

Natural Resources Access Regulator

Progress report 2020-21



Acknowledgement of Country

At the Natural Resources Access Regulator (NRAR) we acknowledge we stand on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

Letter of submission

The Hon. Melinda Pavey
Minister for Water, Property and Housing
52 Martin Place
Sydney NSW 2000

Submission of Progress report—Natural Resources Access Regulator

Dear Minister

I am delighted to submit the Natural Resources Access Regulator's Progress report for the financial year ended 30 June 2021 to be presented to the Parliament of New South Wales.

The report has been prepared as required by and in accordance with the *Natural Resources Access Regulator Act 2017*.

Yours sincerely

The Hon. Craig Knowles AM
Chair, Natural Resources Access Regulator

Glossary

AELERT	Australasian Environmental Law Enforcement and Regulators Network
NRAR	Natural Resources Access Regulator
IPART	Independent Pricing and Regulatory Tribunal
Ewater	Water for the environment
WATERS	“Where All The Electronic Resources Sit” database

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Message from the Board

The NRAR Board is pleased to publish our third progress report, outlining the key highlights of 2020–21 and the results that have been achieved in regulating water use across NSW. Our proactive approach to compliance continues to grow, and our education programs and increased monitoring and auditing capabilities are paying dividends. The number of people who are aware of NRAR’s role is increasing. We know most water users want to do the right thing, and our team is out on the ground and in the media ensuring people understand the rules and regulations and what they need to do to comply.



This year saw the launch of our drone program, and we now have 44 CASA-accredited pilots to be our eyes in the sky, using drones to quickly and accurately capture imagery and audit water use with immediate results. We’ve also achieved great results through our use of satellite and spatial data, unravelling existing data to turn it into knowledge that helps us better understand water use and water take. This knowledge is what enables us to be confident in compliance rates and successfully enforce unlawful use.

Our people continue to work closely with water users, the broader water industry and government agencies to ensure regulation is working as effectively and efficiently as possible. We continue to provide advice on how existing regulations are working in practice, identifying opportunities to improve the regulatory system to increase voluntary compliance.

One of our key objectives is to increase confidence in water regulation in NSW. We have ensured we are sharing the results of our work with the whole community, so everyone knows the efforts we are going to to monitor and enforce compliance. We’ve increased our media presence, with more than 1,500 pieces of media coverage this year, and we’ve built real-time compliance dashboards for our website to provide up-to-date data on our activities.

This year, we welcomed a new Board member, Phil Duncan. Phil is Gomeri man with more than 38 years’ experience working with Indigenous people, communities and government. He is well-respected within the water community and has acted as the Chair of the Basin Community Committee of the Murray–Darling Basin Authority since January 2020. He also represents the rights and interests of Indigenous people in NSW as a member of numerous other committees and councils. We are so pleased to welcome Phil to the Board, and know he will make a significant impact to the way we do business at NRAR.

The Board would like to thank the Minister for Water, Property and Housing, Melinda Pavey, for her ongoing commitment and support as we continue to break new ground as a regulator.

On behalf of the NRAR Board I wish to thank the whole NRAR team for their dedication to our important role and for continuing to get the job done under ongoing difficult and ever-changing circumstances.

A handwritten signature in black ink, appearing to read 'Craig Knowles'. The signature is fluid and cursive, written over a white background.

The Hon. Craig Knowles AM
Chair, Natural Resources Access Regulator

Message from the Chief Regulatory Officer

2020–21 was another year marked by the public health and economic challenges of the pandemic. We have been innovative and found new ways of working to ensure we could continue to deliver on our commitments to the people of NSW. Despite ongoing changes to restrictions, this year we visited more than double the amount of properties we did in the previous reporting period. Putting these boots on the ground has helped us grow our understanding of compliance across the state, as well as meet water users and engage with them directly about our role and how we can help.



Our routine monitoring program identified about 73% compliance at 30 June 2021. This is a positive figure, and I am looking forward to seeing that number rise higher as our engagement with water users increases awareness and understanding of NSW water laws and how best to comply. For me, success looks like consistently high levels of voluntary compliance, where water users do the right thing all the time. We have strategies in place to achieve this including advocating for where improvements to the law and regulations are needed.

