LOWER EDWARD RIVER PUMPERS & LANDHOLDERS

Submission

to the Productivity Commission Inquiry
into
the Murray Darling Basin Plan: Five year assessment

April 2018

General Comments.

As the driest continent on Earth, with our most valuable and limited resource being fresh water, the concept of having a Basin wide plan for sharing water between the environment and productive use is both sound and prudent.

However, the current Murray Darling Basin Plan was a 'knee-jerk' response to the Millennium Drought which was believed to be the new normal under Climate Change hysteria, and as a result it is fundamentally flawed.

Irrespective of the Plan, rising sea levels predicted with Climate Change in the future it appears it will be difficult to impossible to keep the Lower Lakes as freshwater according to Professor Richard Kingston in 2009. Yet the premise that this historically estuarine part of the system must be maintained as freshwater underpins a Plan that is supposed to be adaptive to Climate Change.

The BP is an unrealistic plan with aspirational targets that are now hard-wired through legislation and urgently needs reviewing.

- The aims of the Plan to keep the Murray Mouth open 95% of the time by having 60,000-80,000ML/day flows at the SA border for 5 weeks duration is simply unachievable. It would require three of the four major river systems in major flood at the same time with unacceptable negative impacts socially & economically with greater frequency than historically evident.
- The massive 2016 Spring floods which caused substantial damage and productive losses to riparian landholders failed to achieve these unrealistic objectives. While the 'target flow' was achieved, it failed to keep the Murray Mouth open for any extended period of time and dredging recommenced just ten days later. Clearly, the Plan's underpinning modelling is seriously flawed and its aims unrealistic and unachievable without massive and unacceptable third party impacts.

It lacks any genuine adaptive components and flexibility to learn with experience and incorporate these learnings, other than through the Annual Environmental Watering Plans. It effectively pays lip service to the concept of 'adaptive management' without the MDBA actually implementing it.

The Basin Plan needs to be reviewed as a matter of urgency, and not by the MDBA who devised it.

- It should be independently reviewed by a totally independent organisation with experience in this field. We stress no Australian company, university or organisation with the required level of expertise could be used as all of these have either been employed by the MDBA as consultants over the years in writing the BP, or in peer reviewing various reports, and it some cases both. We would also suggest that any company or university that haven't would wish to in the future and therefore could not be relied on to provide unbiased consideration and comment.
- If the Basin Plan is a truly fabulous a plan with excellent processes being
 implemented by the MDBA then they should welcome external international
 examination, genuine critical analyses and review being contracted by Ministerial
 Council.
- Our recommendation would be UNESCO- IHE Delft Department of Water Science and Engineering in the Netherlands.

- Conflict of interest is all about perception, and the communities are fed up with the MDBA 'marking its own homework.'
- The concept of having a plan is sound, however this Basin Plan, its development and implementation are all flawed.

Politically driven time-lines are resulting in poor decision making without appropriate consultation and adequate use of local knowledge.

• The SDL projects submitted by NSW have been totally lacking in transparency and reasonable consultation. No details have been provided regarding the Menindee Project and others despite repeated requests. Alternate proposals and options were not explored as a dead-line had to met. The Yanco regulator project is not supported by the Yanco system landholders, and yet the alternative option to 'water the mid Murrumbidgee wetlands' was not considered. This would firstly require the identification, assessment and prioritisation of the 'wetlands', then consideration of using infrastructure to enable watering of the prioritised areas. This has the potential to substantially reduce the volumes of water stated to be needed to achieve the environmental outcomes as well as solve the Murrumbidgee constraints issues.

It was developed in a 'cart-before-the-horse' with unjustified volumes of fresh water nominated without any real science in overall assessment of the system, base-line data established, identification and prioritisation of specific, necessary & achievable objectives leading to the creation of environmental water management plans to estimate additional volumes that may be required.

- Long term water management plans are still currently being developed seemingly in an attempt to justify the volumes of fresh water stated as being necessary.
- Expenditure of \$30M in five years monitoring just seven key sites takes no account of
 the negative environmental effects on river bank slumping with subsequent tree fall
 resulting in mobilisation of sediment and nutrients and bank erosion throughout other
 parts of the system which are not recorded and reported publicly.
- Local observations are seeing e-watering resulting in exponential red gum growth resulting in the generation of massive additional loads of leaf & bark litter that seems to be causing in increased frequency of Black Water events following these repeated watering events. The increased frequency of hypoxic events is resulting in substantial fish kills, particularly Murray Cod. Despite having an established Cod monitoring program in place for over a decade, the MDBA failed to analyse and report on the drastic impacts on the Cod population subsequent to the most recent event, instead choosing to only report on the Golden Perch and Silver Perch populations that benefited. Similarly, the explosion of Carp subsequent to 'over-bank' watering events providing ideal breeding conditions is seemingly not recognised as a serious negative environmental impact of these events.

