160-190 kg/m^3 cement. Fly ash will be included

Hydraulic modelling is being undertaken to determine the extent to which the old dam structure should be demolished (lowered) so as not to adversely affect the new dam.

The new fishway will be designed to the latest requirements of DAF.

The grout curtain under the wall is in good condition, except near the 2013 failure.

Sunwater is looking for suitable, off-highway, quarry sites.

There will be no upstream face membrane. The RCC itself will provide the seal.

The design is anticipating that the construction will be overtopped on a few occasions – even in winter. Typically they will have 48 hours notice of a flood.

The original water storage perimeter borders the Goodnight Scrub National Park hence Sunwater has not pursued the idea of building a higher dam with a greater inundation area.

Continued overleaf …

.

There will be an independent design Technical Review Panel.

The new dam will be subject to the necessary State and Commonwealth government financial and environmental approvals that apply now to any new dam.

At the same time Sunwater will commence a detailed business case to expand the irrigation network within the Bundaberg Water Supply Scheme. This will build upon previous investigations to understand distribution constraints. Sunwater will combine the two projects into the one detailed business case.

In conclusion it is expected to take another 12 months before a proper costing of the new structure can be completed. The primary focus is on a on delivering a quality dam built for the long term future of the region, notwithstanding that cost will also be a factor.

Demand and hydrology studies have shown that returning the 300,600 ML storage capacity to the Burnett River will be sufficient to meet the region's rural and urban water needs for decades to come, even with the potential impacts of climate change on both water demand and yield.

The presentation showed the lessons learned from the original approach in design and construction have been built into the new investigation, design and business case development processes. It was also instructive that the case has attracted substantial international attention and advice, and there were a couple of overseas people online for the presentation.

The WRRA members present were very impressed about how Sunwater is being very open and transparent about this project. Sunwater has committed to regularly consult with stakeholders. They will invite the WRRA back for a further briefing in six to twelve month's time.

A copy of Sam Waldron's Power Point presentation has been provided to the WRRA and it can be found on the WRRA website Presentations page.

Vale Kevin William Brown "Brownie"

On Friday 31 May, Water Resources lost one of its long serving employees and true characters with the passing of Kevin Brown "Brownie" in a house fire at Brownie's home in Toowoomba.

Brownie was born in Wellington in NSW in 1935. He moved from Wellington to Charleville at the age of 7. He wasn't a model student and apparently spent more time wagging school hiding in trees around Charleville than he spent at school. His frustrated Mother would quite often ask the local police to get Brownie down from his hiding place to get him off to school.

Brownie left school at the age of 11 and started his first job milking cows on a dairy farm near Charleville. About a year later Brownie started working for a local driller, Otto Bartowski. Brownie got his drillers licence at the age of 14 and with a few fibs to the local policeman, had his drivers licence at age 15.

Brownie held his drillers licence for a period of 75 years and only renewed it in November last year, a record period for the industry, and something of which Brownie was immensely proud.

Otto became ill and Brownie, not being shy of work, went on to work in many and varied occupations. Brownie worked for Railways, Public Works, in a milk factory, in shearing sheds, as a fencing contractor and even worked as a chef at Hicksons Hotel in Charleville. Amongst all of this Brownie did National Service in 1953. It was at the Charleville Hotel where Brownie met Ordrie who became his wife, his drillers offsider and his life long partner.

Brownie joined the IWS in 1964 at the age of 30. He had crossed some dry gullies in his time and was very impressed when he started, that the Commission advanced him one weeks pay to get him through to the first pay day. He worked departmental drilling rigs on Beardmore Dam and Thuraggi Channel at St George and at Cecil Plains, Monto, Biloela, Nanango and Westbrook. Brownie and Ordrie quite often camped together on site. In those days, women weren't able to be employed in those conditions so Brownie quite often had a drilling assistant known as Jim Rice or Joe Jackson who were both, of course, his beloved Ord.

Brownie had a long and colourful career with IWS and Water Resources and all of the different departmental names over the years finally retiring in 2003 after a long spell working on monitoring bores on the Darling Downs and in the Lockyer.

Brownie and Ord loved dancing and Country Music and through their grandchildren, he was a coach at the Rockville Rovers Soccer Club for many years.

Brownie lost his beloved Ordrie from emphysema and related health problems in 2019 at the age of 95 years. He was a true character in the Department and well known for his loud voice, generosity and love of people.

Farewell Brownie, dance with Ordrie in Eternity and may all the bores you drill be straight, deep and plentiful.

This tribute was supplied by David Free.

Toowoomba Water Resources Oldies Gathering – 19 June 2024

Jim Weller

No introductions were needed as more than 20 old faces (some younger) gathered in the common area of the Toowoomba City Library Meeting rooms for our Oldies gathering in June. The conversations were fast and furious but time for that later with representatives from Toowoomba Regional Council ready to deliver presentations on the Cressbrook Dam upgrade and Council's Generator Program that provides entry level opportunities for undergraduate and graduate engineers, and other technical and professional staff.

Jim Weller commenced proceedings with a short vale to Kevin Brown or "Brownie" who passed away in a house fire in Toowoomba on 31 May 2024 (see page 4).

Mr Jaek Passier, General Manager, Water and Waste, provided the group with an overview of planned safety improvements to Cressbrook Dam, the key source of water for the Toowoomba area. Improvements include widening the spillway from 20 to 35 metres and raising the crest of the dam to increase flood resilience and will enable Council to comply with safety requirements of the *Water Supply (Safety and Reliability) Act 2008*. It is the largest dam safety project undertaken by a Queensland local government to date and is expected to cost approximately $270 million.

Council has partnered with dam engineering specialists Seymour Whyte Constructions and SMEC Australia to deliver the project. Work is expected to commence in the second half of 2024 and is scheduled to be completed in late 2025. Major challenges in delivering the project include access (the dam will continue to provide water supply during construction) and fish passage.

Mr David Quinlan, Executive Manager, Business Transformation and Strategy, followed with an overview of Council's Generator Program. Council has 1600 staff with 95 employed with "Engineer" in the position title and a further 150 working in the broader engineering field. The Generator Program was developed to attract and increase retention of people in these fields.

The Program includes Scholarships, Internships, Cadetships and a tailored graduate progression system. The Program is partially modelled on the old WRC approach with positions additional to structure to facilitate rotation and broader experience within Council. There is an 80% retention rate to permanent positions within Council. Many will remember David as an old watery sauces engineer.

The presentations stimulated plenty of discussion but 5 o'clock beckoned and discussions were adjourned to Zack's bar at the Burke and Wills Hotel where a few more familiar faces were waiting. A great night catching up with old friends.