Our work supporting the roll out of the non-urban water metering framework has been particularly important. Before, there was patchy coverage of meters of questionable accuracy, with inconsistent use of logbooks and a few with no meters at all. Now, as the metering program rolls out, we will have increasing access to accurate, independently verified data to monitor and audit water take across NSW. We've been working closely with water users in the first tranche of the roll out to make sure they understand what is required and helping them be compliant with the new regulation.

I'm proud of our growing team at NRAR. Three years since our establishment, we are well on the way to becoming a best-practice regulator and embedding a strong culture built on collaboration and empowerment. We've been particularly focused on ensuring that Aboriginal cultural and spiritual values are considered in everything we do. As at 30 June 2021, 5% of our staff identify as Aboriginal or Torres Strait Islander, and we also welcomed Phil Duncan to our Board, a proud and respected Gomeroi man.

I am privileged to work with such a hardworking and committed team who have taken on the challenge of improving compliance and giving the NSW community confidence that water is being used lawfully with energy and enthusiasm. I look forward to continuing on this journey together.

A handwritten signature in black ink, appearing to read 'Grant Barnes', written in a cursive style.

Grant Barnes
Chief Regulatory Officer, Natural Resources
Access Regulator

2020–21 in review

The 2020–21 year was one of significant growth for NRAR. We continued maturing as a regulator and put in place the processes and procedures that allow us to proactively manage compliance with water laws and increase voluntary compliance.

We've implemented campaigns to help water users understand their obligations and pioneered new approaches for monitoring water use across NSW. We've used our knowledge and expertise to advocate for and support regulatory change, and improved our systems and procedures to deliver better service to water users.

We've done this to improve compliance to ensure communities and the environment get their fair share of our precious water resources. We shared the results of our activities and kept the public informed through traditional and social media. We are making sure the community feels confident that water is being used lawfully and is shared according to agreed plans.

Top highlights of the year



Rolling out our routine monitoring program to engage with water users and create a snapshot of compliance, with more than 2,600 site visits undertaken to 30 June



Working with water users to monitor and audit the roll out of the non-urban water metering framework, which will ensure the vast majority of water take is accurately metered



Developing a drone program to give us even more eyes in the sky, complementing our satellite and spatial capabilities, covering large areas quickly, collecting a large amount of data in one trip and getting real-time data



Formalising our commitment to Aboriginal cultural values in water management by setting an enduring priority to protect and prioritise Aboriginal values and appointing our first Indigenous Board member, Phil Duncan



Commencing our 30th prosecution and taking our 1,000th enforcement action



Launching the 'Know the Rules' and 'Water, what are you really taking' campaigns to improve understanding and highlight the impacts of taking water unlawfully



Developing a waterfront land e-tool to help landowners determine whether they require approval for controlled activities, and reduce unnecessary applications and expenses

Out and about



5,251
total site inspections



Routine monitoring program found

73% compliance across
2,623 sites

Eyes in the sky



18 drones across NSW



25 active pilots

142 missions



< 72 hours' notice to access very high resolution SkySat, which we can task to image any area in NSW



62 gigabytes of high resolution Nearmap aerial photography analysed to support compliance activities

Enforcing the law



>1,500 cases commenced

>1,300 cases finalised

>400 breaches identified



2.5% of audits resulted in an enforcement action



7 prosecutions completed

8 more prosecutions commenced

Improving services



50% reduction in the average completion time of integrated development referrals



75% reduction in the average completion time of controlled activity approval applications

Boots on the ground



155 total staff at 30 June 2021

30 new staff for the routine monitoring program



21 offices across NSW

Stakeholder engagement



9 campaign videos released



655 Tweets



621 Facebook posts



1,569 pieces of media coverage



Website views increased by **38%**

Who we are

NRAR is responsible for ensuring compliance with water management legislation across NSW. We undertake this work on behalf of all NSW citizens and aim to secure and protect water and river environments as valuable resources.

NRAR is an independent government body established under the *Natural Resources Access Regulator Act 2017*. NRAR is part of the NSW Department of Planning, Industry and Environment. We have an independent board that is appointed by, and reports to, the Minister for Water.

The NSW Government established NRAR in 2018 following recommendations from an independent investigation into NSW water management and compliance conducted by Ken Matthews AO (known as the 'Matthews Report').