The single-minded objective of using only fresh water to solve SA's locally created problems without looking at the realities of what caused the problems in the first place is resulting in unnecessary negative social & economic impacts in NSW & Victoria.

The wasteful evaporation of between 700 and 1200GL of fresh water per annum from what was historically an estuarine system at the Lower Lakes is not sound or prudent, and quite frankly defies logic. It is the only artificially maintained fresh water river estuary in Australia.

- This evaporative loss equates to approximately \$900M annual of lost agricultural production alone and no consideration of this was given in the BP development.
- The MDBA did not analyse the cause of the problems in the Corrong, Lower Lakes and Murray Mouth to examine what other options were potentially available to improve their condition. This would be finding local solutions to problems that were created locally, rather than just wasting fresh water sacrificed by upstream states.
- The lack of natural tidal scouring due to the presence of the barrages has resulted in the creation of Bird Island and substantially changed it from its natural estuarine state. Removing the barrages and Bird Island to allow the free flow of water, essentially restoring it to its historical estuarine condition, together with building a weir at 'Lock Zero' near Wellington would have enormous benefits both environmentally and socioeconomically. This would restore the environment, safeguard SA's water supply and allow for increased agricultural production and the restoration of SA's mullaway fishing industry that disappeared subsequent to the construction of the barrages
- In any review it needs to be seriously considered as to whether retention of the barrages is justified.

Not all of the Basin area was included in the Basin Plan. The South East of SA was deliberately excluded from the Plan while the Coorong's environmental condition is used to justify the removal of water from communities in other states.

- The SE Drainage Scheme can divert up to 4,000GL of freshwater that would otherwise flow into the Corrong out to sea. This is twice the minimum amount sought to flow over the barrages annually.
- Using sea water through the Murray Mouth to flush the Corrong and redirecting this fresh water into the Corrong should be examined.
- The SE of SA with local solutions needs to be included in any realistic and credible Basin Plan.

If adaptive management was genuinely being implemented, the MDBA would have called for a serious review of the BP, its's assumptions and all opportunities to improve the environment without impacting communities already.

- A rewrite of the plan incorporating the lessons learnt from the 2016 floods (it will rain even with climate change), looking at options other than simply adding fresh water, and recognising that fighting nature will not keep an estuarine system its current fresh water condition for long under Climate Change predictions.
- The SDL Constraints issues appear unresolvable with no 'buy-in' from riparian landholders in the Murray, mid-Murray system and Victoria. The Yarrawonga to Wakool Junction engagement process has been an abysmal process under both the MDBA and NSW. The lack of transparency surrounding information on frequency, timing, duration and predictability has resulted in a complete lack of trust by landholders. Flows above 30,000Ml /day below Yarrawonga are unacceptable, and even up to this would require enormous expense. The failure to recognise the easement purchase as an 'Acquisition Process' requiring Fair Compensation processes is unacceptable.
- Preliminary assessment of the Social & Economic impacts of the Basin Plan have proven to be gross underestimates when compared with recently released reports. The untargeted purchasing of water has resulted in our area being inequitably impacted at a community level.
- MinCo need to stop and think. Is the plan appropriate and fit for purpose given the new knowledge gained since it was devised?

All consultation by the MDBA and NSW has been deplorable. It is not a two way exchange of information, rather they tell us how things are, and do not provide information to allow people to make informed decisions. Consultation in small groups rather than large meetings appears to be resulting in instances of different information being available at different 'sittings'. This is met with great cynicism as its recognised as an age old political tactic to divide and conquer.

It is enormously concerning that whenever a true scientist questions any of the 'science' and assumptions used to justify the Basin Plan or its monitoring and reporting, they are treated with contempt for questioning what appear to be rigid and inflexible beliefs, somewhat like the flat Earth 'scientists' who refused to even consider the possibility that the Earth was round.. - See attached Professor Peter Gell's paper, 'Watching the tide roll away – advocacy and the obfuscation of evidence.' CSIRO Press.