A big thanks to all those who could take the time to attend particularly Greg Claydon and Frank Van Schagen who made the trip up the hill for the event and the WRRA for encouraging the event and providing generous sponsorship and support.

And Some Reflections from Greg Claydon

The Toowoomba Water Resources Oldies Gathering on 19 June was a truly very enjoyable event, although I had a few concerns driving up the range road and seeing the outside temperature gauge in the car continuously falling until getting a good old wind blast at the top! Yes, it was a "fresh" day to be in Toowoomba and many people had donned their best winter coats.

However, all that was soon put behind by the very warm welcome by Jim Weller and several other "old" colleagues waiting for the presentations to begin – Dennis Gillbard, Alma Jahnke, Dave Free, Phil Sternes, Dave Burton, Frank van Schagen, Frank Walker, Ed Donohue, Ged Brennan, Peter Galligan, Alan Skerman and Ian Young among them (more about Ian in a moment). And there were several others that I missed as Jim ushered us into the room for tea/coffee and a Tim Tam before being seated. Jim did a sterling job as host and Master of Ceremonies – thanks Jim.

Jim has already given a good rundown of the presentations in his report in this newsletter. They were most appropriate and interesting. As a participant in and beneficiary of the IWSC scholarship and rotation scheme myself, it was particularly gratifying that yet another organisation has adopted and adapted the fundamentals of that approach to help build its own capacity and capability and to positively influence many individuals' career journeys.

After a brisk walk from the Toowoomba Regional Council library to the Burke and Wills Hotel (my "home away from home" for over six months in 1991/2), there were more people to catch up with, including some spouses and Dennis Russell and Orren Farrington, and more time to expand on old stories or start new ones. Ed Donohue was looking to combine the old and the new as he was preparing to represent us and head off to the Theodore (the 'town that water built') centenary celebrations (see page 6). Former colleague Dave Quinlan, was also able to join us after finishing his work in the Council offices and shared his intriguing theory (or maybe it's a fact?) about why human's fear of change has deep biological roots..

Which brings me back to Ian Young. The last time I saw Ian was in 1977 when I was still an Ag engineering student at DDIAE and he was in the groundwater section at the IWSC Toowoomba Regional Office in the Strand Arcade. I used to go to that office in the May and August end of term holidays (as they were then) to do some vacation work. I still vividly remember Ian's stories at the time about his motorsport adventures, his triumphs and near misses. Anyway, Ian left the IWSC some time after then and had a very successful career as Business Manager at Toowoomba Grammar School. It was a special reconnection and showed where change can take you.

There were many other reminiscences and the latest updates about health, hobbies and hearsays, but I won't take more readership time to recount them here and now. Safe to say it was wonderful to share them.

Theodore Centenary Celebrations

Ed Donohue

The Theodore Centenary Celebrations organised by the residents were held in Theodore from Friday 27 June 2024 to 29 June 2024. My wife (Jenny) and I attended the most important and significant activities which were held on the Saturday. Those activities were the Ambulance 100 Year Celebrations, the Street Procession at 11am, luncheon with the Governor, the ceremonial proceedings at 2pm, the roll call at the school following the speeches, and the turning on of the lights illuminating the art on the water tower at 7pm.

On the Friday night there was a dance organised and on the Sunday there was a well attended Fun Run and Sports Day.

The invited dignitaries and officials were:
The Governor, Dr Jeanette Young; Indigenous Representative for the Wulli Wulli, Noel Pope; Federal Member for Flynn, Colin Boyce; State Member for Callide, Bryson Head; Mayor of Banana Shire Council, Cr Nev Ferrier; Deputy Mayor of Banana Shire Council, Cr Terri Boyce; Convener, Anne Chater; Great Nephew of Premier Theodore, Steven Theodore;
Granddaughter of Louisa May Partridge who was the wife of Commissioner Partridge, Deborah Partridge; SunWater CEO, Glenn Stockton; Deputy Chair of Theodore Water, Peter French; Ed Donohue.

Lunch was an informal affair at the Retirement Village with about thirty six guests. In addition to the dignitaries, a small number of residents and locals were invited to attend.

The formal proceedings (Speeches) of the Theodore Centenary Celebrations (2pm – 3pm Saturday 28 June 2024) were chaired by Dr Bruce Chater as follows:

Dr Bruce Chater, welcome and announcement of the arrival of the Governor
Noel Pope from the Wulli Wulli mob – Welcome to Country
Governor – Dedication of Water Tower Art
Anne Chater – convener of the celebrations
Isabella Hanson – Miss Showgirl, representing the youth of Theodore.
Nev Ferrier – Dedication of the Centenary footpath
Steven Theodore – His great uncle, Premier Theodore
Deborah Partridge – Louisa May Partridge, wife of Commissioner Partridge
Ed Donohue – representing the Water Resources Retirees Association

All speeches were limited to 5 minutes and the programme ran to time. Dr Chater closed the proceedings and the general public made their way down to the school for the roll call and photos of students from the various decades.

The official party next to the water tower.

After the speeches Jenny and I caught up with Jon Chapman and his wife. Jon was an Administration Officer at Theodore for a number of years in the 1980s. I was also pleased to run into Kristy Meacle, currently Director, Water Services North Region, Department of Regional Development and Water.

People returned to the Boulevard in the evening for the 7pm turning on of the lights to illuminate the recently completed art work on the Water Tower.

The celebrations were extremely successful. Two hundred and fifty people registered for the school roll call, 93 caravans registered at the Showgrounds and the Sunday games were well attended. The Hotel and associated accommodation was booked out for months. Anne Chater estimates there were 700 – 1000 people in the town for the weekend.

Thank you to the Retirees Association for giving me the honour to represent them at the Theodore Centenary Celebrations.
We were also delighted that Ed could represent WRRA — **Ed.**

Addition of the Theodore Water Tower to the National Art Silo Tour

Notes supplied by Ann Chater

The Theodore Chamber of Commerce decided to organise the painting of the water tower as a gift to the town to mark the 100 years since Mrs Partridge turned on the lights to Theodore and Governor Nathan turned on the first water pump to the town and irrigation thereby marking the functional start of '**the town that water built'**.

One strategy in future proofing Theodore is to increase tourism and by having the water tower on the National Art Silo Trail. This will attract more tourists to Theodore, particularly the 'grey nomads' as they travel Australia from one silo to the next.

