Australian Government

Inspector-General of Water Compliance

WATER'S EDGE: TRANSCRIPT

S3, Episode 1: 'A chat with Grant Barnes, from NRAR'

Speaker 1: *Water's Edge* Podcast acknowledges the traditional owners of country throughout the Murray Darling Basin and Australia, and recognises their continuing connection to lands, waters and community. We pay our respects to Aboriginal and Torres Strait Islander cultures and to the elders, past, present and emerging.

Annabel Hudson (AH): Coming up: navigating the challenges of the highly valuable water space as NSW's regulator.

Grant Barners (GB): It's a big operation. There's lots of water being taken in NSW, lawfully. In fact, we understand the value of that water take to be about $29 billion and generates a direct value of around $4b per annum.

AH: And how a lack of duly qualified meter installers is causing significant delays in getting water meters up to standard.

Daniel Blacket (DB): You can't go out across the state and find one of 120. If you're in Narrabri, your options are probably much lower than that, and there's not as many active as we think is needed.

AH: There's a lot to unpack in this episode, so we've split it into two parts. This is part one. I'm your host, Annabel Hudson.

Speaker 1: This is *Water's Edge*, and welcome to the conversation.

AH: The role of the independent Inspector-General of Water Compliance is to deliver trust and transparency in the management of Murray Darling Basin resources and ensure the highest standard of accountability for all involved in the use and management of those basin resources. Often, the role of the Inspector General is confused with the role of state agencies, such as the Natural Resources Access Regulator, or NRAR, in New South Wales. When the role of the Inspector General was established, it was noted in the legislation that it was not intended to duplicate the role of other agencies. The Inspector General aims to oversight and monitor agencies, ensuring they're complying with the Basin plan and Water Act. The role of state agencies like NRAR is to enforce and prosecute individuals. Joining us on today's episode of Water's Edge is NRAR's Chief Regulatory Officer, Grant Barnes, and our Deputy Inspector General of Water Compliance, Daniel Blacker. Grant, we'll start with you and your history. You were recruited in late 2017, hand-picked all the way from Auckland, New Zealand. It must have been a big adjustment to come from New Zealand to Australia to work in the water space. And it's confusing even for people who are familiar with it. How did you end up as the Chief regulatory officer, and how did you adapt?

GB: I have the privilege to lead the Natural Resources Access Regulator, which is NSW's independent regulator of water. It's been a dream role the past five years, and I came to this through a long background in natural resources management - initially in science, and then I worked in strategy for a period, before working in Auckland in the compliance and enforcement space. It really was an incredible opportunity to come over to NSW, at a really important time for water regulation. We have our own statute. We have our own board. And our compliance and enforcement activities are independent of the influence of administrators, the influence of industry, and the influence of political decision makers. So, it is that reason [that] I think it's a dream job.

AH: How does this role at NRAR differ to what you had previously been doing? You'd had a bit of a background in the regulatory space, over in New Zealand.

GB: Yeah. So, my previous role in the Auckland Council was running their compliance and enforcement agency. That was a broad role. It extended from environment to health, alcohol licencing, noise control and...

AH: All the controversial stuff?

GB: All the hard stuff! As well as doing compliance enforcement against air, land, and water matters and natural resources. So, that was a big role with a high volume of incidents. We would deal with about 120,000 incidents per year to investigate. That compares to here, in NRAR, where we are investigating about 1,400 a year. Our focus in NSW with reports of suspicious activity that that the public will make - they'll drop us a line, give us a call and say, 'Hey, not sure what's going on over here, whether it's lawful or not...' We take that information, we assess it for its credibility, and, if it is credible, and if it looks like there's a likely breach of law, then our team of investigators will follow up the case and they'll assess it. They'll undertake their own analysis, take legal advice, and then make recommendations as to whether the matter should proceed to enforcement. And, at that point, within NRAR, we make some decisions where we exercise our discretion. So, we'll look at the matter in terms of the harm caused, culpability - and that's a measure of the water user's knowledge of their activities and whether or not it was in breach of law, whether they had that understanding. We also evaluate the public's interest in the work that we do and how it connects to a particular matter. Then, fourthly - and this is something that listeners might appreciate - is assessing one's attitude to compliance. I always think that in the in the event that someone gets pulled over for speeding and the police officer knocks on the door and she says, 'Are you aware of how fast you were going?' Certainly, in my experience - and the rare occasions I have been pulled over for speeding! - I would be polite. I'd be respectful. I'd offer up genuine answers to the police officer's inquiry, and it's probable that they'll evaluate the circumstances based on the attitude that I was presenting. Now, conversely, if I was to be quite rude to that policewoman, and didn't conduct myself respectfully, it's likely that the consequences would be more severe. So, we look at harm, we look at culpability, public interest, and we also look at the attitude to compliance. You put all that into the mix, and then my team will determine what enforcement action to take. That can be at the lower end of the punitive scale - maybe an issuance of a warning - all the way up to a prosecution in the local court, or in the NSW Land and Environment Court.

