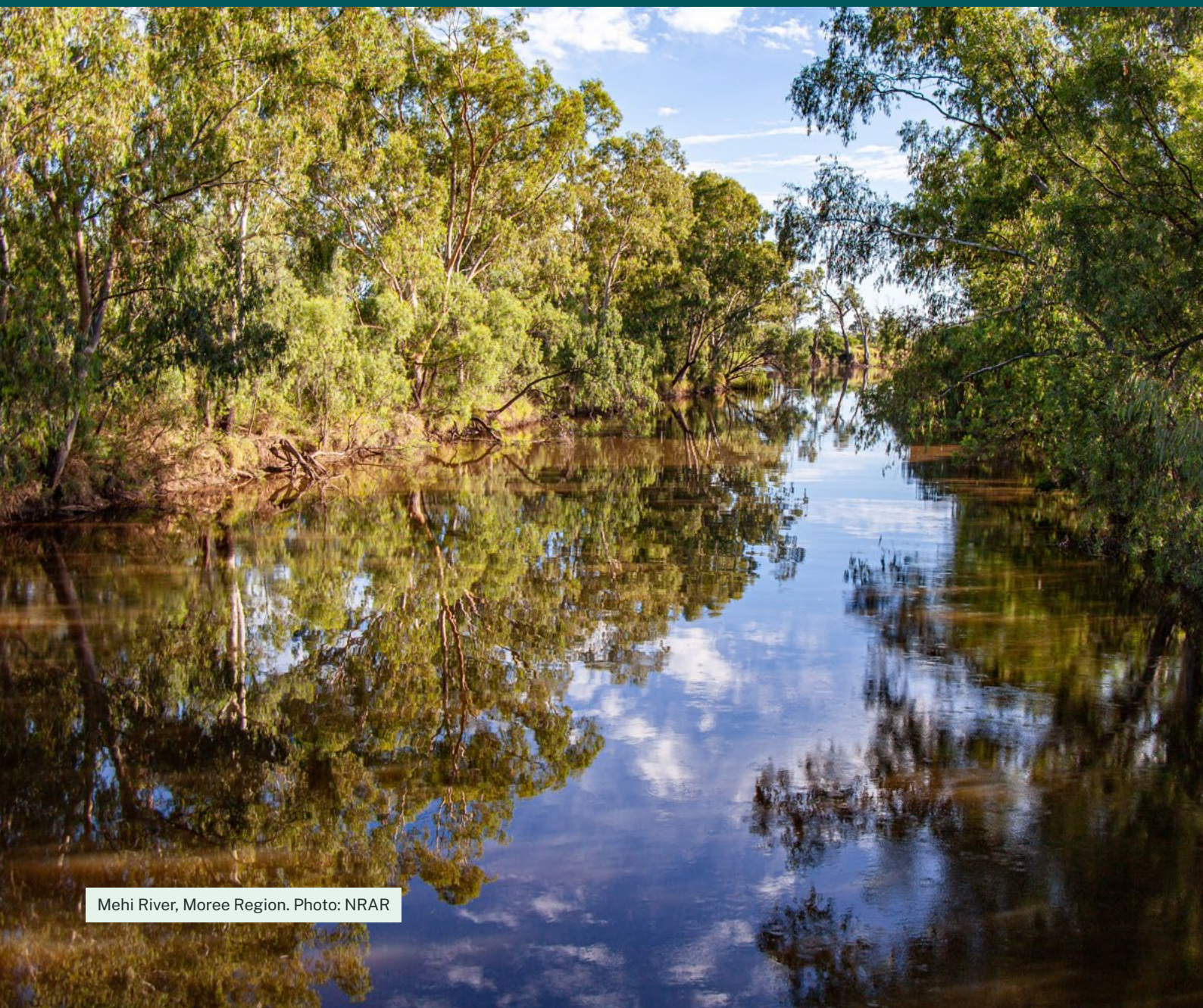


Progress Report 2022-23

nrar.nsw.gov.au

December 2023



Mehi River, Moree Region. Photo: NRAR



Namoi River, Narrabri. Photo: NRAR

Acknowledgement of Country

The Natural Resources Access Regulator acknowledges that we stand on Aboriginal Land. We acknowledge the Traditional Custodians of the land, and we show our respect for Elders of the past, those of the present, and those who are emerging. We do this through thoughtful and collaborative approaches to our work and by demonstrating our commitment to providing places in which Aboriginal people are included socially, culturally and economically.



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Message from the board

The NRAR Board is pleased to present this, our fifth progress report, in which we celebrate the achievements of 2022-23 and outline the changes and plans that will shape the year ahead.

The agency continues to focus its attention on areas that pose the highest risk of harm to communities, the environment and other water users. To that end, the board ratified a revised set of regulatory priorities that guided NRAR's activities in the 2022-23 financial year.

These priorities underpin sustainable and responsible use of the state's natural resources by identifying and addressing key compliance issues. Public trust in the regulatory system is enhanced by these carefully planned priorities.

NRAR continued its focus on irrigated agriculture, a key user of the state's water resources. During 2022-23, we looked at the Murray, Murrumbidgee and the Far North Coast areas of the state. Irrigated agriculture will remain a priority in 2023-24.

Non-urban metering was another priority as the rollout of the regulations across the state continued. While the policy is now under review by the NSW Government, it remains one of the most significant reforms to water management in the past decade. As the review continues, NRAR will maintain its focus on bringing high-volume, high-risk water users into metering compliance in 2023-24.

Water reporting in mining operations and extractive industries received close attention in 2022-23. The agency examined how the industry measures, accounts for and reports their water take and took decisive steps to ensure mining operations were compliant through a number of enforceable undertakings.

As we move into the next financial year, water users who break the conditions of their water access licence by overdrawing their water accounts becomes a new regulatory priority.

NRAR always strives to develop the right systems, analytics, information, and technology to support and guide our activities and to improve our results.

We've built on our understanding of the economic value of NSW water entitlements with our second *Value of Water Report* by natural resource economics policy consultants Marsden Jacob. As well as looking at water entitlements in irrigated agriculture, the study calculated the value of stock and domestic and town water for the first time to provide the most comprehensive picture so far of what water entitlements are worth. With an estimated value of up to \$41 billion dollars, this important study highlighted how important it is that water is managed fairly and sustainably.

Much work has been done in the last year to prepare for a crucial Independent Pricing and Regulatory Tribunal (IPART) determination. IPART examines the prudence and efficiency of NRAR's compliance operations and determines what percentage of our costs should be passed on to water users through water prices framework.

It is important work that will impact on operations in the future, and the board appreciates the many staff who have brought their expertise and knowledge to this critical process.

The board thanks NSW Water Minister Rose Jackson for her ongoing commitment to NRAR as it continues to effectively and efficiently regulate water use and uphold water laws.

We also thank the whole NRAR team for 12 months of excellent work. Their dedication and adaptability through policy reviews and other challenges and changes has kept the organisation moving towards its goals.



The Hon. Craig Knowles
Chair, Natural Resources Access Regulator

Message from the Chief Regulatory Officer

The fifth full year of operation was one of challenges, opportunities and achievements for NRAR.

It was a year in which the agency integrated new ways of working after a major organisational restructure last year. We established six new directorates that more closely align with our purpose, vision and goals. They quickly galvanised into action to recruit, onboard and train many new staff - all despite acute labour market shortages across NSW.

The tight labour market wasn't the only challenge to overcome in the 2022-23 financial year. Widespread flooding reduced access to properties and prevented field-based staff from carrying out planned activities in some areas. It is a credit to our teams that they were able to adapt to the challenge so quickly, focusing on emerging issues like potential illegal flood works. They turned this problem into an opportunity with the clever use of smart data and remote sensing to keep our compliance activities on track.

In the regulatory world, as in life, change is the only constant. A significant review of non-urban metering reforms was initiated by the NSW Government just as the financial year ended, the NSW Government initiated a significant review of the non-urban metering reforms. This review was based on evidence from NRAR that barriers to the implementation of the policy needed to be addressed. NRAR is jointly leading the process with our Department of Planning and Environment - Water colleagues. The expertise and experience of all NRAR branches have been involved in one way or another and this will continue.

Alongside these challenges, NRAR has successfully ramped up its emphasis on helping people to voluntarily comply. NRAR is committed to helping water users because we know most people want to do the right thing. Our outreach and education teams aim to listen, to acknowledge different perspectives, and to encourage a two-way relationship.

Literally thousands of site visits have been conducted, field days attended, hundreds of conversations started, and specially tailored education sessions delivered that underpin our compliance efforts.

Meanwhile, at the other end of the compliance spectrum NRAR has continued to demonstrate that when the

offending is serious, we will take strong action.

Some significant outcomes were achieved in court. Prosecutions were concluded for serious water law breaches in the Moree Plains, Griffith and Leeton areas. The NSW Land and Environment Court imposed hundreds of thousands of dollars in fines and costs.

We achieved some innovative outcomes for the community and environment too through the use of enforceable undertakings (EU) - a legally binding sanctioning option in NRAR's toolbox.

One such agreement with Illawarra Coal Holdings Pty Ltd yielded a significant monetary contribution to redress for allegedly taking water without a licence at the company's Dendrobium mine. It means that, among other things, almost \$3 million dollars will be spent on a community project to restore wetlands and waterways in the area.

Together, all these activities, changes and outcomes keep the agency moving toward the key goal it started out to achieve five years ago:

To make the water compliance and enforcement system more transparent, more independent, and more effective and to boost public confidence in sustainable water management in NSW.



Grant Barnes
Chief Regulatory Officer,
Natural Resources Access Regulator

How NRAR works

Dam located in Narrabri. Photo: NPAR



Our vision

NRAR has a clear and simple vision for the people of NSW when it comes to the fair regulation of water in our state: that together, we can create thriving environments, communities and economies. Our efforts and activities remain focused on seeing that vision realised.

Purpose

NRAR's purpose is to make the NSW water compliance and enforcement system more transparent, more independent, and more effective and those broad principles are at the centre of NRAR's approach.



NRAR staff speaking to a landholder in Bendemeer. Photo: NRAR

NRAR management

Independent board

Our strategic direction is determined by a board with four independent part-time members including a Chair.

The current board members are Chairman, The Hon. Craig Knowles AM, and members Ilona Millar, Bruce Brown and Phil Duncan.

Board members must have experience and expertise in law, natural resources management, compliance and regulation, or other areas related to NRAR's work.

The board is appointed by the NSW Minister for Water based on advice from NRAR staff. Once appointed, the board is not subject to any ministerial direction either directly or indirectly through the Department of Planning and Environment. The Minister has no input or influence into the operational activities of NRAR.

Day-to-day operations

Day-to-day operations of NRAR are directed and shaped by the Chief Regulatory Officer and the executive team with guidance and input from the Board.