When the theme of the centenary – Sensing the Past, Enjoying the Present and Focusing on the Future– was determined within the catch phrase of Theodore being **the town that water built,** it was decided that the Dawson River would be the basis for the artwork. No matter whether you came to these parts 60 000 years ago or 6 weeks ago, the reason you will be here is based on the River.

The artists Joel Fergie (aka The Zookeeper) and Travis Vinson (aka Drapl) were engaged, grants were written and 2½ years later the water tower was painted – by 13 May 2024, taking two weeks.

The artists' discourse:

Nestled in the heart of Theodore, Queensland, where the Dawson River weaves its way through an ancient landscape, this water tower stands, paying homage to the vibrant community that thrives along its banks.

At its centre, two young locals, Cooper and Yakani, enjoy the river, fishing for the iconic Saratoga and Yellow Belly as many of their kin have done for generations in the past, now and into the future. They are forever young. Surrounding them, the canvas comes alive with a mosaic of local wildlife, each species chosen to reflect the region's rich biodiversity and cultural significance.

A platypus sits on a shallow bank, a testament to the unique aquatic wildlife that thrives on its banks. Overhead, a pair of red-tailed black cockatoos add their distinctive presence, a reminder of rain to come. Throughout the scene, Willy Wagtails flitter playfully, representing the spirit of the neighbouring Ghungalu people while a Tawny Frogmouth (a Nightjar) the Totem of the Wulli Wulli language group perches quietly in an old gum tree. Yakini sharing a Ghungalu and Wulli Wulli heritage.

This artwork invites viewers to pause and reflect on the beauty of their surroundings. It looks to evoke a sense of pride and belonging among the people of Theodore, fostering a deeper appreciation for their environment and the stories it continues to inspire. As Theodore looks toward its 2024 Centenary celebrations, "A Ripple in Time" to the community's enduring vitality and the timeless beauty of its beloved Dawson River.

Departmental News

Items provided by Kathryn Clear, Department of Regional Development, Manufacturing and Water

Lansdown Eco-Industrial Precinct

DRDMW has signed the funding agreement for the construction of a 427ML raw-water storage reservoir and an associated pump station for the Lansdown Eco -Industrial Precinct in Townsville. The new 2,500ha precinct will be Northern Australia's foremost eco-industrial precinct for advanced manufacturing, processing, technology and emerging industries.

Baffle Creek Water Plan

This plan is now live online covering a catchment area of around 4,100 km^2 encompassing the towns of Miriam Vale, Rosedale and Seventeen Seventy/Agnes Water. A review of the 2010 Plan found that most outcomes are being achieved but greater consideration should include climate change, cultural values, and connections between ground water and surface water.

Tamborine and Springbrook moratorium

The moratorium protecting groundwater systems has been extended for a further 12 months. Many communities in the hinterland areas of Tamborine and Springbrook do not have access to a reticulated water supply and rely on rainwater and groundwater

The moratorium was introduced in March 2020 following a period of low rainfall.

Mareeba Dimbulah Water Efficiency Project

Delivered by Sunwater, the project replaced 14km of pipeline, installed 125 automated irrigation channel-control gates and upgraded 157 water offtakes. with local irrigators now able to access an extra 11,500 ML each year. The savings now on offer to Tablelands growers will be the first new water for permanent purchase in the Mareeba Dimbulah Water Supply Scheme since the 1990s.

Condamine and Balonne Water Plan

The Minister's five-yearly report on the Condamine and Balonne water plan is now live online. The catchment area for this plan is around 88,500 km^2, extending from Toowoomba into South West Queensland.

The report found that most of the water plan's outcomes (17 of 23) are low-risk and being achieved. Four outcomes were identified as medium-risk, with two achieved. Ongoing implementation and monitoring of the water plan and its outcomes will continue for the plan's life.

Burnett Basin Water Plan Review

Preliminary public consultation has opened for the review of the Water Plan (Burnett Basin) 2014. This water plan area covers around 38,370km^2 extending west of Bundaberg. Water in this area supports towns, industry, tourism, agriculture, and habitat for freshwater turtles, water rats, platypus and many fish species, including the Australian lungfish. It also includes protected areas of conservation and ecological significance such as Coalstoun Lakes (pictured), which is listed in the National Directory of Important Wetlands.

Sunwater Snippets

Julian Murphy

Julian is a Senior Media and Communications Adviser

Rookwood Weir

Sunwater completed the "wet commissioning" process in April. This process tested the weir infrastructure, including the fish lock and all ancillary hydromechanical equipment, and the low flow outlet. All Federal and State environmental approvals regarding water quality, habitat management and species protection have been completed and Sunwater is working with customers to ensure they are ready to take first water from the weir in the coming weeks.

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. On-site investigation activities at the dam also got underway in April, including drilling and trenching to examine the dam's foundations. In May, a contract was awarded for investigations into sections of the road network leading to the dam. Sunwater will engage a design partner for the project in 2024-25, with the tender released in May.

Paradise Dam

Planning is continuing for a new wall on the Burnett River. In January, Sunwater formed an alliance to deliver the new dam wall project – with CPB Contractors / Georgiou as construction partner and GHD as the ongoing design partner. The alliance is progressing design work for the new wall including for the primary spillway, secondary spillways, permanent access roads, and two and three dimensional physical hydraulic models. Other current activities include procurement, road upgrades, geotechnical investigations, concrete mix designs, and environmental approvals while the detailed business case is underway.

Mareeba water auction

An auction for new water allocations from Sunwater's Mareeba-Dimbulah modernisation project was held during May. There were 167 lots auctioned in total with parcels ranging in size from 5ML up to 500ML. This allowed for purchases of a range of different sized allocations, providing an opportunity for businesses of all types to take part. More than 50% of the new allocations were sold at above a reserve price.

Announced allocations

Allocations for the 2024-25 water year have been announced and are positive across most of the state. All water supply schemes with high priority water have been allocated 100% of their entitlement. Only five of 23 water supply schemes will start the water year with medium priority allocations less than 100%.

- Burdekin 80%
- Chinchilla: 71%
- Cunnamulla: 69%
- Nogoa Mackenzie: 30%, however, will have access to 150,000 ML carryover
- Upper Burnett (John Goleby subscheme): 84%

DRDMW Technical Presentations

5 September
The topics are;
1. *The Queensland Water Strategy and work under the four delivery focus areas – Stephenie Hogan*
2. The Rural Water Futures Program, including work for WaterIQ and under the Murray-Darling Basin Hydrometric Networks and Remote Sensing Program – Ian Gordon.

