

THE IMPACT OF PETER CULLEN'S LEGACY – TEN YEAR'S ON

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Introduction

It is now ten years since the passing of eminent water scientist and advocate, Professor Peter Cullen AO, and as such it is timely to reflect on the impact of his legacy – how his love for Australia's natural heritage motivated him to speak for the rivers in ways that few others have done, or do. What was it about Peter that cut through the layers of bureaucracy to influence policy at the highest levels? What was it about Peter that meant that local people in the most remote of communities welcomed him in ways that few others have been received? What was it about Peter that has enabled people who had never even met him, to say that it is his legacy that has changed their lives forever? This report used qualitative research techniques in the form of semi-structured face to face interviews, online surveys and story-telling to capture anecdotal evidence of the impact that Peter had. From this it emerged that Peter Cullen had exemplary skills in three complementary and reinforcing areas – 1. achieving impact at scale by speaking truth to power; 2. communicating to achieve collaboration and influence; and 3. authentic leadership enabling impact. This report concludes by applying these lenses to the current context of water management in Australia today, and shares what is currently being done to honour the legacy of Peter Cullen, and what else should be done.

Disclaimer - This report commences with a disclaimer – this is not a technical paper on a technical scientific study. Rather the opposite in fact. It is more of a story, or a collection of stories about a man who was, amongst many other things, able to return environmental water to Australian rivers. A story about a man who made complex science digestible by communicating in ways that were accessible to all, by all. I am hoping that this story, about that man, emulates a little of his effective communication style.

On a recent Autumn afternoon I sat in the armchair that used to be Peter Cullen's. It was big, green, leather and comfy and the view was of large gumtrees framing a picturesque landscape of the Brindabella Mountains behind, and the Molonglo River valley winding its way west from the south-east of the ACT, towards Yass. Peter's widow, the Reverend Vicky Cullen, had warmly invited me into their home so that I could ask her about the ten years since Peter had died, to chat about his legacy, to talk about his impact.

"He always had a passion for water", she began, after I asked her about Peter's earliest motivations for speaking for the rivers. As a strong river swimmer, spearfisherman and scuba diver, Peter grew up always surrounded by water – his early years are well described in the book "Our Land, Our Water" which Vicky compiled in the years shortly following on from Peter's passing. Indeed, it is this book, a compilation of Peter's writings and reflections from Peter's friends, family and colleagues, which provides crucial evidence that speaks to the man Peter was – AND how he influenced those at the highest political levels at the same time as being welcomed and respected by those in remote communities across Australia. Whilst this book provided a fascinating delve into who Peter was and what Peter stood for, I was curious to learn more about this from those who knew, worked with and loved Peter Cullen. I wondered whether we could replicate Peter in terms of his purpose, values, behaviours, influence and impact? I wondered whether, if you applied Peter's approach

and all he stood for, to today's context of natural resource and water management in Australia, if you could, **would** we have the same impact that Peter did when he was alive?

To answer this question, my research question, I first needed to understand this man more wholly – this 'charming', 'committed' man, this 'visionary', this 'research entrepreneur', this 'gifted synthesiser', this 'Pensioner from Gunning'. I wanted to learn more about him on three different levels: the first - how he achieved impact at scale by speaking truth to power. The second - how he used communication to collaborate with, and influence others. And the third - how his authentic leadership broke through barriers and enabled impact – significant impact at the national policy level resulting in, amongst many other achievements, environmental flows being returned to the Murray Darling System. As Leith Bouilly stated "the legacy of Peter lives on through the implementation of the Plan and the fact that we have environmental flows is due to Peter".

In order to understand these three dimensions more fully, those who knew Peter, had worked with Peter or had been influenced by Peter, held the insights that I needed. The anecdotal evidence from 26 interview subjects, open source information, as well as insights from "Our Land, Our Water" provide the basis for the findings in this analysis.

#1 – Achieving impact at scale by speaking truth to power.

Bruce Thom from the Wentworth Group of Concerned Scientists told me "Peter had impact at all levels, from John Howard to people in remote and rural communities. This was because Peter had charisma, an aura. He had the ability to quickly sum up a situation – he had a prior perspective that others couldn't see – it was a rare talent that is hard to emulate. In his role as an educator, he was convincing".