Read more about our board and executive: nrar.nsw.gov.au/our-board

Our functions

NRAR entered the 2022-23 financial year with a new structure that better aligns with our goals and enables us to respond to changed demands and functions.



Engagement and education

build relationships and partnerships throughout NSW communities to provide them with the right information and help them voluntarily comply with the rules.



Regulatory initiatives

solve important water law compliance problems according to NRAR's annual regulatory priorities. Its focus is on finding solutions to the most complex issues.



Innovation, systems and intelligence

ensure the intelligent use of analytics and development of innovative new systems that better inform, guide and increase NRAR's reach and impact.



Investigations and enforcement

provide expert advice and leadership on when, how and why NRAR investigates and enforces alleged breaches of the *Water Management Act 2000*.



Regulatory excellence

champion improvements to the regulatory framework. They focus on quality assurance and continuous improvement of staff capabilities, processes and systems.



Regulatory co-ordination

provide governance support, performance analysis and reporting, front of house services including an in-house call centre, and communications and media relations.



Legal

staffed by lawyers from the Department of Planning and Environment, Legal supports NRAR's crucial work in enforcement of the state's water laws underpinning efficient and effective management of legal matters.

CASE STUDY:

Board meets in Tamworth

The independent NRAR Board met in Tamworth and Moree on Gomeroi land in April 2023. It was the first regional meeting since lockdowns and restrictions of the COVID-19 pandemic.

Members of the executive team, our Aboriginal Support Network, and some Tamworth based NRAR staff also took part in activities. Board member and proud Gomeroi man, Phil Duncan, led important learning activities about Aboriginal cultural values and took the board and staff to Myall Creek Massacre Memorial site as well as to his own Country at Terry Hie Hie.

Phil brings crucial thought leadership and insights to our work to make sure we respect the values of the Aboriginal people of NSW, for whom water is intrinsically linked to their obligations in caring for Country.

Meetings were planned with key local stakeholders to discuss a range of issues.



NRAR staff at Myall Creek Massacre Memorial, in Northern NSW. Photo: NRAR

Aboriginal engagement

NRAR's enduring priorities represent the principles that support and guide our activities over the long term. One of the most significant of these is protecting and prioritising Aboriginal cultural and spiritual values in water regulation.

During 2022-23, a project plan for this enduring priority (EP2) was developed to bring together representatives from across NRAR branches to collaborate on how we can make the protection of Aboriginal cultural and spiritual values an even greater part of all we do.

Aboriginal Support Network (ASN)

NRAR's Board recently endorsed the establishment of the NRAR ASN. The ASN is a network that provides opportunities for NRAR's Aboriginal staff to come together for a yarn, attend exclusive cultural events and explore the cultural values of water. The network aims to ensure that NRAR is a culturally safe workplace.

Leadership

The reappointment of Gomeroi man, Phil Duncan, to the NRAR Board in March 2023 ensures that his knowledge and guidance continues to be a valuable resource to NRAR.

Mr Duncan will serve on the independent board for another three years, retaining the benefit of 30 years of experience in water policy and management at state, national and international levels. In March 2023, Mr Duncan spoke at the UN 2023 Water Conference in New York.



NAIDOC Week

NRAR ran a series of successful events for 2023 NAIDOC Week. Some 40 staff took part in events at NRAR's Sydney, Dubbo, Deniliquin and Tamworth offices where they had the opportunity to come together to engage with Aboriginal people, history and culture during an important national week of celebration and recognition. When surveyed, 97 per cent of participants said they wanted to see more NAIDOC Week events, and 94 per cent indicated that what they learned was important to their work with NRAR.



NRAR Staff attending NAIDOC events across Sydney, Dubbo, Deniliquin and Tamworth. Photos: NRAR

A year of progress

Irrigation canal, Bourke. Photo: NRAR

2



NRAR achievements

Key water values

\$41bn

the estimated value of all water entitlements in NSW

\$5.8bn

the estimated value of town water entitlements in NSW

\$0.8bn

the estimated value of stock and domestic water in NSW

\$3.5bn

the estimated value of irrigated agriculture in NSW each year



21
offices
across
NSW



196
total
number of
employees



57%
of senior
leaders are
women



65%
of staff
regionally
based

Community wins

3

agreements with mining companies to improve consultation with Aboriginal groups about the importance of cultural connections to water

10

remote primary schools took part in a river ecology program by Western Landcare with funding from NRAR legal action

1

community park upgrade completed with \$80k in funds from NRAR legal action

Education and engagement



8
regional field
days covered



61,000 km
travelled by outreach staff to
speak to water users



17
stakeholder
events attended



2,210
site visits
conducted



4,234
works
inspected



800,000
sqkm land area regulated



167,975
licenced works subject
to regulation in NSW

Compliance outcomes

595
comprehensive
audits conducted

201
follow-up site
inspections done

552
water licence
approvals checked

1,203
water management works
found to be compliant



Research and development

2
major studies completed
to enhance and guide
effective performance
by NRAR

Law enforcement



210
total enforcement
actions taken



7
prosecutions concluded



4
prosecutions started



67
penalty infringement
notices issued



48
official cautions handed out

Building public confidence



1,900
media mentions raising
public awareness of water
laws and compliance



18,300
engagements with
posts on social channels



34,840
views of NRAR
website pages

Environmental benefits

Water is critical to a healthy and sustainable natural environment. It supports various ecosystems and habitats that are home to fish, birds, threatened species and endangered ecological communities, to name a few.

The health and sustainability of water resources depend on the proper enforcement of NSW water laws to ensure the environment gets its fair share. Delivering positive environmental outcomes is a key focus of NRAR's strategic goals.



\$2.9

million to be spent by water users on environmental improvement projects as part of enforceable undertakings

3

coal mines to introduce improved water measurement and monitoring processes to better account for future water use

38

unlawful floodplain structures identified for removal to return natural water flow to the environment and important cultural sites

What is an enforceable undertaking?

If a company or individual breaches water laws in a significant way, they sometimes ask NRAR to consider accepting an enforceable undertaking (EU) to remedy the breach as an alternative to court action.

An EU must contain actions that address the rule breaking and acknowledge the breach of the *Water Management Act 2000*. An EU will not be accepted unless NRAR considers it can deliver positive outcomes in the public interest in accordance with its guidelines.

Illawarra wetlands and waterways

Almost \$3 million will be spent on a community project to improve the health of waterways and wetlands in the Illawarra region following an enforceable undertaking (EU) put forward by Illawarra Coal Holdings Pty Ltd.

NRAR accepted the agreement to compensate for the company allegedly taking surface water without a licence at its Dendrobium mine at Kembla Heights. Details of this environmental project are still being finalised and first steps are expected to start by the end of 2023.

More details and other conditions of this EU on page 29.

Boggabri Coal community eco project

Boggabri Coal will contribute \$10,000 to a community project with a water management focus following an enforceable undertaking with NRAR.

NRAR accepted the legally enforceable agreement after the mine operator allegedly took surface water for which it did not hold a licence and collected it in temporary and permanent storages between early 2019 and April 2022.

Details of this environmental project are in development, and first steps are expected to start by the end of 2023.

More details and other conditions of this EU on page 31.



Chief Regulatory Officer Grant Barnes at Narrabri Fish Farm. Photo: NRAR.

Native fish released

NRAR helped to address declining native fish populations in NSW rivers during 2023.

Thousands of native fingerlings were released into the Namoi River at Wee Waa as part of an enforceable undertaking (EU) agreed to by NRAR after significant over-extraction of groundwater by an irrigator from the region.

NRAR accepted the legally binding agreement from the owner of a property after they allegedly pumped almost 585 megalitres more than their bore extraction limit. The amount of water was equivalent to 234 Olympic swimming pools.

The water was taken from the at-risk Lower Namoi Groundwater Source, part of the Namoi River catchment.

Under the terms of the agreement, the irrigator forfeited more than a third of their 2021-22 financial year groundwater allocation and contributed \$15,000 towards fish stocking in the Namoi River.

The golden perch fingerlings were supplied by Narrabri Fish Farm, which specialises in four native fish species - golden perch, Murray cod, eel-tailed catfish and silver perch.

The golden perch fingerlings were released at multiple sites along the river to increase survival rates.

Improving Floodplain Connections

This Department of Planning and Environment -Water program is designed to regulate unauthorised structures on the floodplain that divert water away from the environment or from places and traditions of cultural significance.

NRAR's Improving Floodplain Connections team works with the department to ensure water moves across the landscape to areas of critical habitat in times of flood.

The team has two main tasks across the six river valleys: documenting existing flood impacting structures and ensuring the removal of unapproved and/or unlawful structures.

Of the 215 significant flood structures identified, the NRAR team has completed the spatial analysis of 198, has physically inspected and documented 130 and verified that 38 of those structures are no longer effective. Upon determination and referral by our partner agencies, the team will start the process of seeing that unlawful and unapproved flood works are removed.

Better water monitoring at three mines

NRAR worked to secure stronger oversight of management of surface water at three significant coal mines during 2022-23. The mines are located in the Illawarra, at Tahmoor and Boggabri and each proposed an enforceable undertaking to NRAR to make up for alleged breaches of NSW water laws.

Full details of the EUs are covered on page 29 but in each case, the agreements required the coal mines to adopt strict methods of measuring, metering, accounting for and licencing water used in their operations. This included measures such as:

- new automated water meters
- new water monitoring software
- investment in water measuring technology
- improved reporting process to NRAR.

These improved water management practices are expected to lead to better outcomes for the local environment and surrounding communities.

Stonequarry Creek, Tahmoor

Tahmoor Coal will contribute \$25,000 for rehabilitation work along the banks of Stonequarry Creek, near Hume Oval at Tahmoor after NRAR secured an enforceable undertaking with the mine owners.

The environmental project was among a range of conditions in the agreement to compensate for allegedly taking water without an access licence.

The Stonequarry Creek rehabilitation site was suggested to Tahmoor Coal after discussions with Wollondilly Shire Council who identified this area would benefit from the work. The council runs a volunteer based Bushcare program to rehabilitate and manage the invasive species in this section of the creek, and the EU community project will support that work.

It is expected that the work will boost the ecological and aesthetic values of the creek environment and strengthen its resilience.



Stonequarry Creek, Hume Oval in Picton. Photo: NRAR

Wins for the community

Collaboration and creativity are key NRAR values as the agency seeks not just to enforce the law but also to deliver real benefits to NSW communities. While NRAR will take strong action when a serious offence is committed, we also seek worthwhile community-based outcomes in the region where rule breaking occurred.

Supporting schools

Children at 10 remote primary schools along the Darling-Baaka River learned more about river ecology thanks to an enforcement action by NRAR.

Western Landcare NSW delivered the education program in 2022-23 with \$10,000 in funding from an EU between NRAR and an irrigator who significantly exceeded their bore extraction limit.