Location is 1 William St, to be in the Training Room on level 14 – great views.
Those attending in person will convene in the foyer of 1 William Street by 9.45am for security check-in.
The presentations with questions from 10am to 11.30am. We will also aim to have people connect in online (provided they provide their email address to receive an invitation to the session).
Afterwards, those of us around in person can relocate to somewhere convenient nearby for lunch.

Fred Haigh Dam

Sunwater is planning a 50th anniversary celebration of Fred Haigh Dam at Lake Monduran in August and has sought help from WRRA for contacts of former employees who contributed to the project.

Get Togethers

The Committee has been informed of a number of groups who meet on an informal basis on a regular or irregular basis and we would love to assist in promoting such activities. We understand that other former officers would be welcome and to that end the Secretary would love to be informed of contacts.

St Barnabas Bulletin Board
At the Parish concert, Miss Charlene Mason sang "I will not pass this way again", giving obvious pleasure to the Congregation. .

The following deaths have been reported:
Keith McCleod died on 21 March.
A funeral for **Barry Mewburn** was held on 5 April.
Kevin Brown died on 31 May (see page 4)
Marjory (Peg) Wheeler died on 21 June, aged 104.
The funeral for **Col Cooney** was held on 28 June.
Denis Connellan died on 6 July, aged 93.

WRRA Road Trip to Granite Belt

Watery Sauces members are planning a trip to the Granite Belt in early October. The proposed itinerary is below. Members and partners will be sharing tall tales and true whilst tasting the best of what Stanthorpe and region can offer. If you would like to come along, or require further information, please contact Tony Clarey at anthonyclarey@bigpond.com

STANTHORPE WRRA ITINERARY

01/10/2024 (Tuesday)
Arrive Stanthorpe and settle into accommodation—participants make their own bookings (see note 1)
5.30pm meet at O'Mara's Hotel for pre-dinner drinks and welcoming speech. Dinner at same venue.

02/10/2024 (Wednesday)
6.30 Quart Pot Ck walk is recommended (in the middle of town, and for as far as folk want to stroll)
Breakfast. Brinx Café is recommended
8.30 Meet at Apex Park (adjacent to Boulevard Motel) for car-pooling *(see note 1 below)*
8.45 Depart for Marleys Lookout and stroll
Jamworks. (Coffee, Jams and pickles)
Tobin Wines for wine tasting
St Judes Café, Ballandean for lunch
Savina Lane Wines for private wine exploration chat with owner
Jester Hill Wines for wine tasting
17.00 Depart for Stanthorpe
19.00 Annas Restaurant (Italian) for dinner

03/10/2024 (Thursday)
7.00 Quart Pot Ck walk (optional)
Breakfast at Brinx or similar
10.00 Meet at Apex Park
Amiens Legacy Centre for tour and Morning Tea
Varias (Qld College of Wine Tourism) for lunch and tour
14.30 Depart for home *(see note 2 below)*

NOTES
1/ The Boulevard Motel and the Grape and Apple Motel are within walking distance of our dining venues and are reasonably priced. Some members will be caravaning. The Top of the Town Tourist Park is recommended.
2/ Visitors may want to extend their adventure by visiting Girraween for some excellent walking trails or even Queen Mary Falls on the way back to Brisbane.
3/ Members will be requested later to inform Tony of their attendance to allow for advance bookings as required.

Tony, a surveyor in IWSC and QWRC from 1974 to 1992, is also seeking contact details of other surveyors employed by the various water departments. He is hoping to arrange a get-together of retired surveyors, assistants and those who are interested, at some point in the future. If you are one of that lucky breed, or know of some, please contact him at anthonyclarey@bigpond.com

WRRA Mid Year Lunch
17 JULY 2024

The 18 members who attended the lunch at the Coorparoo RSL Club enjoyed a good quality two course lunch while listening to presentations by Barton Maher, Assistant Chief Engineer from the Department of Regional Development, Manufacturing and Water and Michael Pitman, General Manager Strategy for Sunwater.

Barton's wide-ranging and thought-provoking talk covered most of the Department's current activities including;

- Regional assessments of the capability of the existing water sources to meet current and projected future water demands
- Infrastructure projects across the State for bulk water supply, dam safety upgrades, and pumped hydroelectricity, and
- Serious challenges ahead in terms of need for more skilled people, impacts of climate change and regional water security

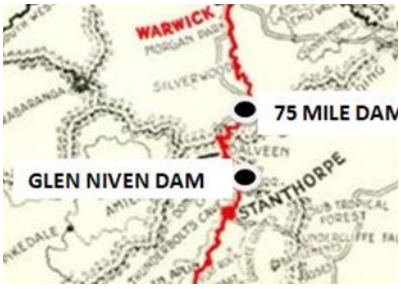
The talk has been posted on the Events page our website.

Michael highlighted Sunwater's work in many of the regional assessments, bulk water supply and dam safety, and also water supply options for the north-west minerals province developments.

Our trivia master Terry Loos came to the fore again with another set of obscure trivia questions. In addition to the Brisbane locals it was great to see Kev Devlin, Brian Shannon, Dave Burton and Warren Shallcross who had travelled from further afield.

We are looking for a new place for our lunch events as the Coorparoo RSL site is to be demolished later this year for a high-rise retirement village. Any suggestions would be welcomed.

TAKING A HIT FOR THE TEAM
Gary Corbett
A team of 'Old-Boys' reflect on the effort involved in accessing the World's Oldest Concrete Arch Dam



On Monday 13 May 2024, a team of three IWSC / Water Resources 'old boys' (Bob Hade, Tony Clarey and Gary Corbett) set out for a trek on the Granite Belt below Warwick to determine whether a visit using a southern approach to 'the oldest concrete arch dam in the world' (the 75 Mile Dam, to the north of the Cherry Gully Rail Tunnel on the Warwick-to-Wallangarra railway) was within reach for a possible larger group of WRRA retirees later in the year – both in terms of logistics and physical effort .

An earlier visit to the vicinity of the dam using a northern approach (ie through private property to the back of Connolly Dam) was undertaken by Malcolm Lawless (a fellow IWSC / Water Resources old-boy), prompted by publication of an article in WRRA Newsletter #104. Malcolm's attempt led to him to conclude that that approach was not workable in terms of logistics, effort and time involved.

The team can report that the attempt to reach the dam from a southern approach was indeed successful, but the team was to come to the same conclusion as Malcolm after it returned to base. It was worth while seeing but could be fraught with many pitfalls (not to mention pain) for the uninitiated or unfit – or both.

However, the team was keen to share the story of its visit as well as the events which led up to it, as it could be of interest to others in our 'water' community (even though the dam is not an ex-IWSC asset).