About the *Natural Resources Access Regulator Act 2017* (NRAR Act)

The NRAR Act has 2 objectives:

- to ensure effective, efficient, transparent and accountable compliance and enforcement measures for the natural resources management legislation
- to maintain public confidence in the enforcement of the natural resources management legislation.

Our purpose

We build public trust and confidence as a regulator by:

- 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
- championing improvements to the management of natural resources.



NRAR's main activities

NRAR ensures compliance with NSW's water laws, provides water licensing and approvals for certain users, and offers guidance and education to help water users in NSW meet their obligations.

We fulfil these responsibilities through 4 key activities:



Licensing and approvals

We issue licences to water users that establish the conditions for using and accessing water. We also issue approvals for activities carried out in, on or beside rivers, lakes and estuaries.

We share responsibility for granting and managing water licences and approvals with Water NSW. NRAR is responsible for administering water licences, water use and works approvals for water utilities, government agencies, mines, irrigation corporations, and Aboriginal communities and businesses. NRAR also advises on state-significant development and infrastructure projects.



Monitoring and auditing

Our on-the-ground staff and cutting-edge technologies help us to determine exactly where water is being used and by whom across NSW. We use this information to monitor and audit water usage and to identify instances of non-compliance and other broader water usage trends.



Investigation and enforcement

We investigate alleged instances of non-compliance that are discovered through our monitoring and auditing activities or by third-party reports. We take a firm but fair approach to enforcing the law, addressing compliance breaches according to the:

- extent of harm or risk
- extent of the conduct
- public interest
- water users' attitude towards compliance.

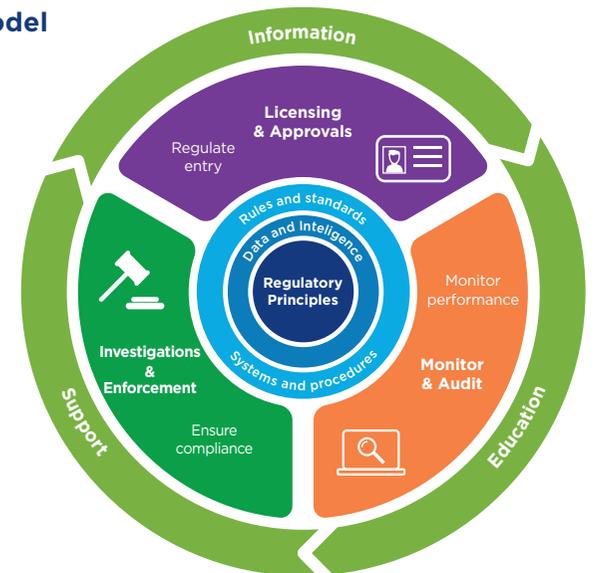


Education and information

NRAR works to ensure that water users know their responsibilities under the water laws. We provide a range of information and programs to make it easier for water users to understand the rules, follow them and make informed choices. We educate, enable and encourage water users to actively comply with the law so that we can prevent non-compliant activities and avoid the need for enforcement.

The regulatory lifecycle model

The regulatory model depicts NRAR's actions to address the risks associated with a licence holder's activities.



Operational principles

Our activities are guided by the following 3 key principles, which originated from the Matthews reports:



Independence

We make decisions about compliance and enforcement independently of water policy, planning and regulation making processes, and water delivery services.



Transparency

By being transparent about what we do, the community can have confidence in our efforts to increase compliance and to enforce instances of non-compliance with the law. We do this by publishing our:

- guiding policies
- Board minutes
- stakeholder engagement records
- speeches made by our Chief Regulatory Officer
- water sharing plans and compliance campaign outcomes
- public register that details enforcement actions taken under the *Water Management Act 2000*.



Effectiveness

Managing water compliance effectively in NSW is vital to delivering on NRAR's mandate. We demonstrate our effectiveness by:

- fully participating in the IPART determination process that ensures the prudent and efficient allocation of licence fee revenue to water agencies
- targeted and timely communication about our compliance and enforcement activities.

Regulatory priorities

We set, review and update our priorities to determine how and where we will focus our efforts. Our regulatory priorities align with the Water Reform Action Plan and the draft NSW Water Strategy and support the goals for water management in NSW.