Among the schools that benefited were Palinyewah and Pomona Public Schools just north of Wentworth, Menindee Public School near Broken Hill, Wilcannia Central School and the nearby St Therese's Community Parish School, St Patrick's Parish School in Brewarrina, St Ignatius Parish School in Bourke and Bourke Public School and Louth Public School.

The program involved children in a range of activities including water bug surveys, study of pests, native fish species, and understanding river ecology near their schools.

The funding enabled Landcare to buy equipment such as an ecosystem quilt for hands on learning, and water bug and water testing kits. This equipment will continue to be used by Western Landcare in schools throughout the Western Region into the future.

Landcare also used the funds to buy water bug kits for each of the schools they visited along the river, so they are able to check for aquatic life in the river as part of their ongoing lessons.

Under the terms of the legally binding agreement, the irrigator forfeited some water entitlements and paid costs of more than \$73,000.

These costs included the Western Landcare funding.



Students from Pomona Public School work on river ecology lesson. Photo: Western Landcare.



Students at St Therese's Community Parish School took part in the program. Photo: Western Landcare.

Improved cultural consultation

Water is central to the cultural and spiritual values of Aboriginal peoples of NSW and is intrinsically linked to their obligations in caring for Country. Understanding this is at the heart of one of NRAR's most important enduring regulatory priorities - to protect and prioritise Aboriginal cultural values.

This means we evaluate and consider cultural harm in our regulatory actions and embed an acknowledgement and understanding of Aboriginal values in our day-to-day activities.

This was reflected clearly in 2023 in conditions secured as part of significant enforceable undertakings with three coal mines.

At Boggabri, a coal mine committed to undertake consultation with the local Indigenous community about the impact of past and future

water take on Aboriginal communities and, where possible, to assist in promoting and protecting cultural values and practices in the area affected by mining operations.

In the Illawarra, the coal operation has undertaken to consult with Aboriginal communities as part of delivering a \$2.9 million wetland and waterway restoration project in that region.

Tahmoor Coal in the Campbelltown region has committed to ongoing consultation with Tharawal Local Aboriginal Land Council representatives about the impact the company's operations may have on waterways, and the corresponding impacts on the local Aboriginal community.

Read more about how we enforce the law on page 25.

CASE STUDY:

Community park transformed

The transformation of a small community park at Hay was completed early in 2023 with funding made possible by NRAR.

The improvements were delivered by Hay Shire Council and were partly funded by an enforceable undertaking (EU) finalised by NRAR after a Carathool irrigator overdraw their water accounts.

Owners of the mixed cropping operation agreed to the legally binding agreement after overdrawing the accounts by 2,280 ML between October 2018 and November 2020 including a period of severe drought.

An \$80,000 contribution to the park redevelopment was part of that agreement.

Among improvements to Murray Street Park include the addition of an eye-catching new Hay sign, installation of public art, wheelchair accessible pathways, tree planting, landscaping, mulching and a picnic table.



The new Hay sign in Murray Street Park now greets visitors to the town. Photo: Hay Shire Council



The three emus sculpture is another new addition to the park. Photo: Hay Shire Council

Research, development and technology

The value of water

Water resources are the foundation of healthy communities, environments and economies. All of us depend on water in so many ways. When you take water in NSW without following the rules, it's not just water you're taking.

Recognising the value of water is integral to how we manage it, and how water laws are enforced.

In 2023, NRAR commissioned its second report on the value of water entitlements in NSW. It builds on our first Value of Water Report in 2021-22 and shows that water entitlements have increased in value from more than \$29 billion two years ago to an estimated \$41 billion in 2023. This is a 17 per cent increase in just two years.

The new report also sought to put a dollar value on access to town water and stock and domestic supplies.

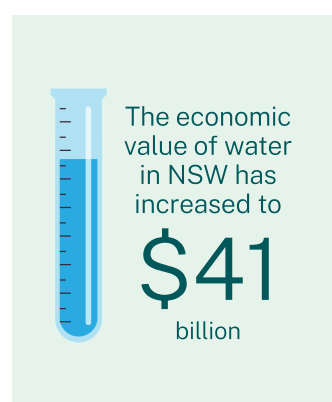
NRAR now has the most comprehensive picture to date of what water entitlements are worth and the economic benefits that flow from its use.

This knowledge helps us to better understand the circumstances and motivations of water users, and to put our staff and efforts into areas where competition for water is greatest.

Key findings include:

- The rising value of water licences is being driven by increasing demand from horticulture (fruits and nuts) and viticulture (grapes), from cotton production, and from high value crop production, like blueberries.
- Tradeable water entitlements (for irrigation and environment) are worth \$25-\$34 billion.
- Town water entitlements are worth \$5.8 billion and underpin the whole NSW economy. Domestic and stock entitlements are worth \$0.8 billion.
- The most valuable water assets in NSW are in the Southern Inland zone and the Murray and Murrumbidgee regions, worth more than \$23 billion. This is an increase of 21 per cent on \$19 billion estimated in 2021.
- Water entitlements support agricultural production value of \$3.7 billion a year - and this is without counting the economic impacts of water used in industries such as mining.
- Water access leads to total direct and flow-on benefits of about \$5.5 billion for regional economies from irrigated agricultural production.

Find out more at nrar.nsw.gov.au/the-value-of-water



Behavioural research

Understanding the people we regulate is key to delivering effective and efficient compliance programs. To achieve this, we have worked with a consortium of academics from UNSW, University of Canberra and University of Technology Sydney to develop a water user behaviour model known by the acronym, BEACON.

The research addresses a question common to all regulators about how to best achieve compliance and enforcement within resource constraints. NRAR operates in a complex legislative and regulatory environment, and the research has boosted understanding of how and when to intervene in the activities of regulated water users to gain compliance.

The model takes into account individual farmers' perceptions about severity, risk, ability to comply, willingness to comply, and motivation to comply with water allocation rules.

Among other things, the model can:

- show the extent to which increasing or decreasing penalty amounts can induce water users to change their behaviour around water regulations
- help to identify the points at which further investment of money, time and people is unlikely to deliver greater levels of compliance
- boost understanding of the overall level of resourcing required to achieve NRAR's objectives in water regulation.

The project helps NRAR meet its strategic goals including ensuring lawful activity and encouraging widespread voluntary compliance and intelligent use of analytics and systems. We released a preliminary report on the results in February 2023.



Presenting the model at a conference for regulators. Photo: NRAR

Eyes on the floodplain

Throughout 2022-23, the NSW Government continued to implement reforms to the management of water on the floodplains of inland NSW.

Rural floodplain management plans provide the framework for coordinating the development of flood works on a whole-of-valley basis.

Floodplain management plans were prepared for five valleys in northern NSW: the Gwydir, Namoi (Upper and Lower), Barwon-Darling, Macquarie and Border Rivers valleys.

NRAR plays an important role in compliance with the new laws, and the use of technology has transformed the way NRAR monitors and assesses this compliance.

Satellites, drones, high-definition aerial photography and smart data have all contributed to advancing NRAR's ability to monitor compliance across all corners of the state at any given time in the past or in the present.

This sort of technology and expertise is used and enhanced in floodplain harvesting regulation, where NRAR has satellite capability to monitor

water surface area. This allows us to estimate changes in the volume of floodplain harvesting and overland flow harvesting in on-farm storage dams in the northern Murray Darling Basin of NSW.

We can identify changes in volume linked to properties and then compare that to what water those properties are licenced to take.

If NRAR identifies a significant gap between what the property is licenced to take, and what the data suggests it has actually taken, then we will investigate further.

The satellite monitoring capability will build a continuously updating database of satellite observations of water surface area and estimated volume change in these farm storages from 1 July 2016 to the present, and for five years into the future. NRAR is aiming to have this monitoring capability by early 2024.

CASE STUDY:

Skills training

NRAR field staff use a range of technology to accurately measure compliance. Our teams regularly visit properties across regional NSW to assist people, to conduct inspections or investigate alleged breaches of the rules.

These staff are well trained to use various technologies to carry out their work effectively and safely.

A field skills camp was held in 2023 to continue to develop skills in the use of key field equipment such as castable depth sounders for measuring dam volume, specialised water meters, data management and GPS equipment.

About 50 staff took part in the three-day event, which covered both theory and practical aspects of NRAR operations.



Watch the video here



NRAR staff learning field skills. They are using a Dumpy level to measure dam size. Photo: NRAR



NRAR staff watching a presentation and learning crucial theory skills on their laptops. Photo: NRAR

Educating and enabling

NRAR is committed to helping people comply with water laws because we know most people want to do the right thing. We aim always to listen, acknowledge different perspectives, and encourage a two-way relationship.

NRAR's key objectives in 2023 included to:

- understand those NRAR regulates and the community it serves
- foster understanding of the rules and NRAR's regulatory practices
- make water compliance a shared responsibility.

We attended 17 stakeholder events during the 2022-23 financial year including three Community Advisory Groups (CAGs) in the Murray-Lower Darling, Murrumbidgee, and Lachlan, and eight rural and regional field days. These events enabled the team to hold face-to-face discussions and to provide key information to stakeholders.

See our upcoming events at:
nrar.nsw.gov.au/upcoming-events



Two staff members talking at a field day, next to NRAR signage. Photo: NRAR



NRAR education staff engaging with water users at a Field Day. Photo: NRAR



Water Compliance E-tool

During 2022-23, a project began to develop an easy-to-use, interactive online education tool designed for use by TAFE NSW students. Known as the Water Compliance E-tool, it is designed to help students better understand water laws and the regulation regime. So far, the development of the tool has undergone user testing and will continue to be developed and refined in close consultation with TAFE.

CASE STUDY:

Tailored talks for your group

Did you know our Education team can arrange a targeted education session for your group?

These sessions can be tailored to the needs and circumstances of your organisation and will help explain NSW water laws and your compliance obligations in a relaxed and simple way.

The sessions can be delivered face to face, online or even as a pre-recorded presentation, depending on your group's needs and NRAR staff resource availability.

In the last year, the team has held these sessions for grower associations, water-user groups, conservation and environmental organisations and other government agencies that work closely with farmers and water-users.

To arrange a session, email the Education team at education@nrar.nsw.gov.au



Education staff hold a targeted education session with landholders. Photos NRAR.

Reaching out

NRAR's Outreach program allows licence holders to directly discuss their water management practices with the regulator and receive valuable and tailored information about their obligations. Teams in Dubbo, Tamworth, Deniliquin and Albury regularly visit properties across regional NSW, meeting water users on their properties.

These visits help determine whether people are aware of the rules, and actively follow them.

During 2022-23 financial year, the Outreach team substantially achieved its inspection targets, recruited 15 new staff and implemented strategies to reduce staff travel fatigue. During the reporting period, Outreach staff travelled 61,000 kilometres and visited 2,210 sites. During these onsite visits, they inspected 4,234 works.

While the vast majority of people are either complying with the rules or trying to, inspections identified 664 sites with alleged non-compliance and referred these sites for further investigation.