Peter Cosier, also from the Wentworth Group shared this: "Peter was a leader at the highest level – he knew that to influence policy, you had to bring people together. His self-interest was around protecting Australia's natural assets, he was friendly in the way he worked, across all houses of politics. He would take control of the agenda and self-organise with communities to take reform to the government". When I spoke with Ken Matthews about Peter's ability to influence at the highest level, I asked him what he saw as the foundation to this success. Ken replied "Evidence – Peter was one of the earliest players in Australia to develop ideas based on evidence, in a space where everyone else had an opinion".

Professor Mike Young reflected the following: "Peter stood out and said things – he was confident and he got traction. He had a way, a willingness to stand up and be counted – he believed it was more important to live within our resources and that we all need to change. He was a visionary, he had impact with Prime Ministers and Premiers. He would just do what needed to happen, and he did it succinctly and carefully. He knew how to use the network". "Peter was a gifted synthesiser", contributed Andrew Campbell when he and I spoke. He went on to tell me that Peter "pulled together disparate pieces of work to tell the story about the river. He worked hard to get a thorough understanding of the science of the system, and when the Wentworth Group formed, Peter became really well known – Peter put this down to his '*pensioner from Gunning phase*' – not being employed and not having the restrictions of an employer in terms of what you can publicly say – this really freed Peter and his voice".

This was corroborated by Dr Kate Andrews who told me that “even though Peter stood outside the power structures, he still had great influence”. And from Vicky Cullen – “ he spoke out with integrity and said the stuff that needed to be said”. A survey respondent wrote “his advice to government and others always focussed on truth, whether those truths were immediately appreciated or not”. Finally, from more survey respondents, “there was a fearless element that characterised Peter. Many researchers don’t stand up enough for their work, and are too research conformist. They don’t mix across sectors and don’t want to bite the funding hand or stir up the academy. These issues never worried Peter – an inspiration”, and, “I think a key element was Peter’s determination to do what he planned to do and say what he wanted to say without worry. And he tackled more than a few public servants along the way. He worked across disciplines such as catchment monitoring and organisational/political issues in water. Fearless in his work, really”.

#2 – Communicating to collaborate and influence.

All of the interview subjects with whom I spoke, and those who responded to the survey, commented on Peter’s ability to communicate – he was a ‘master of language’, he ‘had charisma’, an ‘aura’, a ‘way of listening’. He ‘held audiences with his academic credentials, but he could ditch the jargon’. A PCT Friend stated, “I think Peter instilled in me, others that he worked with, and the graduates of the Trust, a more holistic view of how to work as a scientist in catchment management. He showed the value of communicating very clearly; of understanding and listening to the views of others; to working in multi-disciplinary teams; of coming up with solutions, not just describing the problems”.

As Peter Cosier said, “he was highly informed, he knew the detail, he had the rare combination of being able to combine the rhetoric with the detail, and this, together with his personality and approach to looking after the environment for people who were affected by it, made his legacy”. Peter Cosier continued...“We cannot be careful enough not to overstate his legacy – Australians know how scarce water is, and have known for a long time. Peter’s legacy brings to attention that we manage our water and natural resources badly. Peter Cullen was solutions focussed – his way was to work with local communities to come up with those solutions. Intuitively, he knew to work with those communities who are affected by water reform”.

Bruce Thom said “Peter had insights into the natural world that others didn’t – he had a commitment to understanding nature and how it works and to communicate that to others so that they could broadly understand it too, and to build it into policy”. Ken Matthews added that “Peter had respect for experience and skills of others, he didn’t pretend he was a renaissance man, there were many areas he didn’t have skills but he knew the collective did”. Mike Young confirmed, “he worked hard with communities, he expressed things in ways that fitted with their own values and he was firm in explaining their realities. He had a simple way of explaining complexity in two sentences”. Andrew Campbell called Peter a “research entrepreneur - Peter ran the show, everyone trusted Peter to do the right thing”. Peter was the first to employ knowledge brokers because he recognised that scientists were not the best communicators. He earned respect from the land owners, farmers, irrigators, and environmentalists and as Leith Bouilly stated “his listening skills were second to none”. She said of Peter “he was a thoroughly decent human being, he respected other’s views, he would challenge them but he would see and hear their values and he could change his language to suit the situation, by using their language. He was genuinely interested in people and their landscapes”.