AH: Now, the role of the Inspector-General is slightly different to that of NRAR's. There are a lot of similarities - obviously there's the compliance element - but of course the role of the Inspector-General isn't to duplicate the role of other agencies. So, how does the Inspector-General work with Basin and state regulators like NRAR, Daniel, to support their compliance and enforcement activities, and not duplicate it?

DB: So, the Inspector-General's team spend a lot of time working on things like water resource plan compliance, sustainable diversion limit compliance. We also look at compliance with the Basin Plan Water Trading rules. That's all very different to what Grant and his team do in New South Wales. They're predominantly on farms, they're looking at metering, they're looking at water theft. So, there's a lot of space where we don't duplicate at all, and, of course, the Inspector-General also has a broader function which is all about oversight of the performance of water management agencies, which is much broader than just water compliance. But the thing people tend to focus on all the time is water theft. They look at the potential for duplication between what Grant's team do and what the Inspector-General does on water theft. We tend to think about water theft as a last resort provision. It's a step-in where if there's a failure in the state systems or its intent to investigate and pursue water theft and non-compliance. So, we tend to think that, if we get to that point, we've already got a problem that we should have addressed. We're really interested in the systems and performance of those systems to make sure we don't get to that point. So, we do things like auditing and reviewing and working alongside the regulators to understand performance and maturity. But our job is not to do what the states do. I think there's a really important opportunity here, for cooperation. So, it's not just about where there's potential duplication, but where a Commonwealth offence could potentially have some benefit and opportunity for states. So, if there's cross-border harm, and a state knocks on our door and wants to have a conversation about that, then we're open to that as well.

AH: There are a couple of things I want to talk about. You mentioned that there's work that the Inspector-General's been doing in terms of audits and things like that. But we've recently issued our first metering report card, and there's one not too far around the corner, if it hasn't already been released by the time this podcast comes out. So, telemetry is something that other states really talk up - especially in Victoria. Their telemetry coverage is quite strong and it's all automated. Telemetry, though, Grant, isn't NRAR's core focus for metering, though, is it? What are some of the innovative things that you're doing in the metering and measurement space to make sure that there is that element of compliance?

GB: So, I think the legacy of Ken Matthews and his inquiry holds strong here in New South Wales. Amongst the many recommendations that Ken made, he coined the phrase 'No meter, no pump.' Now, that's articulated for us in the accurate recording of water taken via a meter that is to a high standard of accuracy, that's validated as accurate, and in some circumstances are connected to a device that enables that information to be telemetered to a central...

AH: It's all automatic. It's all through a computer system.

GB: It should be. It should be. There's been a long requirement in NSW for water to be accurately recorded. Now, that started through the manual means - through holding of