Common non-compliances included:

- failure to keep logbooks/records
- metering breaches
- expired works
- incorrect work size
- failure to order water.



NRAR outreach officers inspecting a pump during an on site visit. Photo: NRAR



NRAR staff inspect a water meter. Photo: NRAR

Compliance outcomes

Monitoring compliance is crucial to ensuring water laws are understood and followed, and that the public can be confident that water is being managed fairly and effectively.

NRAR has teams across NSW who actively monitor and audit the use of surface and groundwater.

Our officers use a variety of methods to check compliance with NSW water laws, including:

- inspecting properties and works
- auditing water licences, approvals and reporting information
- sophisticated technology such as satellite imagery, drones and state-of-the-art survey equipment.

Combined, these techniques give us continuous intelligence about what is happening on the ground and inform the actions we take to protect water resources and make sure everyone understands their rights and obligations under the water laws.



NRAR staff using a dumpy level to measure dam size. Photo: NRAR

Water metering

During the 2022-23 financial year, NRAR focused on high volume water users in the Northern Inland region, including those with pumps 100mm and above and bores 200mm and above. Some additional funding enabled our Regulatory Initiatives (RI) branch to achieve even more in the non-urban metering rollout campaign.

During the financial year, the team conducted more than 595 comprehensive audits. These were followed by 201 site inspections at various locations to further check that 552 water licence approvals, and 1,203 water management works were compliant.

RI focused on, and worked with, the largest water users in the Northern Inland and has achieved higher rates of compliance in this group compared to others.

The metering deadline for the Southern Inland region was reached on 1 June 2023 - for pumps 100mm and above and bores 200mm and above.



Water meter for accurately measuring water take.
Photo: NRAR

CASE STUDY:

Non-urban metering review

At the end of the 2022-23 financial year, the NSW Government announced a review of non-urban metering rules to make it easier for water users across the state to become compliant and to ensure water use is measured and managed fairly and sustainably.

This work by the broader Department of Planning and Environment continued through the latter part of 2023 with input from WaterNSW and NRAR.

During the review period, NRAR continued to enforce the rules around non-urban metering, with a focus on high-volume, high-risk water users. The focus was on the highest volume water users across the Southern Inland region whose deadline for compliance has been reached.

NRAR continues to educate and empower water users to comply with the rules, with Outreach teams visiting properties across the state to make sure they understand their obligations.

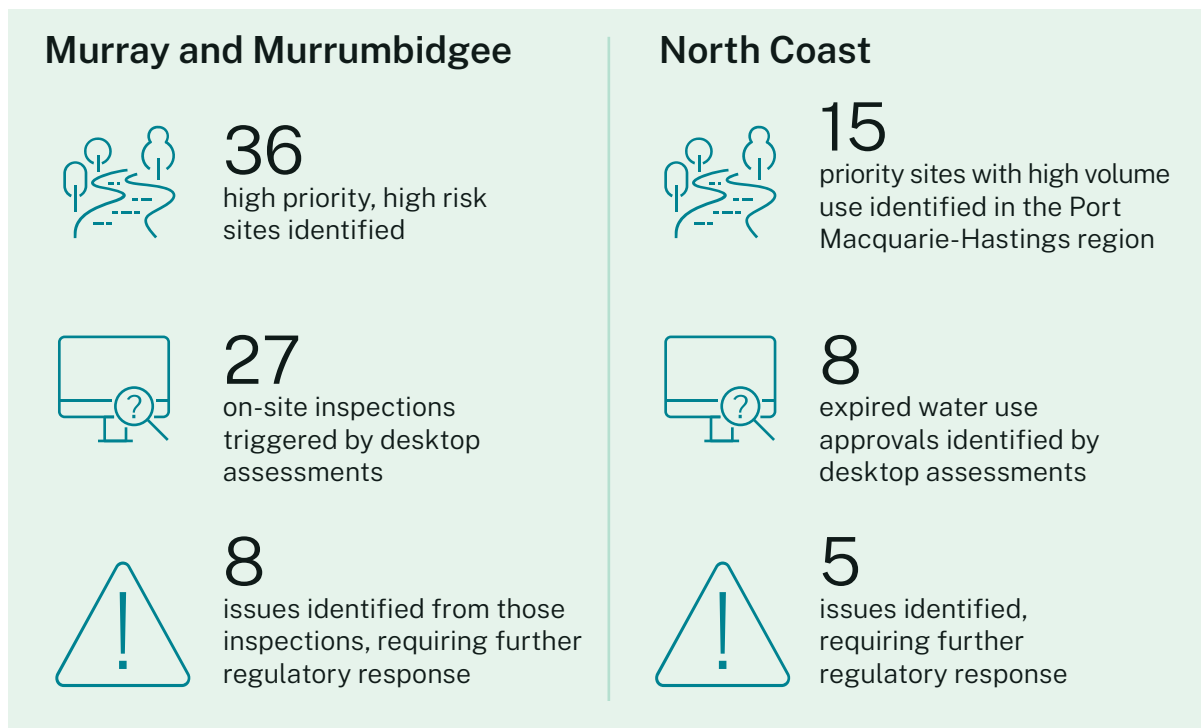
We are a firm but fair regulator, and we consider each individual situation on its merits.



Gwydir Wetlands and Floodplains Moree.
Photo: Daryl Albertson, DPE

Irrigated agriculture

The irrigated agriculture industry accounts for about 80 per cent of water taken in NSW. As a result, ensuring the fair sharing and accurate measurement of water taken by irrigators is a focus for NRAR.



Active management program

A program to monitor compliance with active management rules under the water sharing plans for the Barwon-Darling, Gwydir and Macquarie-Bogan Unregulated water sources continued in 2023.

The project focuses on Held Environmental Water (HEW). This is water the government has purchased to achieve certain environmental outcomes, such as improving the health of rivers, wetlands and floodplains.

New rules put in place by the NSW Government help protect environmental water from extraction in unregulated river systems by limiting how much water can be taken, adjusting access thresholds when environmental water is present, managing resumption of flows after extended dry periods, and providing clarity on access through announcements to water users.

The project aims to achieve a number of significant outcomes, including:

- More information about compliance with active management rules in each area. This information will be provided to DPE - Water and WaterNSW to improve engagement and communication with impacted water users with the goal of widespread voluntary compliance.
- Improved engagement with water users with identified “low risk” alleged breaches. This will ensure these water users who may have inadvertently breached active management rules better understand their obligations and comply in future.
- Increased investigation and enforcement of “high risk” alleged breaches. This will provide a specific deterrent to non-compliance for individual water users.
- Better reporting of activities and enforcement actions undertaken will increase awareness of obligations among water users and provide a general deterrent to non-compliance for all impacted water users.

How we enforce the law

NRAR's Investigations and Enforcement (I&E) branch underpins public confidence in the management of the state's water resources. I&E carries out complex investigations into serious alleged breaches of water law, supported by NRAR's Legal team. Both work together to ensure that breaches of water law are dealt with efficiently and enforced effectively in line with the agency's priorities. The Legal team, staffed by lawyers from the Department of Planning and Environment, also provides legal advice to other branches within NRAR.

NRAR is a risk-based regulator, which means we examine each case on its merits. We consider the potential harm caused to the environment

or other water users, the offender's culpability and compliance history, and their attitude to staying within the water laws.

NRAR undertakes a range of activities to educate and promote voluntary compliance from water users, however when serious and willful law breaking happens, we act. The findings that arose from court cases this financial year will have ongoing implications for how we continue to regulate water, and for how we achieve a culture of compliance across NSW.

Our approach to compliance



Prosecutions

Protecting groundwater

In the first half of 2023, NRAR concluded important prosecutions relating to the protection of fragile groundwater resources in the Riverina towns of Griffith and Leeton. Together, they resulted in almost \$239,000 in fines and \$150,000 in costs to be paid by the water users.

In April, a Griffith area irrigator was convicted and fined a total of \$156,250 for illegally taking water from the at-risk Murrumbidgee Deep Groundwater Source during a period of drought between July 2017 and June 2020.

The owner of the property, which grows grapes, cotton, wheat, canola, barley and corn southwest of Griffith pleaded guilty to five charges in the NSW Land and Environment Court.

Among other conditions, they were also ordered to pay \$60,000 in costs.

The prosecution involved the over-extraction of 7,352.97 ML of water from various bores, the equivalent of 2,953 Olympic swimming pools.

Four of the charges were concerned with breaches of bore extraction limits and one charge of taking water not in accordance with an access licence allocation. The court heard that at the time, the water taken had a market value of \$1.1 million dollars.

In handing down her decision, Her Honour Justice Pepper remarked that the offending posed a "real risk of environmental harm" and that it was up to licence holders to know their licence conditions and follow them.

In the second case, breaching a bore extraction limit proved costly for the owner of a mixed cropping enterprise near Griffith who was ordered to pay a fine of \$26,250 and \$20,000 in costs.

The irrigator pleaded guilty to a single charge of breaching the conditions of his licence approval to over-extract 97.5 megalitres of water from a bore during a period of drought in 2019-20.

While the court accepted that the defendant's breach was accidental, it found that the over-extraction affected the groundwater pressure in the aquifer and would have resulted in additional costs for neighbouring water users if they pumped water during the period of offending.



Google Earth images showing farming areas near Griffith. Photos: Google Earth.