It is really little wonder that the current rendition of the Basin Plan has no credibility with those of us who have to actually live with the consequences of it and its implementation on a daily basis. The Plan should be based on fact, not fiction.

INFORMATION REQUEST 1

The Commission welcomes feedback on its approach to assessing the Basin Plan.

- Thankyou for providing the opportunity to both meet with you in Deniliquin and provide a submission.
- The consultative approach you are taking is refreshing when it comes to water related issues, however some cynicism exists regarding how critical the review will ultimately be. This Basin Plan and its implementation have been reviewed and inquired into by both State and Federal Governments with no result. Endless recommendations have been made with no real change.
- We hope this is not another review with recommendations that are not actioned.
- Please excuse the rushed nature of this submission, however everyone is an
 extremely busy period with harvest, sowing and pasture watering all concurrently
 occurring. We hope we have time for more comprehensive comments upon release
 of the Draft Report.

INFORMATION REQUEST 2

- a. risks that may prevent Basin States from successfully implementing SDL adjustment projects
 - Inadequate and unrealistic timeframes to allow for genuine consultation and negotiation with thousands of potentially effected landholders around constraints.
 - No recognition that even if they achieve this, the collapsing physical constraints at the Chokes and Edward River offtake will not enable them to deliver the volumes of water they have suggested necessary. The volumes cannot be physically delivered. We are of the understanding that there is the real risk that the Edward River off take will slump/collapse over the coming years under desired flows and the main system flow would then be down the Edward system, not the Murray River. NSW agencies are very aware and concerned about this issue.

- No meaningful consultation has occurred regarding the PPM's and Rule/operational changes, what the potential third party impacts on access to allocation and entitlement are, and how they will be mitigated. There is nothing deposited in the 'trust' account.
- Chanel capacity sharing issue is a major concern created by the purchase of upstream water for use in SA and this is now being exacerbated by unlimited downstream land use change and the movement of water for consumptive delivery downstream being - eg massive horticulture developments downstream.
- b. the extent to which adopting a different definition of 'neutral or improved socioeconomic outcomes' for efficiency measures to what is in the Basin Plan would affect the likelihood of projects being delivered on time and on budget
 - The untargeted water purchases have resulted in massive socio-economic impacts on our communities even though individuals who sold water are financially 'better off', have left productive activity and retired elsewhere.
 - The definition of S/E impacts should be at a community scale, not on an individual basis.
 - It is a simple fact that our communities cannot afford for any more water to be removed from consumptive use in the NSW Murray.
 - The MDBA's Chief Economist has identified and acknowledged the extreme severity
 of the unanticipated negative socio-economic impacts on our community due to nonstrategic purchase of water to implement the Basin Plan.
 - There is also no apparent consideration being given to the "lost opportunity" to GDP of removing water from consumptive use growing food & fibre. Implementation of new technologies and water savings has masked the impacts in some areas, however the lost increase in production potential is not being acknowledged. The Australian Treasury should look at this- What has this actually cost the nation?
- c. whether there are other novel approaches to recovering water for the environment, such as purchase of entitlement options, that may contribute to Basin Plan outcomes while achieving neutral socioeconomic outcomes.
 - Murray Group of stakeholders suggested several additional SDL projects that were not investigated for inclusion by NSW we were told 'due to the tight timeframes'.
 These included
 - a. the inclusion of the existing actual volumes of Additional Dilution Flow water and
 - b. an alternative to the Yanco Regulator. This involved identifying and prioritising the 'mid Murrumbidgee wetlands' that are said to benefit from the Yanco offtake regulator project believed to be costed to over \$54M, and meeting their environmental needs by leveeing them (with outlets) and pumping water in as needed. This would also maintain the threatened Trout Cod population and reduce the constraints issues in the Murrumbidgee valley by massively reducing the flows required to access these 'wetlands'.
 - The prescribed timeframes have resulted in rushed and ill-considered options.

- The inability to include projects other than those submitted by a certain date as SDL's
 has meant that there is no flexibility or adaptive management opportunity.
- Alternative projects that will assist in meeting the supposed environmental objectives are being discarded as opportunities to save fresh water.

The Commission is seeking information on actions governments should now take to achieve SDLs in the Northern Basin.