In early 2019 we set priorities for the period March 2019 to March 2021 to guide our activities. Our focus during this period was on unauthorised water extractions and controlled activities at locations where there was high ecological and hydrological value.

In early 2021, we set 4 enduring priorities to guide our activities into the future.



Accurate measurement

Water take to be measured and reported accurately and reliably in line with the law.



Aboriginal cultural values

We will endeavour to protect and prioritise Aboriginal cultural and spiritual values in water regulation. Water is central to the cultural and spiritual values of Aboriginal peoples and is intrinsically linked to their obligations in caring for Country.



Unlawful activity, significant harm

We will continue to take action against water users who undertake unlawful activities, which causes significant harm to other water users, communities or the environment.



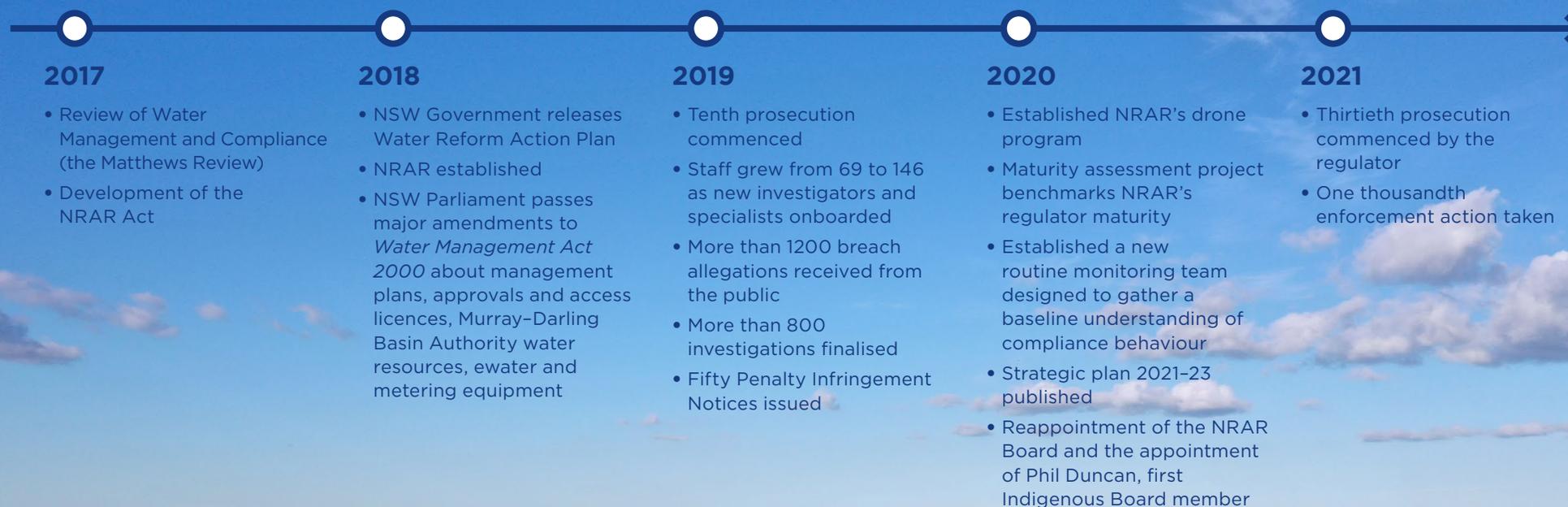
Unauthorised structures

Unauthorised structures stop water from getting where it should on the floodplain. We will regulate water users with unauthorised structures on the floodplain that divert water from important cultural or environmental assets.

Becoming a best-practice regulator

NRAR has embraced the mandate we received to win back the public's confidence in water regulation. Now, we are 3 years along, more self-assured and well on our way to becoming a mature, modern regulator. We recognise the work we must still do to encourage behavioural change in water users, and we are working towards becoming a best-practice regulator. The following pages provide additional detail on some key achievements in the advancement of our regulatory maturity.

Our journey to date





Maturity assessment

We have benchmarked NRAR's regulator maturity using the Modern Regulator Improvement Tool developed by the Australasian Environmental Law Enforcement and Regulators network. In 2020, we conducted an in-depth assessment of NRAR's regulator maturity via several stages including evidence collection from element champions, internal self-assessments, structured interviews and external expert review and verification of the maturity results.