So you can see a picture emerging here of a man - larger than life, full of enthusiasm, intellect, uncanny listening abilities, and above all, an ability to respect all others, connect to their value systems, an ego-less, tireless supporter of others, acting, doing, not afraid of breaking rules, speaking the truth to all, based on multi-disciplinary scientific evidence – leading the way by investing in science to support the ongoing reform agenda and translation of science for policy makers.

#3 Authentic leadership enabling impact.

Described as “the Father of Water”, Peter Cullen was a firm believer in building the skills of emerging and future leaders. As a life-long learner himself, Peter spoke to others about the benefits of undertaking a leadership development program right at the end of his career, despite being in poor health and already in a senior and influential position. Broadening this out, Peter modelled collaborative leadership – as Andrew Campbell reflected, “Peter held the big picture with cunning detail, and he had an understanding of the sociology sitting behind it all. He knew and understood the importance of good communications, and he transitioned well from CEO to Board positions, using coaching techniques to help his colleagues continuously learn – asking ‘how did it go?’, ‘what did you learn as a result?’. He could then distil those lessons without being critical”.

As we have already heard, enabling others who were speaking for the rivers, was a natural predisposition of Peter's. Leith Bouilly states, “Peter asked questions of others, and always made others feel engaged. Peter had no ego – he supported others to be their best. He was only upset when he saw others letting themselves down. He was deeply committed to enabling others. There are windows of opportunity and leaders rise when those doors are open. In today's environment, would Peter have been as effective? He would build relationships, identify what needs to happen and support grass root efforts for change. The Peter Cullen Trust is building the leadership skills of people, so that there are people in positions for when the leadership doors open – they are ready to step through”.

Peter Cullen - a man who loved Australia's natural heritage, particularly its aquatic ecosystems; an academic, an educator, a scientist, an influential and enabling leader; speaking out and speaking the truth; using science as evidence; treating all with respect and equality; building trust across sectors and across disciplines; strategically using the media to his advantage and ultimately affecting policy decisions made about Australian Rivers. Done with a sense of humour.

The last ten years

The shock of Peter Cullen suddenly passing away on March 14th, 2008 rippled across Australian society. The news was covered on radio, in print, with memorials pouring in from all sides of politics. On the first anniversary of Peter Cullen's death, Senator Penny Wong (as Minister for Climate Change and Water) announced \$1 million to establish a Peter Cullen Water and Environment Trust, stating, "The creation of a perpetual legacy in the name of Peter Cullen is a fitting tribute to this great Australian on the anniversary of his death a year ago today .. Professor Cullen made an enormous contribution to the management of natural resources in Australia, most of all around rivers and freshwater ecology... As a founding National Water Commissioner, a leading member of the Wentworth Group of Concerned Scientists, and in his many other roles, Professor Cullen was an inspiring and influential leader in the important debate about water in this country".

When I asked my interview subjects to articulate the legacy of Peter in one sentence, it was Vicky Cullen who said “The Peter Cullen Water and Environment Trust (PCT) is a wonderful legacy of Peter, started by Peter’s friends”. It is this fact I need to remind myself of when looking for evidence of Peter’s legacy – searching for evidence in policy changes around environmental flows, or increased community based collaboration on water management, or the media covering water issues widely and deeply – at the same time blindly ignoring the obvious. There are not too many people in this world who have a Trust established in their legacy, allocated 1 million dollars seed funding, and still growing some ten years later. The Trust, in and of itself, is a testament to the legacy of Professor Peter Cullen.

The purpose of the Trust is to carry on the legacy of Peter by strengthening the understanding between science, policy and stakeholders in water-system management. How we do this is outlined in our Strategic Plan and includes initiatives such as leadership development, high level strategic conversations between stakeholders, as well as thinking of new and creative ways that connect people with water, the latter exemplified by our upcoming ‘Water Dreaming’ art exhibition at Melbourne Water, which uses indigenous art as a way to connect water managers and users with indigenous water issues.