- A funded metering & telemetry roll out across the Northern Basin, included metered flood plain harvesting. This should be carried out by Water NSW just as the pilot project in the NSW Southern Valleys, not by independent accredited certifiers to validate the metering.
- The Barwon Darling Water Sharing Plan changes of 2012 should be reversed as the base line modelling was done by the MDBA without including those changes.
- Installation of doppler instream gauging- real-time with telemetry

INFORMATION REQUEST 4

- a. why progress to remove constraints has been slower than expected
 - Originally the 'Constraints' issue was only identified as being necessary for the 450GL Up Water. A blind man, and certainly every landholder along the system, could see that constraints would need to be 'relaxed' to get any environmental flows through. The landholders would accept the existing frequency of natural events, however additional man-made events impacting businesses is unacceptable. As is the increased risk of subsequent natural events being exacerbated by having pre-wet the system.
 - The original MDBA process was a farcical consultation and failed to reflect reality. Reports did not reflect Advisory Committee recommendations or information.
 - Subsequent NSW process was a 'top down' process where both the Chair and
 consultant were appointed by the DG Water and the result was no ownership of the
 process by those who are to be impacted. We were then assured that if we were not
 happy with the final document it would go no further, and yet it was submitted as an
 SDL, and the final Business Case has not been provided to anyone despite
 numerous requests.
 - More recently a lack of communication & transparency, together with a lack of internal capacity in NSW department.
 - There is no recognition that even if this is resolved, the system is not physically able to deliver the volumes being suggested due to the Chokes and the Edward River offtake collapsing.
 - There is no method of ongoing 'event- based' payment for weed control, fencing, loss of pasture, changes of vegetation type, lost grazing etc.

- We have been unable to ascertain the extent, timing, frequency, duration and predictability of events in order to estimate the full extent of impacts on our businesses and lives to determine appropriate compensation.
- There has been no transparency around the SDL process. We have been unable to
 get copies of the Menindee Project 'Business Case' to see what impacts it will have
 on Murray Valley access to allocation, and how these will be mitigated.
- There is only \$200M on the table for constraints- grossly inadequate to meet what will be required to compensate landholders.
- Consultation and negotiation with about 2,000 landholders will take time. There is no single 'prescription' or formula for compensation that will adequately address everyone's issues. Each property and business is different, so what is required will vary between neighbours.
- One off payments for ongoing and regular impacts is not being well received by impacted landholders.
- Redirection of the SE Drainage Scheme was not included as an SDL project which is a major flaw in the whole Basin Plan.
- b. the implications of this slow progress
 - extreme frustration and enormous angst from uncertainty.
- c. what can be done to ensure that constraints are removed in a more timely manner while managing impacts on third parties
 - some honesty & transparency- share the information as repeatedly requested.
 - A realistic understanding that some constraints cannot be removed or resolved.
 - Find local solutions to the Coorong, Lower Lakes and Murray Mouth.
 - Include those solutions as SDL's
- d. strategies that are, or could be, put in place to increase the extent to which Basin Plan objectives are met when constraints cannot be removed.
 - Deliver water only at times of low demand. Unfortunately, the system needs the river banks to have a drying phase annually (winter) to try and minimise the bank wash & subsidence and tree slumping.
 - Meet the SA Lakes needs using sea water with a weir at 'Lock Zero', and the Corrong's by redirecting the entire SE Drainage Scheme back into the system, not just a small portion of it.

The Commission is seeking information on:

a. the extent to which the Australian Government's strategy to recover water in areas where gaps remain will be cost effective, align with the Basin Plan's environmental objectives, and be transparent

- What about the BP 'Triple bottom line' objective? Why only ask this about aligning with environmental objectives?
- b. risks to achieving water recovery targets by 1 July 2019 and, where not already addressed under current arrangements, how any shortfalls may be resolved examples of water recovery (both infrastructure projects and purchases) that have been either well implemented or had major deficiencies, including risks to securing contracted but not yet delivered water from water-saving infrastructure projects.
 - The timelines are politically rather than realistic. The outcome is a turkey instead of a Bird of Paradise.
 - Incorporate the Additional dilution flow volumes as an SDL.
 - The up to 450GL 'Up Water' without socio-economic impacts appears to be unachievable- unnecessary and politically motivated.
 - Never, not once since CEWH has held environmental water has there been a single year when he/she has used all the environmental water available on account. How then can they justify using more water?