NRAR has acted on the recommendations from the 2020 assessment report through establishment of an ongoing maturity advancement program that includes the following programs:

- establishment of a Regulatory Intelligence function
- review and remake of NRAR's corporate documents, including NRAR's new strategic plan and corporate operations plan
- continuing development of a strong brand for NRAR
- communicating the outcomes of our work to assist the public to understand how the work we do benefits the community and the environment.

Strategic plan 2021-23

One of our key achievements for 2020-21 is the publishing of [our strategic plan 2021-23](#).

The strategic plan is a clear statement of our purpose, strategic goals and priority actions that will enable our team to do their best work. It also lets the public know why we are here, what we do and the future we are working towards.

This plan will be our guide through the challenges ahead and will ensure we remain focused on our commitments and goals.

We have made a firm commitment to be future focused, confident and collaborative in the next phase of our growth. In the next 3 years we want to:

- increase voluntary compliance
- embrace learning and innovation to develop and improve our actions and results
- use data intelligently to increase our reach and impact
- engage effectively with stakeholders to promote transparency and accountability
- become a leading regulator.

Licensing and approvals probity review

During 2020–21, NRAR commissioned OCM consultants to undertake a probity review of NRAR’s licensing and approvals function to examine the adequacy of governance and probity arrangements. This included considering the effectiveness of corruption prevention, transparency to the community and instilling probity and ethics in the culture of the Licensing and Approvals branch. This also included examining compliance with documented procedures for licensing and approvals work.

The review found that the licensing and approvals function within NRAR presents a relatively low risk of serious and systemic corruption, large-scale fraud or large-scale maladministration. The review also recognised that as a relatively new organisation, many policies and procedures are still under development.

OCM identified 3 key gaps in control measures and provided a suite of recommendations to address the priority areas, specifically in relation to:

- understanding and declaring conflicts of interest
- segregation of assessment officers from determination officers by location and grade
- transparency of licensing and approvals work to the public (e.g. via searchable registers, records of approvals, conditions, variations).

We have addressed key recommendations by documenting and refining roles, responsibilities, processes and procedures and storing them in WATERS. Managers have also implemented recommendations via improved use of systems and decision-making tools, and through existing staff engagement channels such as personal development plans and regular meetings. We will continue to address these priority areas in 2021-22.

Our accredited quality management system

NRAR is implementing a quality management system (QMS) in accordance with ISO 9001. It requires a process approach based on the ‘plan-do-check-act’ cycle and risk-based thinking to plan and document processes, their interactions, resourcing, review and continuous improvement. The QMS provides a formal structure for NRAR’s assurance activities and aligns with attributes measured by the Australasian Environmental Law Enforcement and Regulators network (AELERT) modern regulator improvement tool, against which NRAR assesses our maturity as a modern regulator.

Our culture journey: The NRAR Way

As an organisation, we uphold 6 core values:



We are committed to building a strong culture at NRAR, where the diversity and strength of our people are leveraged to deliver meaningful results for the community and environment. As a young organisation, we are taking the time to check in with our staff regularly, to ensure we are continuing to embed our way of working and developing the culture that will drive our success.

In May 2021, we ran a series of staff engagement sessions, where we collected feedback on our cultural strengths, cultural challenges and any shifts in our culture. The results of this engagement showed that as NRAR has rapidly grown over the past 3 years we remain positive, look forward to embracing the future of regulation, and are progressing towards regulatory maturity through collaboration, positivity and empowerment.



Our achievements

We're proud to say that as a result of our efforts this year, we've seen significant change in attitudes to water use and positive outcomes for the community and environment.

In this section we provide an overview of some of our key achievements from the past year to 30 June 2021, which demonstrate the leaps forward NRAR is making to become a more effective, efficient, transparent and accountable regulator.

These achievements show how we are:

- changing behaviors and attitudes so we can maximise voluntary compliance with water laws
- improving our monitoring so we can pinpoint exactly where water is being used and by whom
- improving water regulations and supporting our stakeholders to successfully navigate their way through these regulations
- improving our services so we can get a better outcome for the community and the environment.