The story had its beginnings just over 20 years ago, through my involvement with the state's 'orphan' water assets at the time. Here is the story:-

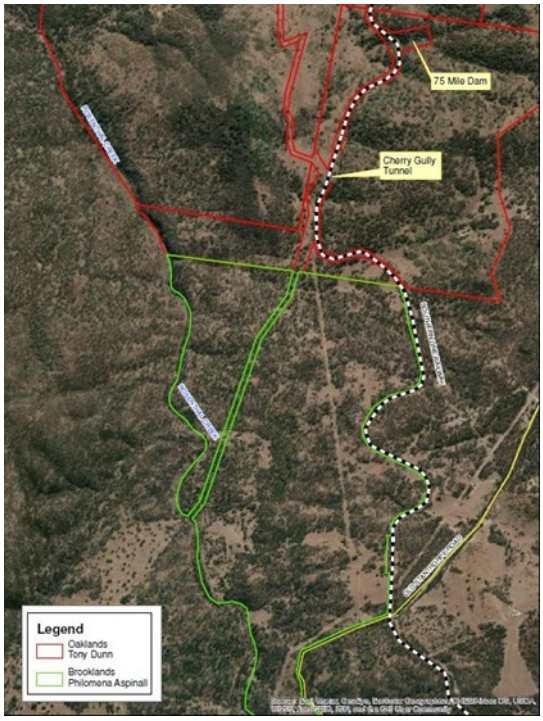
Story Behind the 13 MAY 2024 Visit

I became aware of what I now know to be the 75 Mile Dam when I was working with the Non-Commercial Assets group of the department under engineer Richard West in the early 2000s. This was at a time when part of my role was to look after 'orphan' water assets between Monto and the Qld/NSW Border, one of those being Glen Niven Dam just in from Applethorpe – the first railway dam south of the 75 Mile Dam. 'Orphan' water assets at the time of Sunwater's corporatisation were typically those for which a major consumptive user no longer existed but for which the state/community wanted retained, hence this on-going ownership involvement by the state of such assets. The 'Orphans' also included a number of Mines Department dams which the NCA group inherited, through our direct association with that department around that time.

I looked after 'orphan' water assets from Monto south, and Peter Cannel looked after those from Monto north. The full list can be found via the following link:-
https://www.qld.gov.au/environment/water/catchments/state-owned-dams

As far as I have been able to establish, Glen Niven Siding was the first railway siding south of the Cherry Gully Siding near the heritage-listed Cherry Gully Tunnel. The tunnel was some 500m or so south of an old concrete railway dam across a small gorge adjacent to the rail line. The construction of the tunnel and dam began in 1878 and was completed in 1880. The railway line was opened in 1881. As part of my job also implied keeping an eye out for any other old state-owned water assets which could pose potential liability exposure for the state, my interest turned to finding out a little more about the 75 Mile Dam, given that it was referable (by height) prior to the Water Act 2000 but became non-referable following a PAR Assessment after the passage of the Water Act 2000 (and for all intents-and-purposes, may well have been forgotten about because there had not been a consumptive user for many many years). At the time, all I knew was that it was *'just north of the Cherry Gully Tunnel and there is a good chance you can see it from that end'* but this proved not to be in this case, so my first attempt to find it failed because I could not see it from the northern end of the tunnel.

When I got involved with Bruce Pearce in putting together the Q100 events in 2022, we looked at what 'day-trips' could potentially be attached as 'day-after' add-ons to the events themselves for anyone interested, and I decided to look further into the 75 Mile Dam as possibly being one of those should an event eventuate on the Downs (which it did in Toowoomba). Around that time, I was to run into Bob Hade from Warwick (ex-Local Govt/Water Resources etc) and Bob provided me with a document put together by a Dr Chanson at UQ. The document made the proud claim that this concrete arch dam was the oldest of its kind in the world. (I was later to find that the status of this dam had officially been recognised by the Institution of Engineers – and I was equally surprised that the dam had not at any stage been heritage-listed by the state government).
https://www.engineersaustralia.org.au/sites/default/files/resource-files/2017-01/EHA%20No_9-Oct99_1_1.pdf



Bob then went about producing a local area GIS map with cadastre overlay over aerial photo, which identified the dam as residing within the rail reserve – it also provided the names of the adjacent landholders who we would have to approach in order to gain access through their properties. A recent reference to the 75 Mile Dam in Newsletter #104 drew the attention of an IWSC/Water Resources 'old-boy' Malcolm Lawless, who took it upon himself to attempt to get to the 75 Mile Dam by going 'the back way in' using a northern approach from Connolly Dam. Following his visit, Mal reported on some of the inhospitable aspects of going in that way, and suggested that it would not be a simple thing to take on for a group using that option.

So I then contacted the Downs Explorer, thinking that there could be a possibility that the steam train could drop a group off on their day-trip from Warwick to Wallangarra and back, and possibly pick us up at 'The Gorge Tank' beside the rail line near the dam on the way home. No success.
https://downsexplorer.org.au/

I then contacted the Australian Society of Section Car Operators, to see whether there was any possibility of their group providing access to the site, should they be proposing a get-together/outing along that rail-line using their unique vehicles in the near future. (This group was on record as having held a day-outing on that rail-line in the recent past). Again, no success. https://assco.com.au/

So the only option left for us was to look into the logistics of getting in from the south, through the Brooklands and Oaklands properties – with entry off the Old Stanthorpe Road. Using Bob's data, Tony was able to then contact the owners of both properties and we were able to secure the keys to the Aspinall's property (Brooklands), enabling vehicular access to around half the distance in to the dam. We were able to get to the property boundary of Brooklands in a 4WD but the rest we had to do on foot and in retrospect, we could have been better off to stick to the rail-line itself for the entire distance (something which we did on the way back), as the area was reasonably hilly. (Tony had also clarified with the Downs Explorer that there would be no 'steam-driven surprises' in store for us on the Monday in question as we made our way there and back through the Cherry Gully Tunnel – and over the old rail bridge on the way back). *To be continued, next edition.*

Chappos Big Lap Part 2

Jon Chapman

For a complete change of pace, we next ventured to Karijini National Park. Another stunning place but would be best done in your 40s (or younger) not your 60s Some of the walks were beyond our creaking bones. Regardless we saw some of the most stunning landscape in Australia, full of high grade iron ore too!