- a. what specific assistance has been provided to help communities adjust to the Basin Plan
 - Adjustment money was distributed on a politically desirable basis rather than as needs based. Albury, Wagga and other areas that have no demonstrable impact from implementing the Basin Plan received funding on the basis of being located in the Basin.
 - We are unaware of any significant funding in the worst affected areas.
- b. the extent to which this assistance has supported particular industries or regions
 - Not where it may have been able to assist.
- c. evidence that this assistance has facilitated adjustment that would not have otherwise occurred and has contributed to meeting the intended outcome of the Basin Plan, including more resilient industries and communities with confidence in their long-term future
 - Not aware of any local evidence of this.
- d. whether future structural adjustment assistance is warranted, and if so, what lessons can be learnt from past programs.
 - Structural adjustment should not be required if there were alterations in the Basin Plan as it effects the Southern Basin. New changes to the Basin Plan could deliver

- social, economic and environmental outcomes removing the need for structural adjustment packages caused by poor decision making.
- It should be targeted where the water has actually been recovered from, not on town votes in major centres.
- It is definitely needed where the socioeconomic impacts actually are. Wakool, Moulamein, Deniliquin areas even if not another drop is recovered from them.
- It now appears to be a 'wicked' problem, with massive damage to the community.

- a. the main risks to remaining WRPs being finalised and accredited by mid-2019
 - The time-lines of various processes do not correspond with each other. For example, the WSP is being developed without confirmation of SDL's, particularly constraints, being able to be resolved <u>IF</u> that is even possible.
 - once again, unrealistic politically driven time-lines expecting NSW to complete about 20 WSP's while QLD, VIC and SA had a handful each.
 - It appears that it is expected that each WSP must be prefect immediately.
 - How then do you incorporate changes from new and better information? There is no adaptive component or flexibility.
 - Release Draft WSP's for consultation with SAP's. The 'process' has to tick so many
 consultation boxes, and yet our SAP has not even been shown the full set of
 assumptions in the BP modelling, the SDL's, PPM and Rule change business cases.
 The SAP's need to be provided with ALL the information and the cumulative impacts
 in order to make informed comment.
- b. how, and to what extent, recent measures to make the WRP accreditation process more efficient and streamlined have sped up the preparation of WRPs and whether there are opportunities to further streamline the accreditation process for WRPs
 - Change time-lines to be more realistic.
- c. other ways WRPs or associated planning processes (e.g. consultation, modelling inputs) could be changed to better meet the objectives of the Basin Plan
 - The Basin Plan as well as the WRP's both need to incorporate some genuine adaptive components and flexibility to enable new knowledge for revised models and updated more accurate assumptions.
- d. how effective Basin States have been in consulting with all relevant stakeholders
 - NOT.
 - Consultation has largely been telling, not listening.
 - When local advice is provided it is ignored or covered up if it doesn't fit into a predetermined position.
- e. the main risks to planning assumption work being finalised on time.

- Lack of transparency
- Lack of funding
- Lack of consultation- holding consultations during harvest, sowing and other key
 times makes the process farcical. There is no consideration given to the fact that
 stakeholders have businesses to run and are not sitting in an office with nothing
 better to do than go to another meeting. Timing consultation outside of peak periods
 would be appreciated.

- a. how environmental water planning under the Environmental Management Framework is, or is not, facilitating achievement of the Basin Plan's environmental objectives within legislated timeframes, and what improvements should be made.
 - It's hard to differentiate between the benefit provided by e-watering from that provided by the floods.
 - According to MDBA & CEWH they are doing a sterling job.
 - Consultations are not inclusive enough, basically agency interaction with limited community input.
 - The MDBA are very recently trying to improve this locally in the Edward Wakool system however only time will tell if this consultation process returns to their historic 'telling' model.
- b. how effective and efficient the delivery of environmental water is including through coordination among owners of held environmental water, managers of planned environmental water and other stakeholders and how any barriers could be reduced
 - The EWAG has limited landholder representation and consists mainly of departmental representatives. It is NSW Office of Environment and Heritage's (OEH) process attended by MDBA & CEWH, Wetlands Working Group, MD Freshwater Research, Department of Fisheries etc.
 - The practicalities of timing of watering need to be more written in to the formal consultation process by increasing landholder representation to reduce or minimise impacts on landholders and their businesses.
- c. whether Australian and State Government objectives for the delivery of environmental water align, any examples of where this has not been the case, and how differences are resolved through the Environmental Management Framework
- d. the extent to which the Prerequisite Policy Measures (PPMs) assumed to exist under the Basin Plan will be in place by the target date of 30 June 2019, so that the Plan's environmental objectives can be achieved under the SDLs agreed by governments, and how any identified concerns should be addressed
 - Unable to make informed comment as consultation has been inadequate.

e. any opportunities to better integrate environmental water planning and management with natural resource management programs and complementary works to facilitate achievement of the Basin Plan's environmental objectives.