CASE STUDY:

Largest fines so far

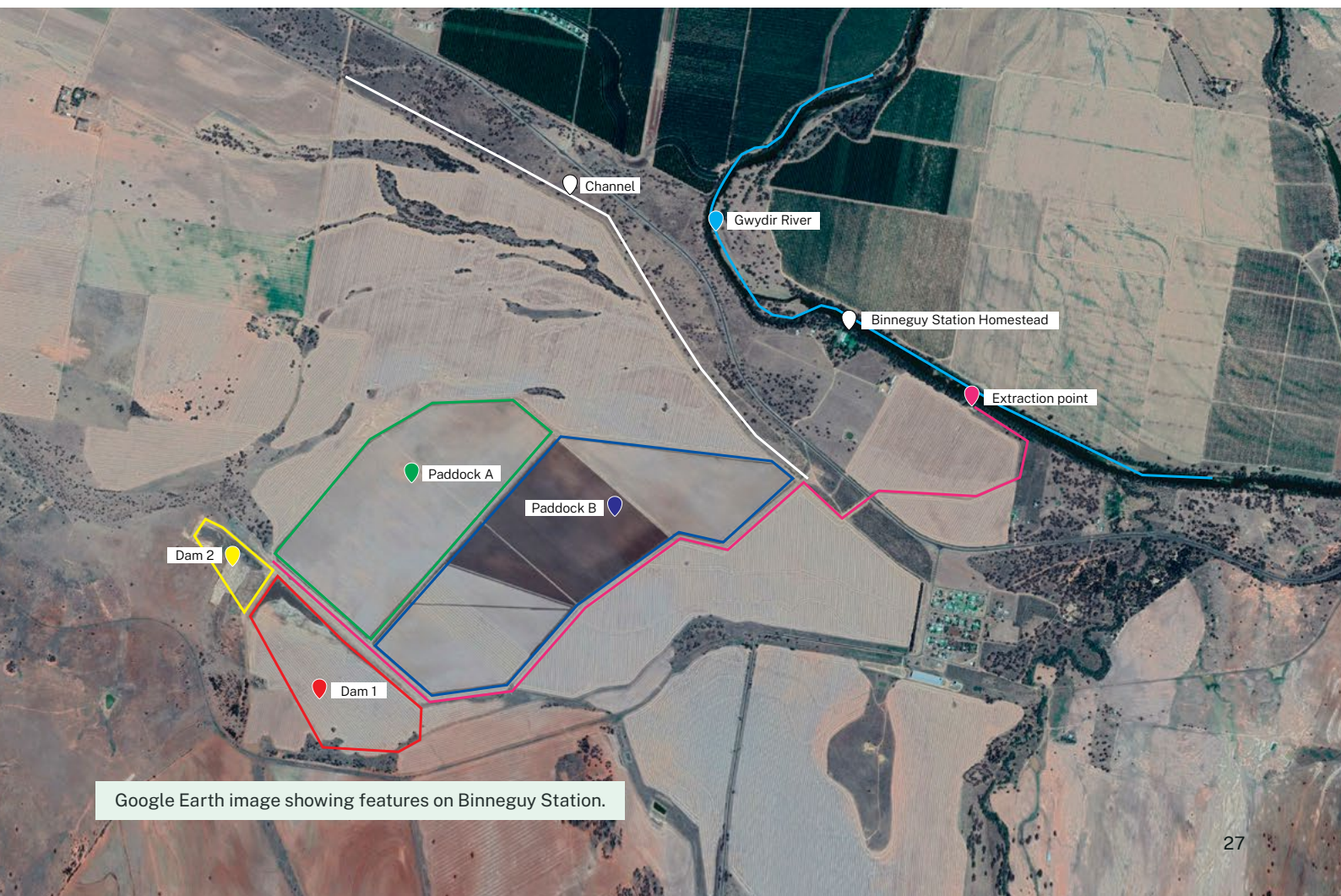
A Moree Plains irrigator paid fines totalling \$353,750 after the company pleaded guilty to and was convicted in the NSW Land and Environment Court of four offences under the NSW *Water Management Act 2000*. The fines were the largest for an NRAR prosecution to date.

NRAR brought prosecution against Henry Payson Pty Ltd, which operates the 1500ha Binnegy Station in northern NSW including 152ha of crops irrigated from the Gwydir River.

NRAR alleged the company knowingly took water while its metering equipment was not working and built and used a 610ML dam without approval.

In her judgment, Justice Rachel Pepper said she was “satisfied beyond reasonable doubt that Payson knowingly took water while the meter was under-recording” and that their actions “deliberately deceived the regulator” about the amount of water pumped from the Gwydir River during 2016-17 and 2017-2018.

Justice Pepper said the offences caused “substantial harm to the integrity and consistent administration of the water management scheme in NSW”.



Google Earth image showing features on Binnegy Station.

Still in court

Dams at Kempsey

NRAR has started a prosecution against an irrigator from the Kempsey region after a series of alleged offences near nationally significant wetlands.

NRAR brought the case to Kempsey Local Court for offences including two counts of building dams without approval, four counts of using dams without approval and six counts related to illegal excavations on waterfront land.

The alleged illegal dams have the combined capacity to hold approximately 165 megalitres of water - enough to fill 66 Olympic swimming pools.

The offences are alleged to have occurred within the Kempsey region between December 2017 and February 2021, including a period of very dry conditions.

The Clybucca estuary, including Aboriginal reserves, is near the property and makes up a large network of reserved land containing nationally significant wetlands and Aboriginal cultural heritage.

The matter came to the attention of NRAR after an anonymous tip off from a member of the public.

Water take on the lower Murray

NRAR has begun a significant prosecution in the NSW Land and Environment Court against a Lower Murray vineyard operator.

NRAR will allege that the former owner of a vineyard near Wentworth bypassed water meters and pumped up to 13,000 megalitres of water beyond their water licence allocation.

The water was allegedly taken illegally from the Darling River over four years between 2011 and 2015.

The alleged offences occurred shortly after the Millennium Drought when the Murray-Darling Basin and almost all the southern NSW cropping zones were still severely affected by dry conditions.

Water take near Wentworth

In the first half of 2023, NRAR started a prosecution in the NSW Land and Environment Court (LEC) against a Wentworth region irrigator and company who are alleged to have illegally interfered with a Western Murray Irrigation pipeline and unlawfully taken water from it.

NRAR alleges that on two separate properties in 2016 and 2019 the defendants connected an unapproved pipeline to the Western Murray Irrigation supply pipeline to divert water.

It is further alleged that the defendants took water at these same properties without Western Murray Irrigation's permission in the 2018-19 and 2019-20 water years.

The alleged illegal take of water occurred during a period of severe drought in NSW.

This is the first time NRAR has prosecuted under sections 342 and 343 of the *Water Management Act 2000*, which are intended to protect water supply infrastructure and stop water being taken illegally from it.

Western Murray Irrigation is a public company responsible for maintaining 184 km of pipelines, pumps and other equipment, which supply and service over 4,100ha of irrigated land in Curlwaa, Coomealla and Buronga.

The amount
allegedly
unlawfully
taken would fill
5,200 Olympic
swimming pools.

Read our prosecution guidelines at nrar.nsw.gov.au/prosecution-guidelines

Enforceable undertakings

If a company or individual breaches water laws in a significant way, they sometimes propose to NRAR that they enter into an enforceable undertaking (EU) to remedy the breach as an alternative to court action. An enforceable undertaking must contain actions to address the rule breaking and to acknowledge the breach of the *Water Management Act 2000*. An EU is legally binding.

In deciding if an EU is the right course of action, NRAR considers what happened, how serious it was and whether there is a history of rule breaking. An EU will not be accepted unless NRAR considers it can deliver positive outcomes in the public interest.

Three EUs were finalised in the past financial year with a range of outcomes and conditions.

Illawarra Coal Holdings Pty Ltd

Illawarra Coal Holdings Pty Ltd will contribute almost \$2.9 million to a community project under this enforceable undertaking with NRAR after the company allegedly took surface water without a licence at its Dendrobium mine in Kembla Heights, west of Wollongong.

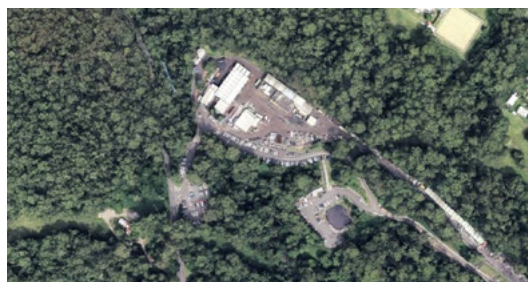
The monetary contribution is the largest and most significant secured under an EU with NRAR since the agency was formed and will fund a project related to wetland or waterway restoration.

NRAR alleges that the underground coal mine's operations caused the incidental take of surface water without a licence over five years from 2018 to 2023.

Under the terms of the EU, Illawarra Coal will:

- Acknowledge the alleged breaches occurred during the 2018-2019, 2019-2020, 2020-2021, 2021-2022 and 2022-2023 water years.
- Provide a monetary contribution of \$2,878,138 for a community project that will improve the health of waterways and/or restore wetlands. The community project proposal must be put to NRAR for consideration by 30 September 2023.
- Start delivering the community project within 3 months of NRAR accepting the community project proposal.
- Consult with local Aboriginal communities and groups connected to the area where the community project will be undertaken.

- Commit to improved surface water management by investing in and using an array of new and emerging technology and report the results back to NRAR annually.
- Commit to regular reporting to NRAR about consultation, community project progress, and other aspects of the agreement.
- Pay NRAR \$70,000 to cover investigation, legal and monitoring costs, with the option to increase these costs after the community project proposal is received.
- Place a media notice in certain agreed publications detailing the undertakings in the EU.



Google Earth images of Dendrobium coal mine at Kembla Heights.

Tahmoor Coal Pty Ltd

NRAR secured its third significant mining-related enforceable undertaking after accepting an agreement with Tahmoor Coal Pty Ltd.

Compensation of \$200,000 and a strict water monitoring and reporting regime are among the actions to be carried out by the company to compensate for allegedly taking water without an access licence.

NRAR began investigating Tahmoor Coal in 2020 after it was observed that underground longwall mining had fractured Redbank and Myrtle Creeks causing surface water to be diverted from them.

Under the enforceable undertaking, the company must:

- pay compensation of \$150,000
- pay a further \$50,000 for not having adequate water licences
- contribute \$25,000 for rehabilitation work along the banks of Stonequarry Creek, near Hume Oval at Tahmoor
- report to NRAR on its monitoring of, and impact on, current and future water take at Tahmoor Coal, including supplying six monthly water monitoring reports to NRAR
- ensure it has sufficient water access licences and water entitlements for its mining activities by reviewing its water access



Google Earth image showing Tahmoor Coal Mine.

licence strategy every year; by buying extra water entitlements when needed and by providing a copy to NRAR of its updated water strategy within 28 days of completion

- provide quarterly progress reports on the remediation of Redbank and Myrtle Creeks with a final report to be provided after two years
- commit to ongoing consultation with Tharawal Local Aboriginal Land Council representatives about the impact the company's operations may have on waterways, and the corresponding impacts on the local Aboriginal community.



Stonequarry Creek, Hume Oval in Picton. Photo: NRAR

Boggabri Coal Operations Pty Ltd

In the case of this Boggabri coal mine in the north of NSW, the company will have to install more accurate water meters and report four times a year about its water use under its enforceable undertaking with NRAR.

NRAR accepted the legally enforceable agreement after the mine operator allegedly took surface water for which it did not hold a licence and collected it in temporary and permanent storages between early 2019 and April 2022.

Under the terms of the EU, the mine owners will have to:

- install new water meters which automatically record water-use data
- purchase new software and implement an improved water balance modelling program
- report to NRAR on surface water take four times a year until 2027
- pay more than \$54,000 to compensate for surface water taken unlawfully, and a further \$15,000 to cover NRAR's investigation costs
- contribute \$10,000 to a community project with a water management focus in the local area
- undertake consultation with the local Aboriginal community about the impact of past and future water take on Aboriginal communities and where practical and reasonable, assist in promoting and protecting cultural values and practices in the area affected by mining operations.



Google Earth image showing Boggabri Coal operations.

Read our enforceable undertaking guidelines at: nrar.nsw.gov.au/enforceable-undertaking-guidelines

CASE STUDY:

Other ways we respond to non-compliance

NRAR has a range of enforcement actions available, and decisions about how we respond to breaches are made according to our Regulatory Policy.