logbooks and recording daily entries of water taken. And, there was an expectation, or an obligation, that that recording was accurate. Now, if you fast-forward into a digital environment, what we can do now with technology is to take the manual recording out of a logbook and do it through a device that's connected to a meter. That device records the information that's coming off the meter, packages it up, and sends it into the cloud, where it's accessed, stored, and then - from us, as a compliance enforcement agency, we can draw on that information and check whether it accords with the entitlement that a user has. So, you can determine whether they're taking what they are entitled to or more than that. It's the 'more than' piece that, from a compliance enforcement perspective, we are interested in. There are many users in NSW - we know there are about 40,000 water access licences. It's a big operation. There's lots of water being taken in in NSW lawfully. In fact, we understand the value of that water take to be around $29 billion or generates a direct value of around $4 billion per annum. So, it's a very valuable resource and one that I think all stakeholders want to see is managed in accordance with the law. Moving from a manual-based system of reporting water to a digital system is something that the NSW government is committed to, and we're seeing that roll out over various tranches. That's through the last couple of tranches to now tranche 3 and into tranche 4. So, it's a work in progress. So, that's a long answer to a question of 'What is NRAR focusing on at the moment?' We're focusing on the first element, the installation of an accurate meter that's been independently validated as accurate. Our attention then follows as to how that information is then being telemetered into the system. Now, why we have split those two up is because, it being a new technology there have been some challenges along the way that water users have encountered. The ability to connect this new technology to a meter, configure it in a manner that it can send data into the cloud, that when it's received by this database, it's in a form that enables its access - these are all things that the government's been working on to get right, and it's still a work in progress. It's hindered by the sheer volume of works that need to have meters corrected and connected. So, we will see over the next year or two our focus will shift very deliberately from accurate meters installed to the information collected in those meters being reported through to the central database.

AH: And is there a deadline that you've put on having all that sorted by?

GB: Well, the great thing about working in NRAR is we don't impose the deadlines. We don't make the regulatory settings. We don't write the rules. We're not the policy maker. We try and keep our job in the simplest of forms. So, [that's] being really clear about what is the obligation that a water user has? That enables the right to take the water. Then there's those obligations: what do they have to do? When do they have to do it by? So, there's a sequence of events, here, that the NSW government has adopted as they roll out the non-urban metering regulations, starting with the big end of town. So, those users who have pumps greater than 500 millimetres - they've had an obligation to install meters, to have them accurately certified, and connected to telemetry since December 2020. More recently, users in the Northern Valleys of NSW have had an obligation to do similar since December of 2021. And, as of this month, as of June, tranche 3 comes online. So Southern Water users now have an obligation to install meters on their surface pumps or their groundwater bores if they meet a certain diameter. Finally, all this concludes with tranche 4. In another year's time, into December 2024, users in the coast will need to make sure that their works, pumps, or bores have an accurate metre installed and that that's been independently validated.

AH: And Daniel, with the Inspector-General of Water Compliance doing the metering report card, is what NRAR's rolling out, in terms of the tranches, is that on track, according to the report card?

DB: We put out our first report card earlier this year and it went up to the point of mid-2021. So, it states how states, including NSW, are going with their metering rollouts up until that point. What we're working on now is the second set of data to give us an idea of how it's changed between mid-2021 and mid-2022. And that'll give us a really good picture for the first time about the pace of implementation. So, we think coverage is quite good across all jurisdictions. There's very high percentages of coverage. NSW is now up over 80% in coverage. Our concerns are around the accuracy and the timeliness. So, some of the things that Grant was talking through, there are commitments there from all governments, including NSW's government, to implement that by mid-2025. That means high levels of coverage, accuracy, and timeliness within three years of that second report card. So, we're really looking at the pace of implementation and any impediments and what we're particularly looking to see at the end of that is that governments have kept the commitments that they made to the community five years ago, on the back of Matthews [report] and on the back of [4 Corners program] 'Pumped', and that those things have been implemented by 2025. The pace is probably the thing that concerns us around accuracy and timeliness. As Grant said, there's lots of different agencies in that landscape. We don't just deal with the regulators. We deal with the policy agencies, with the river operators, and there's a much broader conversation there about 'How do you roll out a new policy and policy implementation?' We're also interested in the specifics - things like, in NSW, the number of duly qualified persons. Do we have enough people to validate, to install, and to do all of the things around maintaining meters that we need to actually get this to work?

AH: And do we? Does the metering report card tell us whether we do?

DB: We capture numbers around that from the national body that keeps those statistics. I think what the report card probably doesn't highlight in full is that not all of those that are captured by that federal body are active in the market. That you can't go out, across the state, and find one of 120. If you're in Narrabri, your options are probably much lower than that, and there's not as many active as we think is needed. That's certainly an area that we're talking to NSW policy agencies about.