INFORMATION REQUEST 9

The Commission is seeking information on:

- a. any inconsistencies between the various national water quality guidelines and the water quality management plan requirements in WRPs and whether these inconsistencies are being resolved and managed
 - Water quality issues are becoming an increasing issue due to the increased frequency of Blue Green Algal blooms and Hypoxic & non- hypoxic Black Water events. The increased frequency seems to correspond to the increased use of environmental water, yet the MDBA seem reluctant to explore any correlation between the two.
- b. the adequacy of the actions of water managers to achieve the water quality objectives of the Basin Plan.
 - Water quality objectives may be undermined by the focus of the Basin Plan increasing flows from the Murray River to SA. There is already evidence of major bank erosion resulting from increasing demand to supply water to SA and new horticultural developments below the Choke.
 - This will result in decreased water quality (turbidity and sedimentation). This is an
 example where flexibility around projects within the SDL adjustment mechanism is
 required. Vital projects such as Murray River bank stabilisation works should be
 included in the SDLAM but are prevented by current restrictive political decisions that
 limits flexibility of projects.
 - We are experiencing a frequency of Black Water events unparalleled in recorded history and believe this may be caused by the over-watering of the Red Gums and forests. Red gums produce extensive new growth in response to watering events and in turn produce more leaf & bark litter. This combined with a lack of burning and being watered again is creating these 'natural' man-made events.
 - The 'scientists' tell us this is not so, however won't even consider it- they must be from the same mould as 'the Earth is flat' scientists as I'd have thought it would be worth investigating.
 - Like-wise, the frequency of Blue Green algael events is increasing, and could this be caused by the mobilisation of silt & nutrients from more frequent larger flows.- again the 'Flat Earth' science doesn't seem prepared to even consider these adverse outcomes resulting from these planned environmental flows.

INFORMATION REQUEST 10

- a. whether the Basin Plan trading rules advance the water trading objectives and outcomes stated in chapter 5 of the Plan
- b. whether changes to state trading rules made to date as part of implementation of the Basin Plan adequately recognise and protect the environment and third party interests

- No
- Inappropriate land-use change from dry land to irrigated horticulture lower in the system made possible by the separation of water from land to be tradable to 'higher value' crops has led to channel capacity sharing issues in the future that did not exist prior to the Basin Plan.
- These 'higher value crops may be worth more money to the individuals, however do
 not replace the employment of those who are losing their employment growing lower
 value crops. The demise of the rice industry as water moves to intensive horticulture
 in lower value land areas is a really serious unforeseen consequence at a community
 scale.
- c. whether implementation of the Basin Plan has improved access to market information and what further actions Basin States, irrigation infrastructure operators or the MDBA might need to take
 - In the interest of a transparent market the States need to have an online platform recording ALL temporary & permanent sales of water in real time- volumes & price. At the moment this information is partially provided by brokers, however not all sales appear to listed, only the higher value ones thereby distorting prices.
- d. whether processes for reviewing Basin State trading rules including the roles of the MDBA and the water trade working group — are sufficiently transparent, evidence-based and consultative.
 - We haven't heard of them.
 - Never once has the CEWH used all the water available on account in any single year.
 - After a major system flood has provided natural service of the environment, all
 environmental water held on account should either spill from accounts or be available
 for temporary trade immediately. As a naturally variable climate means our
 environment does not benefit from over regular watering, this water is then surplus to
 requirement and could provide some economic benefit opportunistically.

- a. risks to meeting critical human water needs (CHWN) under the Basin Plan, how the Plan addresses these risks, and what, if any, further measures are required
- Even with the Basin Plan another severe drought is inevitable. In the interests of ensuring SA's access to critical human need water, Lock Zero should be built, and sea water used to replace freshwater for evaporation in the lakes to meet their environmental needs just as happened historically.
- b. any concerns about provisions in WRPs relating to CHWN under extreme conditions.
- Having been left out of the original BP CHWN seems covered now. Concerns for the Lower Darling landholders are well founded unless connectivity is implemented.