Next was Tom Price (no longer has the Mount), a very pretty Rio Tinto town. The current Tom Price mine is 13 x 6 kms. Pit No 1 is currently decommissioned, while Pit No 2 is all go, although a new vein has been found in Pit No 1 as the rehab was taking place and it has been decided that it will be mined again in the future. We saw huge equipment in the maintenance sheds, tyres worth $30K, but there are some that are worth $70K!! Dozers, haul trucks, loaders, shovels or buckets, excavators, water trucks in the mine then reclaimers, conveyors, stackers, hoppers, surge tanks, separators etc in the main area. One conveyor runs 26km from the West Turner Mine, part of Rio's expanding collection of 9 mines in this area. We drove through the maze of grading plants that separate fines (dust to 5mm) to lump (up to 60mm). These are loaded separately on massive trains that go to Dampier. We saw a train being loaded, 2.4 km long! While small compared to the craziness of Port Hedland, to go through a working mine is exciting.

From here we headed back to the coast via a arm stay at Cheela Plains and a few rest areas on our way to Exmouth.

Leg 5 Western Australia (Gascoyne)

It had to happen and here was where we started to crash into the peak season, plus school holidays. Exmouth was "booked out", We got one night on the ocean side and one night 50km inland at Bullara Station. No tours, no whale sharks etc. We have friends who lived here so we did get to see the beautiful coastline and, via the Museum, marvelled at the history of the US Submarine base etc.

We moved on to Carnarvon on our way to Denham / Monkey Mia. Hang on school holidays not so fast; we ended up in Carnarvon for a fortnight. Maybe it was meant to be as we got some R&R. This was also the start of the HMAS Sydney story, where an Aussie ship went down in WWII. Carnarvon, Denham, Geraldton and Fremantle all have a memorial of sorts to the HMAS Sydney. In Carnarvon there is a wall with an individual name plaque for every sailor lost.

Carnarvon is a small town with not a lot going for it, but there is the Space and Technology Museum, and a collection of museums at the One Mile Jetty, that celebrates the history of their lighthouse, shipping, shearers and railways. At the time of our visit, the famous farmlands along the Gascoyne River were in recovery mode as a cyclone in the last few years had basically washed away all the farming infrastructure. A massive levee now protects some the farms and the recovery continues. While here we also visited the Quobba Blowholes and they didn't disappoint. This is where we saw our first whale of the trip as well. The lack of staff issue was also a big thing here, no backpackers meant a lot of farms, pubs have no staff and open for limited hours.

Eventually we moved on (now July 2022) to firstly Hamelin Station and then Denham. Hamelin Station is a former sheep station now a wildlife preservation area. We walked from the station to Hamelin Pool where two unique things exist. First, Stromatolites the only living things from the Jurassic era and a shell block quarry where, like Besser blocks, homes were built from solidified coquina shells. Limited quarrying still occurs to maintain houses in Denham built from the material.

The Caravan parks in Denham were still busy despite school holidays being over. A 6 week pink snapper season meant the fishermen had moved in in droves. Once an open season all year, the snapper are much loved, over loved, so the 6 week season is full on. We didn't get to Monkey Mia, but we did do a tour of the Francois Peron National Park. It's a stunning place where we saw dolphins, dugong and a tiny thorny devil. To end the day, we had a hot dip in an artesian bath at the old pastoral homestead in the park. Parks have eradicated all ferals from Dirk Hartog Island and are reintroducing native animals to the island and now aim to do the same in Francois Peron. The cats are the hardest to remove and the most destructive. They had recently trapped a 26kg cat!

Leg 6 Western Australia (Mid-West)

The regions in WA overlap at times so this area was a little confusing. First up Kalbarri and another stunning National Park that is in two parts. Stunning Murchison River valleys and then the shipwreck coastline. This was our first real exposure to the wildflowers and canola as far as the eye can see. Anyone who hasn't been to WA should schedule it around the wildflower season, it's just awesome! Kalbarri is still in recovery mode post Cyclone Seroja which hit in 2021. The clean-up requires asbestos trained tradesmen for the demolition work and they are rarer than hens' teeth. Beautiful town and our first exposure to the tag for WA = Windy Always.

On to Port Gregory, the former Hutt River Province, and a genuine pink lake system, purely magical. Onwards via Northampton (more canola and lupins) to Geraldton.

Car service was on the agenda, likewise the van but the weather turned to windy rainy hell. It did ease one day and we took a cruise to the Abrolhos Islands. Still windy just a 3 to 4 metre swell though!! This was a truly unique spot and while the lobster fishing industry is undergoing massive cutbacks, the way of life these people have lived for many years is hard to fathom. The shipwreck stories are endless, the Dutch just kept running into the reef.

Continued next page

Chappos Big Lap *continued*

Leaving Geraldton, we ventured inland and this is where our trip started to zigzag inland and back to the coast. Inland of Geraldton we took in Mullewa, Morawa and Mingenew, grain growing areas, but Mullewa is also the first place to have the renowned wreath flowers, very unique. This is also the first time we encountered the use of granite rocks to capture and store water supplies with Bilya and War Rocks near Morawa. Back to the coast and Port Denison and more gale force winds in between beautiful sunny days.

Next, the true mid-west passing through farming communities of Carnamah (Talc mine) and Perenjori before we went through the old gold mining towns Paynes Find, Mount Magnet, Cue to Meekatharra and Karalundi. Besides the mining tales, there are still some big mines operating. There were tales of pastoralism and the aboriginal connections. Sadly, Meekatharra is all and more of what the stories say, a sad place with a big history. We stayed 50 km north at Karalundi, a Seventh Day Adventist mission and Caravan Park because Meeka is a dirty, unfriendly spot.

Leg 7 Western Australia (Wheatbelt)

This is a massive area and our zigzag travel did bring us to the coast a few times away from the wheatbelt. The size of the wheat, canola and other crops is hard to fathom. Much of it is only possible due to the Perth to Kalgoorlie pipeline that not only secured the gold mining operations but opened up the wheatbelt with a secure water supply.

On the way from the Midwest to the wheatbelt we dropped into a piece of coastline that included Green Head, Jurien Bay and Cervantes where the World Heritage listed Pinnacles exist. The wildflowers are also on steroids in this area with the Lasueur NP as a stand out. Jurien Bay also got the gong for the dearest IGA in Australia – $12 for a 500 gram block of cheese! One of the more beautiful and stunning parts of our trip.

Back to the Wheatbelt, the land of crops, wildflowers and granite rocks. With grain comes grain silos (some monstrous) and a relatively new phenomenon of silo art where artist paint a mural or two on these monstrosities; very talented people. The towns are small very friendly and happily oblivious to the hustle and bustle going on at the coast at Moora, Dalwallinu, Bencubbin and others.