During 2022-23, NRAR's response to breaches of NSW water law also included:

- 32 directions such as stop-work orders, directions to remove works such as pumps and pipes, and remediation notices
- 60 formal warnings (written and verbal)
- 48 official cautions
- 67 penalty infringement notices.

Read about our regulatory policy at: nrar.nsw.gov.au/regulatory-policy



NRAR staff checking paperwork during a site visit. Photo: NRAR

Regional snapshots

Tributary of Gloucester River. Photo: NPARR

3

Barwon, Darling and West



160
investigations completed



16
total enforcement actions taken



2
penalty infringement notices issued



4
orders or directions issued



10
cautions or formal warning issued



13%
of non-urban water meters
compliant as at July 2023



Darling River, Bourke 2023. Photo: NRAR

Statistics

During the 2022-23 financial year, NRAR finalised 160 investigations in this water sharing plan region. A total of 16 enforcement actions were taken, including 2 penalty notices, 4 orders or directions issued and ten cautions or warnings. Two significant prosecutions for breaches of the *Water Management Act 2000* began in the period involving properties near Wentworth in the far southwest of NSW. Read more on page 28.

The area

The Barwon, Darling and West region covers a large area of western NSW. Major tributaries to the Barwon–Darling River system include the intersecting streams, Border Rivers, Gwydir, Namoi, Castlereagh, and Macquarie rivers. All enter the Barwon–Darling River upstream of the township of Bourke. Downstream of Bourke and further west, the Paroo and Warrego rivers contribute intermittent flows.

The region is located within the traditional lands of the Barkandji, Barapa Barapa Budjiti, Euahlayi, Gomeroi/Kamilaroi, Guwamu/Kooma Kunja, Maljangapa, Maraura, Murrawarri, Muthi Muthi, Ngemba, Ngiyampaa, Tati Tati, Wadi Wadi, Weki Weki, Wemba Wemba, Wiradjuri and Yorta Yorta Nations.

Border Rivers



39

investigations completed



0

total enforcement actions taken



0

penalty infringement notices issued



0

orders or directions issued



0

cautions or formal warning issued



9%

of non-urban water meters compliant as at July 2023



Macintyre River, Bogabilla. Photo: Vince Bucello (DPE)

Statistics

During the 2022-23 financial year NRAR, finalised 40 investigations in this part of NSW. While no enforcement actions were recorded in the period, investigations revealed that the most common alleged offence types in the region related to taking too much water or metering breaches. There were 18 incidences of this type of offence in the Border Rivers for the period. When NRAR staff detect potential offences, they assess for risk posed, and the most serious incidents are referred for further investigation.

The area

The Border Rivers region comprises the catchments of the Dumaresq, Severn, Macintyre and Barwon Rivers which drain from the Great Dividing Range between Inverell in far northern NSW and Warrenbayne in Southern Queensland. The catchment occupies an area of about 49,500 km² of which about 24,500 km² is within NSW.

The Border Rivers flow through the traditional lands of the Bigambul, Githabul, Kambuwal, Gomeroi/Kamilaroi, Kwiambul and Ngarabal Nations.

Gwydir



36

investigations completed



13

total enforcement actions taken



4

penalty infringement notices issued



4

orders or directions issued



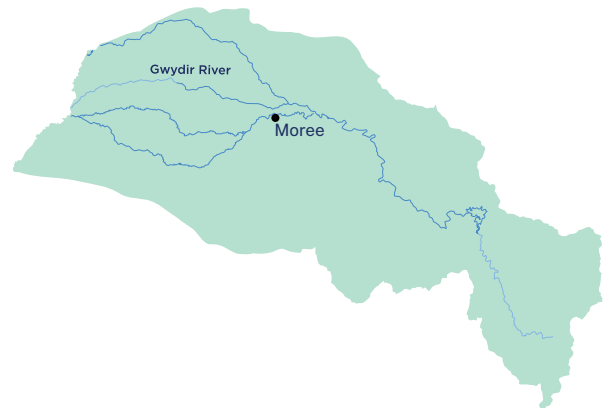
5

cautions or formal warning issued



26%

of non-urban water meters compliant as at July 2023



Gwydir River, Moree region. Photo: NRAR

Statistics

During the 2022-23 financial year, NRAR finalised 36 investigations in the Gwydir water sharing plan area. Of the 13 enforcement actions taken, four were penalty notices, four were orders or directions, five were cautions or formal warnings to comply. The most serious regulatory action in this area occurred in February 2023 when a Moree Plains irrigator was convicted of several offences under the *Water Management Act 2000* and faced significant penalties imposed by the court. Read more on page 27.

The area

The Gwydir water sharing plan region is located in northern NSW, bounded by the Border Rivers region to the north, the western slopes of the Great Dividing Range to the east, the Namoi catchment to the south and the Barwon River to the west. It covers an area of more than 26,000 km².

The region is the traditional lands of the Gomeroi/Kamilaroi Nation.

Macquarie-Castlereagh



155
investigations completed



10
total enforcement actions taken



4
penalty infringement notices issued



3
orders or directions issued



3
cautions or formal warning issued



25%
of non-urban water meters
compliant as at July 2023



Macquarie River at Narromine. Photo: NRAR

Statistics

During the 2022-23 financial year, breaches related to taking too much water or metering breaches were the most common in this area in every quarter. When NRAR staff detect potential offences, they assess for risk posed, and the most serious incidents are referred for further investigation. A total of 155 investigations were finalised during the period and 10 enforcement actions taken including fines, directions and cautions.

The area

The Macquarie–Castlereagh region lies west of the Great Dividing Range in central NSW and comprises the catchments of the Macquarie and Castlereagh Rivers which cover an area of around 92,000 km². This area includes significant Ramsar wetland, the Maquarie Marshes, which covers 19,850 hectares, and lies about 100 kilometres north of Warren in central west NSW.

The region is the traditional lands of the Gomeroi/Kamilaroi, Ngemba, Ngiyampaa, Wailwan and Wiradjuri Nations

Namoi



162
investigations completed



20
total enforcement actions taken



8
penalty infringement notices issued



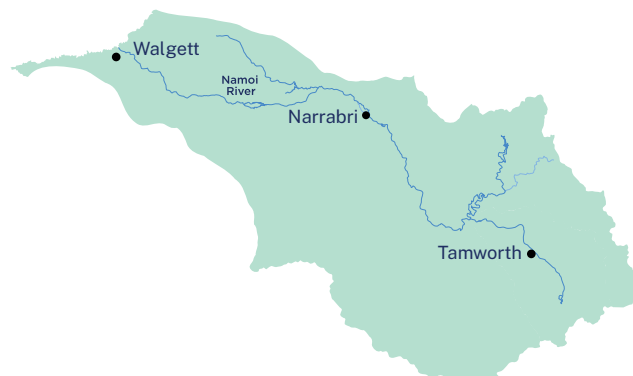
3
orders or directions issued



9
cautions or formal warning issued



21%
of non-urban water meters
compliant as at July 2023



Namoi River. Photo: NRAR

Statistics

During the 2022-23 financial year, NRAR finalised a significant enforceable undertaking with a coal mining operation at Boggabri related to breaches of the *Water Management Act 2000* (see page 31). More than 160 other investigations were completed in the region, and 20 enforcement actions taken. The most common type of alleged offences found by NRAR staff related to taking too much water or metering breaches - which accounted for more than 75 per cent of offences in every quarter. When NRAR staff detect potential offences, they assess for risk posed, and the most serious incidents are referred for further investigation.

The area

The Namoi region bounded by the Great Dividing Range in the east, the Liverpool Ranges and Warrumbungle Ranges in the south, and the Nandewar Ranges and Mount Kaputar to the north. It covers an area of over 43,000 km².

The region is the traditional lands of the Gomeroi/Kamilaroi Nation.

Lachlan



80
investigations completed



7
total enforcement actions taken



3
penalty infringement notices issued



2
orders or directions issued



2
cautions or formal warning issued



12%
of non-urban water meters
compliant as at July 2023



The Lachlan River and Nerran Lake, part of the Cumbung Swamp. Photo: Paul Packard (DPE)

Statistics

Unlawful flood works were the most common alleged offence revealed by NRAR inspections in the Lachlan water sharing plan area during the financial year. This was the case of three of the four quarters. Eighty investigations were finalised in the region and a total of seven enforcement actions recorded. At the start of July, the Lachlan water sharing plan area had the lowest percentage of non-urban metering compliance in the state on 12 per cent.

The area

The Lachlan region lies west of the Great Dividing Range in central NSW, extending across 90,000 km² from the Great Dividing Range near Gunning in the east to the junction of the Lachlan and Murrumbidgee Rivers near Oxley in the west. The area contains three wetlands listed on the Directory of Important Wetlands in Australia – the Great Cumbung Swamp, Lachlan Swamp and Booligal Wetlands.

The region is the traditional lands of the Barkandji, Nari Nari, Ngiyampaa, Wiradjuri and Yita Yita Nations.

Murrumbidgee



70
investigations completed



7
total enforcement actions taken



1
penalty infringement notices issued



1
orders or directions issued



5
cautions or formal warning issued



39%
of non-urban water meters
compliant as at July 2023



Murrumbidgee River, Balranald NSW. Photo: NRAR

Statistics

Two significant prosecutions by NRAR for breaches of the *Water Management Act 2000* occurred within this water sharing plan area. In April, two Griffith area irrigators were convicted and fined for breaches during a period of drought (read more page 26). Outreach officers were in the Tumut area in May to support water users trying to comply with NSW water laws, inspecting about 50 properties. Data for the financial year shows that the most common type of alleged offence found in this region involved unlawful water take or metering breaches.

The area

The Murrumbidgee region is bordered by the Great Dividing Range to the east, the Lachlan catchment to the north and the Murray catchment to the south. The region covers over 84,000 km². Important wetlands of this region include Ramsar-listed Fivebough and Tuckerbil swamps; and the lower Murrumbidgee floodplain, which includes the Nimmie Caira and Redbank systems and incorporates Yanga National Park.

The region is the traditional lands of the Barapa Barapa, Muthi Muthi, Nari Nari, Ngunnawal, Nyeri Nyeri, Wadi Wadi, Wolgalu, Wemba Wemba, Weki Weki, and Wiradjuri Nations.

Murray



191
investigations completed



58
total enforcement actions taken



29
penalty infringement notices issued



1
orders or directions issued



28
cautions or formal warning issued



45%
of non-urban water meters
compliant as at July 2023



Murray River below Hume Reservoir, Albury. Photo: NRAR

Statistics

NRAR Outreach officers were in the Deniliquin region in April, including site visits around Swan Hill, Hay, Berrigan and Finley to support water users trying to comply with NSW water laws. The Murray region recorded the highest number of penalty infringement notices in NSW but also the highest percentage of compliance with non-urban water meter rules at 45 per cent.

