



Barnes LegalWise Water Symposium – February 2022

I acknowledge that I join you today from the lands of the Gadigal people of the Eora Nation. The Traditional Owners of Sydney and beyond have a physical and spiritual connection that extends well past 65,000 years. I pay my respects to their Elders past, present and emerging, and extend that respect to all Aboriginal and Torres Strait Islander peoples.

Thank you to our Chair for the introduction. I have been asked to speak today about our compliance and enforcement activities and the outcomes of recent prosecutions. Now I certainly could spend 45 minutes doing that, because there is lots of activity, or I could refer you to our website where all this information is published. Rather, I propose to use our time together to describe our work through the lens of a global pandemic. I will describe:

- our role as NSW's independent regulator of water
- how we proactively assess non-compliance
- how we maintained operations through Covid

Turning to the first point, what is our role?

More than four years have elapsed since Ken Matthews delivered his two reports on water management to the NSW Government.

Many of his findings aligned with the four reviews conducted by the NSW Ombudsman in the 10 years to 2018. The Australian Government also drew attention to systemic issues in their own review of compliance and enforcement.

In 2020, the Independent Commission Against Corruption (ICAC) added their weight to the consensus that there were many things fundamentally wrong with how water laws were being complied with and being enforced.

Collectively, these inquiries determined that the attention to compliance and enforcement of water laws in NSW was ineffectual and needed urgent improvement, that the public had lost confidence, and that the activity was significantly under-resourced.

Two of the most significant reforms that came about because of the NSW Government's acceptance of the recommendations that came out of these inquiries were the creation of an independent regulator of water and a far-reaching commitment to implement water metering to significantly improve the accuracy and transparency of water extractions in NSW.

NRAR was established with a clear, legislated mandate to; ensure the efficient, effective, transparent, and accountable delivery of water regulation, and to maintain public confidence in that regime.

As an independent regulator, we have:

- re-established a visible compliance presence with 'boots on the ground'
- re-set what is required to be a professional regulator that is outcome focused, intelligence-led and risk-based



- required the highest ethical standards of our people, accountability, integrity, and trust
- committed to always act in the public interest
- continued to fiercely protect our independence

Our work is undertaken across NSW. Territory that is almost as large as Germany and France combined. We monitor, audit, and regulate the use of water across almost 100,000 legal instruments and many tens of thousands of water users and landholders.

How do we proactively assess where and whether potential non-compliance may be occurring?

To achieve the greatest overall benefit for the state from our activities, we prioritise:

- the areas and activities with a demonstrable history of noncompliance, and
- the activities with the highest potential for harm to the environment and other water users

We aim to deliver balanced outcomes that support the greatest impact on compliance and water management. We do so by carefully considering the timing of water use, the volume abstracted and the location of take, storage and use.

As a law enforcement agency, we work with the willing to educate, encourage and enable water users to actively comply with the law. We also enforce the law to sanction wilful and reckless conduct, to provide deterrence and ensure fairness for the compliant.

In almost four years of operation:

- we have taken over 18,000 enquiries, logged 4,500 reports of suspicious activity, and finalised over 4,300 investigations
- we have subsequently taken 1,300 compliance actions, including:
 - issuing 500 formal warnings
 - issuing 441 statutory notices, including stop-work, show-cause and remedial directions
 - imposing 400 penalty infringement notices
- we have commenced 36 prosecutions of which:
 - 16 cases have resulted in convictions and penalties totalling approx. \$900,000
 - 2 prosecutions resulted in charges not being proven beyond reasonable doubt. 2 cases were withdrawn

With boots on the ground and by engaging directly with water users on-farm, we know it to be true that:

1. Most water users are honest operators who appreciate the need for rules and want them applied fairly.

Fact - Seventy percent of the 2,600 properties inspected since October 2020 complied with the conditions of their water access licenses or works approvals.

2. Water users genuinely want to do the right thing but can find it challenging on occasion, particularly given the complexity of water regulation.
Fact - Twenty per cent of the 2,600 properties inspected since October 2020 were in minor non-compliance. Most had failed to keep a record of their water take or lacked tamper-proof seals on their meters.
3. Our efforts in this regard are to provide advice and guidance where the level of non-compliance is minor, harm is low, culpability is negligible and the attitude to compliance is positive. These are the majority of interactions we have with water users.
4. We continue to encounter a small number of users whose actions are wilful, reckless and cause significant harm to communities and the environment. It is the criminal action of these few where we deploy the full force of the law.
5. Our experience of non-compliance is not constrained by location or type of water users. Rather, they are distributed north, south, east and west; in the regulated and the unregulated systems; surface water and groundwater; Murray–Darling Basin and coastal regions. It is widespread and systemic.

The common explanation for most non-compliance is a lack of awareness of the conditions of approval that allow the diversion, storage and use of water in NSW.

There is though encouraging evidence of increasing voluntary compliance, particularly as water users' awareness of NRAR's presence increases, and as our methods of detection become more widely known.

How do we assess non-compliance during a global pandemic?

Throughout most of 2020 and more than half of 2021 NRAR staff were working from home with field activities suspended. Only a few, time critical inspections were conducted. All other activities had to be performed remotely.

Fortunately, NRAR has access to many technologies, tools, and expertise in external agencies. More fortunately, we have staff with the skill and expertise to utilise this technology for compliance and enforcement purposes.

We can remotely monitor the movement, abstraction, storage, and use of water across the flood plain. Our boots on the ground are complimented by novel and sophisticated technology derived from satellite imagery sourced from NASA and the European Space Agency and airborne laser survey data from Geoscience Australia.

This technology has evolved to enable us to assess change rapidly and accurately in storage volume. Direct comparison can then be made with the water accounting system using advanced mathematical algorithms. Any date range can be compared. Data can be aggregated to catchment scale or disaggregated to individual storages.

By using this technology, we have been able to maintain our compliance programmes through the pandemic. In fact, the technology enables us to operate more efficiently and effectively.

There has though been challenges, as you would expect with the deployment of innovative technology and techniques:

- our legal and technical teams speak different languages (jargon is common)
- accepting technical information at face value can erode the strength of evidence as errors in processing, assumptions and raw data go unnoticed
- inconsistent methodologies can produce different results which weakens the evidence and exposes to challenge
- real or apparent complexity of the technology can undermine legal team confidence in chain of custody

We are addressing these challenges by:

- developing technology framework; standards, procedures, checklists, competency training, audit and review
- commissioning an ICT Technology Strategy that defines the types of technology we'll utilise, how its supported, and how it will be maintained and improved through its lifecycle
- validating evidence with different technology where applicable (i.e. satellite imagery, GIS tools c.f. bathymetric survey)
- avoiding leading edge technology without a proven use case
- Comprehensively training staff in the field to embed procedures and protocols

To summarise

We are here to support first and then enforce when required.

We have clear guidance and thresholds for our responses. We are transparent with water users and the public about our compliance approach, and we are accountable for our actions.

The use of remote sensing allows us to accurately monitor the abstraction, storage and use of water across NSW.

We know that transparency is an essential element to maintaining the public's confidence in NRAR and our operations.

This ensures stakeholders and the regulated community are aware of NRAR's intentions, expectations, and conduct.

Thank you,

This speech was delivered by Grant Barnes, Chief Regulatory Officer at the Natural Resources Access Regulator at the LegalWise Water Symposium in February 2022.