As we know Peter was a big supporter of people who could ‘speak for the rivers’ – those people who could communicate with clarity and credibility to promote informed exchange and debate on important water-management issues. The clear, principled and accessible way Peter communicated complex concepts and practical solutions, made him one of Australia’s most effective science communicators and advocates for a healthy planet. This provides the mandate for the Peter Cullen Trust– to spot new talent and support early career researchers and adopters of change, by building their communications and leadership capacities in order that they might in turn contribute more effectively to building links between the scientific and political communities in order to promote effective management of our river systems.

Since its establishment, the PCT has delivered its flagship Science to Policy Leadership Program each year and, since 2016, has also offered a Women in Water Leadership Program. These intensive three month programs are experiential, learning based and are bookended by week long residential sessions. Each cohort undertakes a significant ‘project’ – a collaboratively produced, water issue related report – developed over a two month period whereby participants implement the leadership skills they have learnt in the face to face sessions. The formal program is supported by an ongoing learning and development program offered to Trust Fellows that continues their professional and personal journeys.

The PCT has designed and implemented a monitoring, learning and evaluation framework, which, at the program level, uses social science methodologies to capture anecdotal evidence of impact – through story telling and the creation of ‘narratives of change’. These stories are a deep dive into individuals learning journeys, and describe the most significant change for each as a result of the leadership program. Collectively, through these stories, patterns emerge, around the challenges professionals in the water sector face, what enables them on their leadership journeys, and what more they need in order to most effectively ‘speak for the rivers’ with clarity and credibility.

The evidence to date suggests that the impact of these leadership programs is significant, if not transformational for many, in the short and medium-term. There are many, many testimonials from participants attesting to this, ones like - *“My involvement in the Trust and the Program has been life changing – it really put me outside my comfort zone and taught me the value of self-reflection. It also opened my eyes to the broad network of like-minded and passionate people that volunteer their time and experience to assist each other and to continue to assist in the uptake of water management issues by a wider audience”*.

And this - *“You are completely immersed, it enables you to break down barriers and this is about working through the process together. I’ve got more out of this two weeks than anything I’ve ever done, ever”*. And this - *“Personally, the program has had significant impacts. In particular, improving my awareness of all facets of the debate, and in particular taking on board the ‘other side’ of the story. In addition to recognising the importance of the simple message, translating the complexity of natural systems and how my work understands them, into much simpler stories. Not to mention recognising the importance of people as part of aquatic ecosystems. Not to mention the importance of ‘co-development’, bringing everyone along on the journey to a decision. My ability to lead students and work colleagues is greatly improved because of the lessons many of the activities of the PCT taught me”*.

Only long term impact measurement will show whether the outcomes of the programs will be sustainable over time – the Trust is seeking further funding in order to commence long term impact studies. The most significant lesson learnt by the PCT as it enters into its ninth year of program implementation, is that in order for a leadership program to be truly transformational, it needs to challenge individuals to critique their leadership behaviours ***in practice*** – skills based training in the classroom has far less impact than that of a program that immerses learners into applied practice – one which our experiential and iterative learning approach enables.

Our critical success factors have included, first and foremost, the legacy of Peter Cullen, his tried and true communication skills and influence are the inspiration of many an aspiring scientist. Secondly has been the commitment and ongoing involvement of the network - Peter Cullen Fellows – to both encourage and mentor new participants, and to self-organise around an ongoing professional development pathway for Fellows. Thirdly, the Trust’s loyal stakeholders, including Peter Cullen Trust Friends, all of whom contribute regularly to the implementation of the programs themselves and to our continued communications between scientists and policy makers more broadly. Whilst the Trust enters into a new phase of consolidating what we do well in this space, and exploring new and exciting territories, our foundation remains true to Peter’s legacy – enabling those who can influence policy for sustainable water management in Australia with both knowledge and leadership and communication skills in order to ‘actually make change’.

So what about this ‘change’? – what can we learn from Peter that is relevant to today’s context?