The Commission is seeking information on:

- a. risks to the MDBA's ability to monitor and enforce compliance with the Basin Plan and WRPs from July 2019, and what, if any changes should be made to address these risks
 - In stream doppler stream gauging with real time telemetry to provide immediate indications of anomalies in flow.
- b. the extent to which non-compliance with the Basin Plan will be addressed by recent changes to compliance and enforcement announced by governments any further changes that should be introduced to increase water take compliance across the Basin
- C. .
 - Metering & telemetry Project rolled out by Water NSW across the Northern Basin, just as they did to the Southern Basin on the basis that it was going to be compulsory. It needs to be done by a Govt agency so that no independent accredited meter certifiers deal one on one with the landholder.

INFORMATION REQUEST 13

- a. how well current arrangements for monitoring, evaluation and reporting support the delivery of the objectives of the Basin Plan; and how they could be improved to increase the likelihood of the objectives being met
 - Selective monitoring is frustrating Basin inhabitants. The Edward Wakool fish
 monitoring program which had years of data regarding Murray Cod, evidently chose
 not to report Cod numbers from the annual monitoring following the black water
 events. This was despite them having the Cod data, however saying they did not
 have funding to correlate that data that year. Instead they reported how excellent the
 watering had been for Golden Perch without mentioning the decimation of the Cod
 population.
 - No negative environmental effects of watering events is report- carp population explosions, bank subsidence and tree slumping, changing of native vegetation types and distribution (eg RRG area extending into Black Box communities, and BB into grasslands.)
- b. whether there is a clear delineation of responsibilities for monitoring, evaluating and reporting on the Basin Plan, and, if not, how it could be improved
 - An entire industry is developing as discarded government department employees become consultants working under contract.
- c. the usefulness of the MDBA's Framework for Evaluating Progress and its recent application in evaluating the Basin Plan

- They need to recognise the negative impacts, not just the localised environmental benefits at a limited number of sites
- d. how data and information obtained through monitoring, evaluation and reporting could be made more useful for decision making and evaluation of the Basin Plan (including how to make this data and information more outcomes-focused)
 - Monitoring and reporting needs to have a more holistic approach and cover the system between sites and not just the selected key sites. The key sites are indicators, and the advantage of them is that the can have measurable targets. This is useful only so long as the targets are realistic and not aspirational.
 - Acknowledge that there are negative environmental impacts from these events and try to avoid them. Rethink plans based on the full facts rather than selected aspects that support or validate actions when looked at in isolation.
- e. the general information required to provide confidence to communities and others that the Plan is being implemented well and is achieving its objectives whether processes are in place to monitor key risks to the continued availability of Basin water resources.
 - Those who live along the system have a much more meaningful understanding of the health, or lack thereof, of the system.
 - The credibility of the MDBA and CEWH is eroded every time they release a report that makes highlights the positive environmental gains and makes no reference to the negative environmental impacts.

- a. whether current institutional and governance arrangements provide for sufficient oversight of the plan and support engagement with the community
- Minco or the Federal Water Minister need to get an external independent assessment of the MDBA performance and the Basin Plan development. The MDBA have been marking the own homework for to long.
- You would be hard pressed to find a suitably resourced entity in Australia due to
 potential for conflict of interest- most sizeable operations have done contract work
 for the MDBA in some capacity over the years, so it would need to from overseas.
 Our recommendation would be UNESCO- IHE Delft, Department of Water Science
 & Engineering.
- The Basin Plan is held up as the ultimate in water planning all over the world, so it
 would be interesting to see how they stood up to real scrutiny. We are surprised this
 hasn't already been done given the staggering volumes of money it is costing
 taxpayers.
- This independent review with recommendations should be done routinely to ensure improvement in performance over time.
- Using an independent organisation from overseas would remove the politics from the recommendations.

- b. whether there are risks to the achievement of the objectives of the Plan that arise from the current institutional and governance arrangements
- see above
 - c. what improvements can be made to ensure that institutional and governance arrangements are fit for the next phase of implementing the Plan.
- See above

Attachment 1

Professor Peter A Gell 'Watching the tide roll away – advocacy and the obfuscation of evidence'
(CSIRO Publishing 2018)

https://doi.org/10.1071/PC17048