On this leg we went rock crazy; these granite giants with bund walls and storage are just amazing examples of pioneers' ingenuity. The aborigines did it on a small scale, before the Europeans took it to the next level. Their names don't exactly roll off the tongue – Billiburning, Beringbooding, Elachbutting (camped here) and Warrachuppin. This trail took us to Southern Cross (that is actually in the Goldfields) and more rocks, more crops and more tales of the Golden West Pipeline.

We followed the Pipeline (sort of) going back west into the Wheatbelt towns of Merredin, Bruce Rock, Quairading, Wyalkatchem and Dowerin. The local museums are often based on one of the Pipeline pumpstations and are very interesting places. There are many museums (we went to 154 on this lap) all of which offer something different. Apart from the pump stations, there was one at Wubin housed in a massive wheat bin. Many are dedicated to the tractors used in the cropping pursuits. Did you know WA is the home of the Chamberlain tractor? There were many military museums with a huge connection to WW1 with the Lighthorse resources men and horses; more on that later.

Throughout this section of the Lap wildflowers were everywhere. A trip to WA should be timed to do the wildflowers. While there are many places to go and see the flowers, we were staggered by a small block on the edge of a town (a water reserve actually) called Wongan Hills, just wall to wall wildflowers.

Our next major stop was a place called New Norcia, not far north east of Perth, still in the wheatbelt, home to a Benedictine Monastery. There are still a few monks in residence and they still make their bread, wine and beer, however it's the architecture that takes the breath away. All hand built and painted and only on a tour can you get inside the churches to see the paintings and the true awesomeness of the leadlight windows etc.

Leg 8 Western Australia (West Swan)

We never intended to go to Perth city as such and this stopover for a week was just 30km from the CBD and our worst internet on the Lap! Our park was just 10km from Guilford, once touted as the WA capital and home to the Lilac Hill Cricket Ground (a bucket list thing for Jon). Lilac Hill is where the poms play their first tour match of an Ashes tour and is very much a village ground just like Pommyland.

This area also allowed us to see the Yanchep National Park and its immaculate gardens and limestone caves. There was the Gravity Discovery Centre (Gingin) with Perth's connection to the space race, then Whiteman Park, with three museums, a railway track and a wildlife park, all worth the visit. Two museums are standouts, the Motor Museum of WA has 100s of cars, 1000s of models and includes a lot of Daniel Ricciardo's early cars. The Tractor Museum of WA has 100s of fully restored tractors, including a special section dedicated to the Chamberlain.

As we left here, we had our first serious breakdown issue. The caravan brakes had played up at Dalwallinu some weeks before with the right hand rear tandem brake magnet randomly coming on. The only available mechanic, a monster John Deere tractor specialist, couldn't diagnose the issue, re calibrated the brakes and all seemed fine until we left West Swan. Same wheel, same tapping and dragging. Call RAC: no idea! Luckily got into a repairer who had a cancellation, but we had to take the van 30 km north west to Joondalup. We had the van fully serviced but the brake issue was again a mystery. On a hunch, they replaced the problematic brake magnet. Bloody electronics!

To be continued...

HEALTH *and beauty*

For the Sake of Your Health, Burp

People who lack the ability to burp have some pretty unpleasant symptoms, according to scientists at Texas Tech University. Researchers conducted interviews with 199 people who had the condition retrograde cricopharyngeus dysfunction and noted they experienced excessive flatulence, a bloated stomach, socially awkward gurgling noises and difficulty vomiting. A muscle in the throat of non-burpers can't relax to allow gas to escape, causing the condition.

As well as having the unpleasant symptoms. Half the patients had not talked to their doctors about the condition through being embarrassed.

Some said it affected their relationships and working lives, leading to depression.

For the Sake of Someone Else …

A year ago, our son in law was diagnosed with leukeamia. Today he is in remission thanks to a bone marrow transplant, without which he would no longer be with us. A generous American woman made the donation.

At any one time about 1000 Australians are urgently waiting for the perfect living donor, so the Leukaema Foundation and the Australian Bone Marrow Donor Registry are appealing for Australians to sign up to become a live bone marrow donor.

"When I saw the first grey hairs, I thought I would dye."

Exercise those Brain Cells

Leonardo da Vinci was asked in what year of the 15th century was he born. He replied "The digits in the years of my birth sum to a number formed of two consecutive numbers and is also the product of two consecutive numbers. Call this number Y. Subtract Y from the year I was born, then divide the new number by Y and then divide that by Y and the number remaining is 10.'"

In what year was Leonardo born?

Grant Wood 1891-1942
American Gothic

"Them dang fraccers needn't think they're comin' onto our spread!"..

Phobias

The verse on page 15 is about one particular phobia. It's amazing just how many phobias there are. When clinicians come across one, they invent a name usually combining a Greek prefix with –phobia (fear of). Here is list of some taken fairly randomly from Google: acrophobia (fear of heights); agoraphobia (open spaces); claustrophobia (confined spaces); atichiphobia (failure); autophobia (being alone); catoptrophobia (mirrors); chronometrophobia (clocks); cyberphobia (computers); gynophobia (women); venustraphobia (beautiful women); phobophobia (fears).

You can google your own phobia – have no fear.

Collective Nouns

Anyone can call a collection of animals a mob, but if you really want to show off, you could always try some of these: a gaggle of geese (on the ground); a skein of geese (in the air); a bouquet of pheasants; a business of ferrets; a skulk of foxes; a smack of jellyfish; an ostentation of peacocks; a murder of crows; an unkindness of ravens; a parliament of owls; a never-thriving of jugglers; a sentence of judges; a shrewdness of apes; a convocation of eagles; a knot of toads; a charm of finches; a kindle of kittens.

Look them up. Or make them up.

Many years ago *Aquarius* invited readers to submit their own collective terms. Among the nominations, judge Bernie Credlin noted *a phylum of Records Clerks* and *an arsenal of WCs.*

Answer to last Issue's Teaser

A. John is 73 and Ben is 37. Last year they were 72 and 36. When John was 54, Ben was 18 and when John was 48 Ben was 12.

Apostrophes

Helen received a letter addressed to her at Ipswich Girl's Grammar School. I asked her if she was the one girl who owned the school. The school's title is the Ipswich Girls' Grammar School which is grammatically incorrect. It is a school **for** girls (dative case), not one that is owned by girls (genitive case). Interestingly the equivalent Brisbane Girls Grammar School is grammatically correct while Brisbane Boys' College is also wrong.

The correct use of the apostrophe is best illustrated by the following examples: the visitor's book – a book owned by one visitor; the visitors' book – a book owned by more than one visitor; visitors book – a book to be signed by visitors.