When I asked Peter’s friends, colleagues and family about what they thought he would think about the situation of water management in Australia, there were varied responses. Peter Cosier said “Peter would be dismayed at water management in Australia today – government behaviour has forced people apart, not brought them together. People have been forced into entrenched positions, which is the antithesis of Peter’s legacy”. Bruce Thom from the Wentworth Group said “Peter had a commitment to understanding nature and how it works. He could see unity in nature – not seeing this is still a big problem, we still work in silos in the administrative

domain as well as the private sector. We still have a long way to go to understand science". Vicky Cullen said "he'd have been mad. He would have done his darndest to stop them. People are cheating: they are not managing water extraction properly. Peter would have got the government to monitor properly – he realised people were cheating at the time but it also looked quite good because there was some water back for the environment. Today, Peter would have been speaking out. If he were here the river wouldn't be in such a mess because he would have kept it on track. He could speak to both the irrigators and the scientists – they both trusted him". Andrew Campbell said "Peter would find the current situation of water in Australia, frustrating and difficult". Dr Kate Andrews commented that "there is a gap now where Peter once stood. No one has stepped up and into that space of advocacy and influence".

Professor Mike Young and Ken Matthews reflected slightly differently. Professor Young indicated that he believed "Peter would be proud of what we have achieved, yet he would have been frustrated with what is going on. He would recognise that the current inquiries going on are good news – without them, he would be worried that there is nothing going on. Ten years on – this is the second phase, now we need to figure out what the next step is. We didn't get it right the first time round, but Peter would be positive about now". Indeed Ken Matthews stated "Notwithstanding the problems in Australia right now, we should be proud of our approach to water management – other countries view that we have our act together – we need to continue this and look at what works well. Im not depressed", he continued, "the report* I wrote was about one area of NSW. We need to be more positive and less self-critical about our record and where we stand in the world". (*This was Ken Matthews' final report on NSW water management and compliance, released on November 24th, 2017).

So what does all this mean in today's context for water scientists and policy makers, where we need significantly more constructive engagement and discussion around Basin issues, a greater ability to listen, to empathise, to appreciate other views and maintain constructive dialogues across the states? In achieving a greater understanding and insight into Peter Cullen, who he was and what he stood for, we might draw insights for our own practice. It makes me feel regretful that I only met him just the one time during my stint working for the National Water Commission, 11 years ago. But in one of my last research interviews, which was with Vicky Cullen, as she went to answer a phone call, I lent back into Peter's deep leather chair and looked again out to that remarkable mountainous view with the river meandering below, and I reflected on what I had learnt and whether I could now answer my research question – can we replicate Peter Cullen in today's context of water management in Australia?

No. Peter's impact was particular to a time and place and circumstance, and his legacy proves it was significant on many levels, for many people. The legacy of Peter via the Peter Cullen Trust and the Wentworth Group continues his good and important work.

So the question that remains is – What insights can we draw from Peter's ways of working – indeed - can we even emulate Peter's *ways of working* in today's context? And the answer is, of course we can. And yes, we should. And here are some ways we might begin.

Action #1 - Achieve impact at scale by speaking truth to power.

Do it by – Speaking truthfully, without fear or favour. Don't ask permission. Don't be afraid of risk. Remember that independence can be influential.

Do it by - Having a multi-disciplinary foundation upon which to draw your views. Use science as evidence. See the Big Picture. Respect science, policy *and* politics.

Action #2 - Enable collaboration through communication

Do it by – Communicating in ways that are accessible to all – be clear, concise, synthesise where possible, and use science as evidence.

Do it by – Making the media your friend and using the media to spread your message.

Do it by – Connecting with communities to identify solutions – understanding all stakeholder views does not mean you have to agree with them but understanding them will help form holistic policy responses and will help ensure stakeholders feel valued and heard.

Do it by - Integrating indigenous knowledge into water planning from the beginning, and always.

Do it by – Investing in networks and participating in collaborative leadership around sustainable water management.

Action # 3 – Authentic leadership enabling impact

Do it by – Lead according to a clear purpose and your values – for Peter these were a love of life-long learning, integrity and respect.

Do it by – Above all else, keeping a sense of humour.

As one of the interview subjects stated “We can never replace Peter, but with the power of the collaborative network maybe we can harness what he did and take it further. This is an amazing network linked by his legacy and the more we invest in this network, the more we will be able to leverage the impact of Professor Peter Cullen”.

References

Cullen P. (2011). 'This Land, Our Water: Water Challenges for the 21st Century'. Edited by Helen Victoria Cullen. AFT Press, South Australia.