The area

The Murray water sharing plan region is bordered by the Great Dividing Range to the east, the Victorian border in the south and the Murrumbidgee region in the north. It covers an area of over 97,800 km². The region contains diverse landscapes including vast red-gum forests, floodplains, saline lakes and inland billabongs.

The region is the traditional lands of Barkandji, Barapa Barapa, Maljangapa, Maraura, Muthi Muthi, Ngiyampaa, Tati Tati, Wadi Wadi, Weki Weki, Wemba Wemba, Wiradjuri and Yorta Yorta Nations.

Far North Coast



57

investigations completed



1

total enforcement actions taken



0

penalty infringement notices issued



1

orders or directions issued



0

cautions or formal warning issued



Deadline for compliance with non-urban water meter reform, 1 December 2024



Tweed River, Far North Coast. Photo: Salty Dingo.

Statistics

During 2022-23, the most common alleged offences related to unlawful works or dams, and to unlawful activities on waterfront land. Only one enforcement action was recorded, but NRAR Outreach officers completed dozens of site visits in this region in 2023 to support people trying to comply with NSW water laws. They visited properties around Ballina and Lismore and in the Byron Bay hinterland.

The area

The Far North Coast region of NSW stretches from north of Coffs Harbour to the Queensland border, covering an area of 10,000km² including over 280km of coastline. There are two major river systems in the Far North Coast water sharing plan region: the Richmond and the Tweed. The region has significant and unique Aboriginal cultural values that are continually interconnected with Country. This attachment is through earth, water, plants, animals, knowledge, traditions and stories, all of which are interwoven and inseparable, and are still strong today

The region is located within the traditional lands of the Bundjalung Aboriginal Nation.

North Coast



468
investigations completed



75
total enforcement actions taken



26
penalty infringement notices issued



13
orders or directions issued



36
cautions or formal warning issued



Deadline for compliance with
non-urban water meter reform,
1 December 2024.



Clarence River, Grafton. Photo: NRAR

Statistics

NRAR finalised 468 investigations on the North Coast in the 2022-23 financial year - the highest number in NSW. This region also recorded the highest number of enforcement actions in the state, including 26 fines, 13 directions and 36 warnings or cautions. NRAR started a significant prosecution on the North Coast in April against an irrigator from the Kempsey region after a series of alleged offences near nationally significant Clybucca Wetlands. Read more on page 28.

The area

The North Coast water sharing plan region of NSW is between the Central Coast and Far North Coast regions. It covers an area greater than 17,000km². The North Coast has many interconnected rivers, creeks, groundwater aquifers, estuaries, marine parks and nationally important wetlands. Its main rivers are the Clarence, Macleay, Bellinger, Nambucca, Hastings and Camden Haven.

The region is located within the traditional lands of the Birpai, Dunghutti, Gumbaynggirr and Nganyaywana Nations.

Hunter



95

investigations completed



13

total enforcement actions taken



0

penalty infringement notices issued



1

orders or directions issued



12

cautions or formal warning issued



Deadline for compliance with non-urban water meter reform, 1 December 2024.



Hunter River, Maitland, Photo: NRAR

Statistics

NRAR data shows that 95 investigations were finalised in the Hunter region in the 2022-23 financial year with 13 enforcement actions taken. By far the largest number of these action were for formal warnings or cautions, which accounted for all but one. Breaches related to water take or metering that wasn't compliant were a common issue in the region.

The area

The Hunter region is bordered in the north-west by the Liverpool Ranges, which separates it from the Namoi catchment, and on the west by the Great Dividing Range, which separates it from the Macquarie River catchment. It covers an area over 20,000km² and extends further inland than any other coastal region of NSW.

It is the traditional lands of the Kamilaroi, Geawegal and Wonnarua people.

Central Coast



32

investigations completed



3

total enforcement actions taken



3

penalty infringement notices issued



0

orders or directions issued



0

cautions or formal warning issued



Deadline for compliance with non-urban water meter reform, 1 December 2024.



Piles Creek, Central Coast. Photo: NRAR

Statistics

NRAR Outreach officers visited more than 60 Central Coast properties in December 2022. The most common issues were water users failing to keep their water licence details up to date and not notifying WaterNSW when pumps or bores were decommissioned. Another common compliance breach was water users not monitoring their water take and completing a water take logbook. There were 32 investigations finalised in this area for the period, and just three enforcement actions recorded.

The area

The Central Coast region covers an area of more than 1560km² and consists of two distinct areas: Tuggerah Lake and its tributaries (Wyong River, Ourimbah Creek and Jiliby Jiliby Creeks) and the Hawkesbury River and its tributaries (Mangrove Creek and Mooney Mooney Creek systems).

This region is the traditional land of the Darkinjung people.

Greater Metropolitan



80
investigations completed



8
total enforcement actions taken



3
penalty infringement notices issued



2
orders or directions issued



3
cautions or formal warning issued



Deadline for compliance with
non-urban water meter reform,
1 December 2024.



Nepean River. Photo: Shane Barter, DPI

Statistics

NRAR Outreach staff inspected Sydney schools, parks and golf courses for the first time in June 2023 as part of its ongoing outreach program. Officers inspected up to 100 sites around Hurstville, Cook Park, Botany Bay, Mascot, Eastlakes, South Coogee, Randwick, Bondi and North Bondi. Unlawful activity on waterfront land was a common alleged offence detected in this region. Eighty investigations were finalised, and eight enforcement actions taken.

The area

The Greater Metropolitan region is located on the south-east coast of NSW, extending from Shoalhaven Heads in the south, Broken Bay in the north, Lithgow in the west, and Goulburn in the southwest. It covers an area of approximately 32,500km².

The region is located within the traditional lands of the Yuin, Tharawal, Eora, Dharug and Gundungurra Nations.

Clyde



80
investigations completed



8
total enforcement actions taken



3
penalty infringement notices issued



2
orders or directions issued



3
cautions or formal warning issued



Deadline for compliance with
non-urban water meter reform,
1 December 2024



Moruya River. Photo: Jonathan Steinbeck

Statistics

Outreach officers were in this area in 2023 to support people trying to comply with NSW water laws. Properties were inspected around Narooma, Merimbula, Tathra, Bermagui, Batemans Bay, Bega and Eden. The most common breaches in this region related to unlawful works, or non-compliant dams. Eighty investigations were finalised. Three enforcement actions were recorded.

The area

The Clyde or South Coast water sharing plan region of NSW is the coastal strip bounded by the border with Victoria to the south, the coastal escarpment of the Southern Tablelands to the west, and the Greater Metropolitan region to the north. It covers an area of 14,440km².

The area is the traditional lands of a number of Aboriginal groups including the Yuin and Dharawal people.

How NRAR will progress in 2023-24

Lachlan River, Booligal. Photo: NRAR

4

Our Strategic Plan 2021-23

NRAR's operations are guided by its Strategic Plan spanning the years from 2021 to 2023. This document is a clear statement of the organisation's purpose, strategic goals and key targets. It helps ensure resources are applied in the most efficient and effective way to both short and longer-term goals. The document defines NRAR's five strategic goals, as well as more specific targets.

The goals are:

- Achieve good outcomes and benefits for the people, environment and economy of NSW. This will flow from sound enforcement of water laws and from helping people to voluntarily comply with the rules.
- Develop the right regulatory systems, analytics, information, and technology to support and guide NRAR activities, and to continually improve our reach and our results.
- Build strong relationships with stakeholder communities, organisations, and individuals with an interest in effective enforcement of the state's water laws. These external relationships will grow from our commitment to transparency and accountability.
- Lead the way when it comes to being an effective regulator and a role model for others.
- Learn, innovate, achieve and continuously improve through a collaborative, kind and inclusive culture that values both daring and integrity.



NRAR Staff participate in planning activities face-to-face at an all staff day. Photo: NRAR

Priority actions 2023

In the final year of this strategic plan, we worked on focus areas aligning with NRAR's vision and purpose.

Vision

Together, we create thriving environments, communities, and economies.

Purpose

We build public trust and confidence as a regulator through:

- educating, enabling, and encouraging people to actively comply with natural resources laws;
- enforcing the law to provide a deterrent, and to ensure fairness for the compliant; and
- championing improvements to the management of natural resources.

1 Outcomes and Benefits to the People, Environment, and Economy of NSW

Outcomes driven by innovation and targeted programs-based work, that enable lawful activity and encourage widespread voluntary compliance

Enforcing the Law

Focused efforts on matters involving significant harm to the environment and other water users, and use range of enforcement to deter non-compliance

Non-Urban Metering

More meters and installers available and more water users moving into compliance

Floodplain Harvesting

Our compliance campaign will show the people of NSW that water taken from the floodplain is being measured appropriately and taken lawfully.

Water Reporting in Mining

A measurement and reporting framework for mining operations and extractive industries, with the potential to develop an audit program to test compliance against requirements

Aboriginal Cultural & Spiritual Values

Protecting Aboriginal spiritual and cultural water, and developing an agency-wide long-term action plan

2 People and Culture

An organisational culture that embraces learning, innovation and achieves outstanding results reflected by actions

Work Health and Safety

Every person home safe and well every day

The NRAR Way

The NRAR way is how we define and build our cultural identity.

3 Regulatory Systems and Information

An intelligent use of analytics and systems to inform, guide and increase our reach and impact

Intelligence-Led Regulation

Intelligent use of analytics and systems to inform, guide and increase our reach and impact in order to support NRAR in strategic and operational decision-making.

4 Leadership

A sharp focus on leading regulation and being a role model

Regulatory Framework

Our reg framework provides our staff with consistent standards and guidelines.

Regulatory Best Practice

Maintaining ISO 9001 QMS accredited, maturing our practice against AELERT MRIT and embedding continuous improvement as BAU for NRAR.

5 Community and stakeholder engagement

Direct outreach and engagement with water users and the wider water community to increase voluntary compliance and accountability in the management of natural resources.



Our Strategic Plan 2024-27

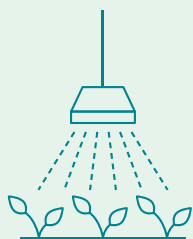
A new plan to guide NRAR's actions and activities for the next three years is under development and is expected to be considered by the independent board in December 2023.

Our Regulatory Priorities 2023-24

NRAR's annual regulatory priorities set its operational course for the coming year. Deciding where to focus our attention involves careful analysis and planning. The 2023-24 annual priorities underpin sustainable and responsible use of the state's natural resources by identifying and addressing key compliance issues.

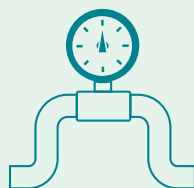
The three main priorities for the 2023-24 financial year are:

Irrigated agriculture



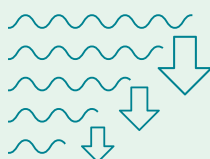
NRAR will prioritise monitoring and regulating water management practices in the irrigated agriculture industry. Spatial analysis suggests there are large numbers of potentially non-compliant water storages in the Murray and Murrumbidgee regions. NRAR will encourage water users to become compliant by obtaining approvals, purchasing water to account for any excess held in storages and/or modifying oversized storages.