Mothers Day and Fathers Day should also be apostrophe free.

Keeping it in the family

The last Newsletter carried a note about the much "married" Henry VIII of England.—**Ed.**

Philip II of Spain (the one who sent the Armada to invade England), was a much married man – though hardly in the same league as one of his fathers-in-law (Henry). His first wife, Mary of Portugal, was the daughter of his mother's brother and his father's sister. His second wife, Mary I of England (and daughter of even -more-married Henry VIII) was the daughter of his grandfather's sister. His third wife, Elizabeth, daughter of Henry II of France was not a particularly close relative. But his fourth wife, Anne of Austria, was the daughter of his sister. She was the only one to give him an heir – Philip III. **He** married Margaret of Austria and their son Philip IV married **his** niece, Mary Anne of Austria.

Charles II—note the growing jaw.

Not surprisingly after all of this inbreeding (much of which has not even been mentioned here), their son Charles II was epileptic and sickly. He wasn't weaned until he was four and had fourteen wet-nurses. He married twice but it was generally considered that fatherhood was beyond him. He was the last Hapsburg king of Spain.

A Sign of the Times
At the Cleveland Ferry Terminal

It's probably cheaper if it's not ice cold.

Terry's Trivia (from the Mid-year luncheon. - Answers on page 16.)

1. Kylie Minogue has an honorary doctorate from Ann Ruskin University in the UK in: (i) Music; (ii) Dance; (iii) Engineering; (iv) Health Sciences; (v) Politics.
2. Monte Carlo biscuits have a filling of vanilla cream and ?: (i) Strawberry jam; (ii) Chocolate cream; (iii) Watermelon jelly; (iv) Raspberry jam; (v) Fig jam.
3. Which is the main spirit in a Pink Lady cocktail: (i) Rum; (ii) Bourbon; (iii) Vodka; (iv) Gin; (v) Ouzo; (vi) Bacardi.
4. Who was Indian PM from 1966-77 and 1980-84: (i) Jawaharlal Nehru; Narendra Modi (iii) Rajiv Gandhi; (iv) Indira Gandhi; (v) Virat Kohli.
5. What animal is on the Porsche Logo?: (i) Lion; (ii) Cheetah; (iii) Leopard; (iv) Horse; (v) Tiger; (vi) Eagle; (vii) Wombat.
6. An Ailurophile is a lover of: (i) Stamps; (ii) Flowers; (iii) Cats; (iv) Ants; (v) Dogs.
7. Which country has the highest percentage of people over 65? (i) Monaco; (ii) Japan; (iii) Italy; (iv) Finland; (v) Puerto Rico; (vi) Portugal.
8. Which former PM did not sign up on a joint statement expressing support for Israel and calling for solidarity with Jewish Australians: (i) Paul Keating; (ii) Malcolm Turnbull; (iii) Kevin Rudd; (iv) John Howard; (v) Tony Abbott.
9. What is the Beatles recent and last song: (i) Penny Lane; (ii) Help; (iv) When I'm 84; (iv) Then and Now; (v) Now and Then; (vi) Angry; (vii) From me to you.

A homophonic limerick

Gataphobia

Here's a cause over which Science pores:
just to see a big cat gives Paul pause
and the sweat simply pours
in great streams from his pores
at the thought of the claws in its paws.

"Isn't it terrible how there's a shortage in every profession you can think of?"
"Except politicians and lawyers."

Book Club

Shakespeare's Library by Stuart Kells. Shakespeare, the world's greatest playwright, drew on numerous sources for his material. Scholars have therefore been convinced that in order to have access to it, the Bard must have had a library. But where is it? Over the centuries, people have searched in mansions, in palaces, in attics and libraries. It has never been found. But perhaps one day?

Pursuing the search like the mystery story that it is, Kells takes us through the trail of the hunters, many genuine and some who turned out to be complete charlatans.

Also embedded in the book is the question Who actually wrote the works attributed to Shakespeare? There are many contenders explored by Kells with the supporters of many ready to go to battle for their nominee. This is naturally complicated by the fact that none of the plays were published in Shakespeare's lifetime. The first folio was printed years after his death and was compiled from numerous sources, including rehearsal scripts with side annotations, which the editors had to winnow. Parts of the plays are almost direct quotations from the previous authors of the source material and certainly there were many around him, including the actors, supplying him with material.

In my view, a case could be made for the fact that no one person wrote Shakespeare, though he almost certainly was the one chiefly responsible.

A very interesting read.

Ian Pullar

The World Before Us *How Science is Revealing a New Story of Our Human Origins* by Tom Higham.

In 2008, archaeologists digging in the Denisova Cave (in the Altai near Russia) found a tiny bone, less than 2.5 cm long. After processing by scientists from a number of disciplines, it was determined that this bone came from the "pinky" finger of a girl of around 13 years of age who was the first generation child of a union between a Neanderthal mother and a Denisovan father (no homo sapiens involved). Incredible!

This book is fascinating and simply mind-boggling as it explores archaeology, genetics, carbon dating, ZooMS (a method of detecting human bone based on collagen fingerprinting) and what appears to be new Science. As carbon dating is limited to around 50,000 years, Science has invented more techniques including the dating of dirt!

There have certainly been quite a few other hominids on earth before (and even overlapping) homo sapiens.

The Science is beyond me, but I still gained a great deal of enjoyment from reading this book.

Ian Pullar

I would still like to publish other recommendations of books in future Newsletters so please keep them coming – **Ed.**

"When one door closes, another opens.
Apart from that, this is a good buy!"

Thanks Terry Loos!

Answers to Terry's Trivia (page 15)
1. (iv) Health Sciences. 2. (iv) Raspberry jam. 3. (iv) Gin. 5. (iv) Indira Gandhi. 6. (iv) Horse. 7. (i) Monaco (the list is in order) 8. (i) Paul Keating. 9. (v) Now and Then.

Office Bearers

President	Chris Robson	0402822828	chrisrobson52@gmail.com
Past Pres	Daryl Brigden	0418 710 697	darylbrigden@bigpond.com
Vice Pres	Greg Claydon	0417 009 385	greg.k.claydon@gmail.com
Secretary	Rob Ayre	0418 151 790	secretary@waterysauces.org.au
Treasurer	Gary Corbett	3398 8657	treasurer@waterysauces.org.au
Executive	Tony Clarey Phil James	0412 701 626	anthonyclarey@bigpond.com phil_james@powerup.com.au
Editor	Ian Pullar	3281 4437	hpullar@bigpond.net.au
WebMaster	Jon Henry	webmaster@waterysauces.org.au	

"There is no future in history."