GB: You can look at the rollout of the non-urban metering regulations, from a 'no metre, no pump' lens, and considering that to be about volume of water taken. So, thinking about how well is NSW doing it at the moment, you can look at that in terms of the number of works that have a meter connected. Or, you can look at the volume of water taken from accurate meters. So, I don't think NSW is unusual to other jurisdictions in that a small number of users take a large volume of water. It's almost a 20-80 perspective. So, 20% of works in NSW take 80% of the water. So, how is NSW going in that regard? Well, with the successful rollout of tranche one, and those being works greater than 500 millimetres, they are the works that have the capacity to take large volumes of water. Now, we are satisfied that with tranche one, about 90% of those works now have an accurate meter installed. Those works with those accurate metres are taking large volumes of water. I think it's really encouraging, in that respect. When you look at other tranches, you start to see smaller works involved and it's there where the progress is not at the rate

needed. That's resolved of circumstances that, in some instances, are outside the water user's control. The COVID-19 pandemic had major impacts on procurement and supply. Getting access to meters, having the physical ability to pick them up, and then to install them, was a major constraint for many over 2020, 2021. Equally, flooding - it's amazing - you go from severe drought conditions and then into flood conditions, both of which were impediments to getting meters installed. Firstly, to install a meter and validate it, you have to be able to run water through the system to check that it's working - difficult to do when you're in severe drought and there's no water around! Now, too much water made access to site really difficult for those in the north and the south. The government recognised that by extending the deadline for users into the south by a further the six months. We also know that - and Daniel just mentioned it - the duly qualified person is a central part of the success of these reforms. They are the agents who will be installing the meters and then running the tests to certify them as accurate. Now, we know through experience that there simply haven't been enough active DQP's in NSW to meet the demand for installation and validation. In fact, looking at the numbers now for the north, we know there's a very long queue of water users who've sought the services of a DQP and are now waiting for them to get on farm and service their requirements. It's taking 200-250 days, on average, from the time you start your installation to getting it certified at the end. That's a market constraint that that we have acknowledged, and we can see through the work that our teams are doing on farm, providing advice toward the water users and hearing generally what their challenges have been. This is an ambitious programme to get all 40,000-odd works into an accurate meter space. And, yes, to Daniel's point about 2025, that deadline looks difficult to achieve at the current run rate - at the current rate of installations and validation. So, that's why I think it's necessary to take a look at how the rollout is going and I think the government will be doing so. But I think, to conclude, that the main message here is that the volume of water - that large volume of water that's being taken in NSW - what proportion of it is going through an accurate meter? That, through the Inspector-General's report card, is validated as high. That's a good thing. But it's also acknowledging that there's more work to be done to get that long tail of low-volume users with smaller works into the accurate metering ecosystem.

DB: I think there's probably two things there that are really worth highlighting, Annabelle. The first one is the conversation on coverage. There is a perception in other jurisdictions, other than NSW, that there is a lot of properties taking water without a meter. The coverage numbers show that they have meters. A lot of the conversation in NSW is about, 'How do we get those to an Australian standard of accuracy?' That's plus or minus 5%. Then, 'How do we get those meters to a point where they're providing real time information to regulators like NRAR, so that they're making decisions in real time, in response to that information?' They're the two areas that we're really looking to see improve. But Grant also makes the really good point that, when you look at a problem like this, it's been around for a long time. There were commitments around this back in the mid-2000s. There were commitments in 2009, commitments again in 2017, and 2018. So, it's been a pretty long journey to get to this point on water metering - particularly in New South Wales, but other jurisdictions as well. And when you've got a long legacy issue like that, the question is 'How do you address it?' Grant's quite right. You have to address the biggest risk first. You have to spend your time and attention on those who have the biggest pumps, the biggest water take, and that's where you start. And that's what NSW has been doing.

AH: Next episode, we'll be talking about NRAR's use of remote sensing technology and whether the penalties are proportionate to the offences people have found guilty of. That's in part 2 of our chat with Grant Barnes.

Speaker 1: *Water's Edge* is produced by the Inspector-General of Water Compliance, Australian Government, Canberra. For more information visit www.igwc.gov.au.