Non-urban metering



This is an ongoing priority area for NRAR as the rollout of the regulations across the state continues. It's one of the most significant reforms to water management in the past decade and NRAR will particularly focus on high-volume, high-risk water users.

Overdrawn accounts



NRAR will concentrate its efforts on those who break the conditions of their water access licence (WAL) by entering into a negative account balance and taking water they are not entitled to. The response to non-compliance will increase in severity for those who continue to break the rules.

Our enduring priorities

Some of NRAR’s overarching priorities remain in place over time - an enduring guide for all our activities.

Our enduring priorities include:



accounting accurately for water taken



protecting and prioritising Aboriginal Culture and spiritual values in water regulation



stopping and deterring unlawful activity that causes significant harm to the environment and other water users



removing unauthorised structures that prevent water from getting to where it should be on the floodplain.

CASE STUDY:

Aboriginal cultural values

NRAR is committed to identifying the benefits and impacts to Aboriginal cultural and spiritual values in our regulatory functions and activities

During 2022-23, a project plan for this enduring priority (EP2) was developed to bring together representatives from across NRAR branches to collaborate on how we can make the protection of Aboriginal cultural and spiritual values an even greater part of all we do. This approach at NRAR is being led by engagement team members Andrew Den (Warumungu man) and Carissa Beatty (Wiradjuri/Kooma woman)



NRAR staff at Terry Hie Hie Aboriginal Area.
Photo: NRAR

Your questions answered

Bore outlet emptying into an irrigation channel, Narrabri. Photo: NIRAR

5

What do all the various water agencies do?

The management of water in NSW involves the Department of Planning and Environment –Water (DPE Water), WaterNSW and the Natural Resources Access Regulator (NRAR).

- DPE Water makes the rules and sets the water management policies through legislation.
- WaterNSW puts the rules into action, administers most water licences and approvals and manages NSW rivers and water supply systems.
- NRAR enforces the rules by monitoring compliance, educating the public and, when needed, taking enforcement action.

Why do we need a water regulator?

Before NRAR, the likelihood of being caught and facing the consequences of breaking the water rules in NSW was low. Rules were often broken and the environment, the community and other water users suffered.

Since then, we have taken big strides in changing attitudes so that most people want to comply, in developing ever more accurate ways to monitor compliance, and in taking strong action against the most serious breaches of the rules.

The public is more confident that NRAR is there, monitoring, educating, enforcing -underpinning the fundamental integrity of the system.

Against the backdrop of predictions of a hotter, drier climate having an independent regulator has never been more crucial to ensuring fair access to limited water resources.

Where can I see your activities and the results you've achieved?

Quarterly reporting

NRAR is committed to providing fair, transparent, efficient and accountable water law enforcement-and that means sharing regular information about our compliance activities.

NRAR's Quarterly Reporting tool shows the types of alleged offences commonly found by our staff in each quarter as well as recording the number of inspections, fines, warnings and directions issued.

The tool also breaks all the data down by region so people can see how compliant local water users are and compare this with compliance in other parts of NSW.

Explore our quarterly reports at: nrar.nsw.gov.au/qrt-reports

Public register

As part of our commitment to providing transparent and accountable enforcement of NSW water laws, NRAR publishes the details of its enforcement actions.

Publishing NRAR's more serious regulatory actions on the register shows all water users the consequences of not complying with NSW water laws and deter them from breaching the rules.

View the register at: nrar.nsw.gov.au/public-register

Metering compliance reports

NRAR is responsible for monitoring and enforcing compliance with the new non-urban water metering rules, which are being rolled out in stages by the NSW Government to better measure water take in the state, make water use fairer, and to build community confidence in water management.

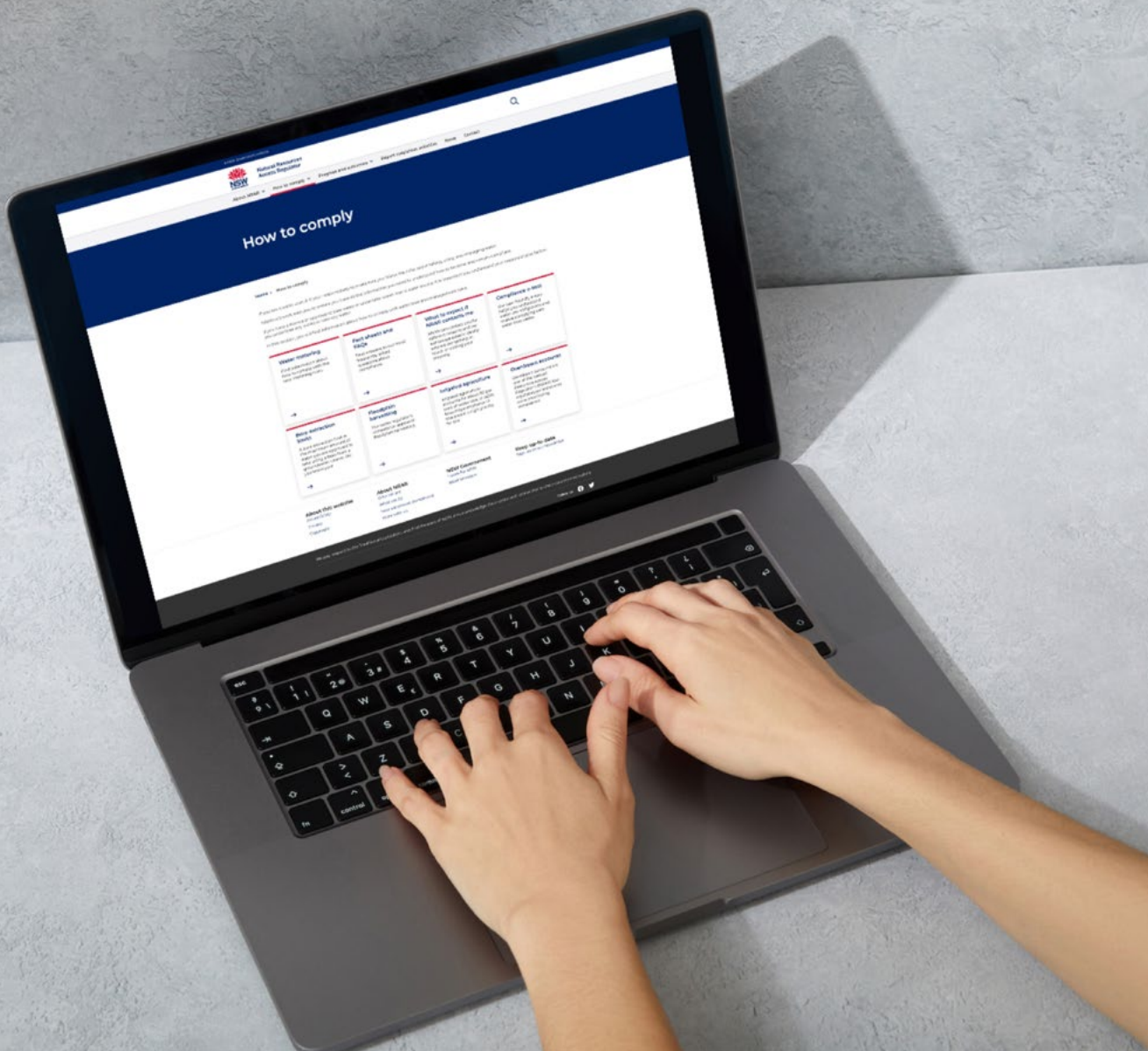
You can find compliance rates for the Northern and Southern Inland on our website. Other regions will be added when their compliance deadlines are reached.

View the reports at: nrar.nsw.gov.au/metering-compliance-reports

Annual Report

You can read more detail about how NRAR operates in our Annual Report, which delves further into our purpose, aims and vision as well as information about our management structures. The report also covers our strategies, systems and processes, the activities of all NRAR branches, workplace diversity and human resources information, Work Health and Safety performance and audited financial statements.

Read the Annual Report at: nrar.nsw.gov.au/progress-and-outcomes/progress-reports/NRAR22-23_Annual-Report.pdf



How do I know if the rules apply to me?

Online

If you are comfortable with digital methods, NRAR's website has a lot of helpful information. We work hard to ensure you have all the information you need to understand how to become and remain compliant.

This page includes links to information about:

- water metering
- bore extraction
- overdrawn accounts
- floodplain harvesting
- irrigated agriculture
- what to expect if NRAR contacts you
- fact sheets and frequently asked questions.

Find out more at: nrar.nsw.gov.au/how-to-comply

Face-to-face

Hundreds of our most productive discussions with water users take place at rural and regional field days across NSW each year. It's the perfect opportunity to have a face-to-face conversation with experienced officers from our Education team.

Our schedule commonly includes:

- May – Tocal Field Days, Hunter Valley
- May – Primex, Casino
- July – Mudgee Small Farms Field Days, Mudgee
- August – AqQuip, Gunnedah
- September – AgriShow, Moss Vale
- September – Henty Machinery Field Days, Henty
- October – Murrumbateman Field Days, Murrumbateman
- October - Australian National Field Days, Borenore

Find out how to arrange for our staff to present a specially tailored session for your group on page 21.



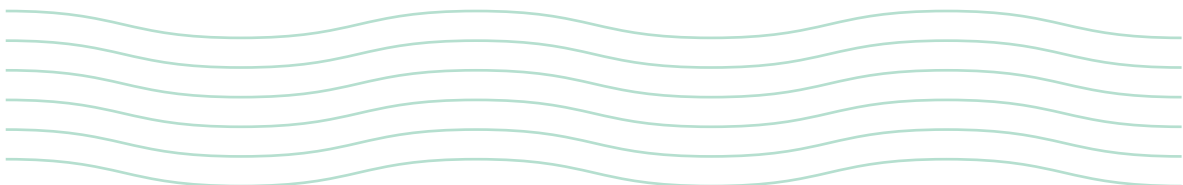
NRAR education staff having a conversation with a water user at a regional field day. Photo: NRAR

I have information about potential suspicious water use activity. How do I report it?

While most water users follow the rules and meet the legal requirements defined in NSW water laws, some people carry out illegal water activities. Sometimes these alleged breaches of water law are deliberate and sometimes they happen out of ignorance of the law.

To make a confidential report of any suspicious activities, contact NRAR:

- on 1800 633 362 during business hours or
- complete the online form and read about how we handle reports here: nrar.nsw.gov.au/report-suspicious-water-activities



Notes

Notes

Natural Resources Access Regulator

Locked Bag 5022
Parramatta NSW 2124

T: 1800 633 362
W: www.nrar.nsw.gov.au