Changing attitudes and behaviours to increase voluntary compliance



We work closely with water users to help them understand water laws, their obligations as water users, and the consequences of not following the rules. We know water users, industry and the broader community want to see evidence that water laws are being regulated effectively and positive outcomes for the community and environment are achieved. Our aim is to increase voluntary compliance with the law, minimise the need for enforcement and give the community confidence the system is working.

Outreach and education

We know most water users want to do the right thing, and we proactively engage with and educate water users to help them understand the rules and make it easier to comply. In 2020–21 we've been out in the community, working with water users and running online campaigns to improve compliance.

Raising awareness through routine visits

Since October 2020 we've been visiting more properties across the state than ever before to increase water users' understanding of the conditions of their water licenses, how to comply, and the role of NRAR in protecting our precious resources. Sixty per cent of people we visited in 2020–21 stated they were unaware of NRAR and our role in regulating water use prior to our visit.

Being out in the field and meeting more water users face-to-face is critical to increasing understanding and rates of voluntary compliance. As part of our routine monitoring program we committed to visiting 3 times more properties in the 2020–21 water year than in any previous year. To 30 June 2021, we visited 2,623 properties across all regions of NSW, up from 1,150 in 2019.

‘Know the Rules’ campaign

We launched the ‘Know the Rules’ campaign in early 2021, which uses educational resources to help water users understand and comply with their licence and approval conditions.

This campaign was based on the results of our community benchmarking survey and anecdotal evidence that suggested most people genuinely want to comply with water laws. However, many simply don’t understand the law and the conditions of their water licences.

The first campaign video, Licences and Approvals, encourages water users to check their licence and approval conditions through the NSW Water Register to ensure they comply with water laws.

The video was launched in April 2021 on NRAR’s website and was promoted through a series of WaterNSW Facebook and Twitter posts, eNewsletter, at stakeholder events, and in the local media. Immediately following the launch of the campaign, there was a 20% increase in the number of overall users of the NSW Water Register, a 30% increase in new users, and more than double the normal website visits.

‘Water, what are you really taking?’ campaign

The ‘Water, what are you really taking?’ campaign tackled the complex and far-reaching impacts of people taking water without following the rules. We examined this issue from the multiple viewpoints of Indigenous people, communities, agriculture, industry, and the environment – showing the far-reaching consequences of people not following the rules and highlighting the harm this can cause.

To date, we have produced 2 videos for this campaign: one featuring Bendermeer farmer Bruce Chapman who equates unlawful water user as stealing from neighbours. The second video explores the spiritual connection of Indigenous people to rivers, through the voice of proud Gomeri man and NRAR Board member Phil Duncan (pictured right). From his perspective, water is the lifeblood running through the veins of the land and First Nations People.

These videos formed the basis of a 3-month advertising campaign on radio and through social channels. A third video in this campaign will be released in the coming year.





Compliance campaigns

In the past 12 months, we've undertaken campaigns to monitor and audit compliance in areas we know non-compliance has a high impact. In 2020-21, we've targeted a range of different water users to monitor and audit including bore extraction, horticulture, irrigators and local water utilities.

Coffs Harbour horticulture campaign

During 2020-21, NRAR conducted a third and final round of 52 inspections for the Coffs Harbour horticulture campaign. We used aerial imagery and desktop assessments of dams and properties to determine sites to be inspected. On the ground, we used surveying equipment, sonar depth sounders and drones to collect evidence. Unfortunately, 78% of the properties inspected were found to be non-compliant to some degree and were issued with an immediate sanction or referred for further investigation. Through this campaign, NRAR has identified that engagement and education should be extended beyond farmers and industry associations to include other ancillary organisations such as conveyancers, banks and supply chain organisations to achieve greater compliance. We are pleased to report that since our campaign, more landowners have become compliant.

Bore extraction limits campaign

This proactive and ongoing campaign named 'Operation Drawdown' aims to oversee and assess compliance with bore extraction limits applied to water supply work approvals that involve aquifer interference across NSW.

In 2020-21, NRAR staff assessed compliance with water licence conditions through a combination of auditing digital records and on-site inspections by field staff.

Bore audits took place on properties in Griffith, Leeton, Coleambally, Hillston, Dubbo, Narromine and Narrabri. NRAR conducted hundreds of desktop audits and made dozens of site inspections, which revealed that 90% of water access licences were fully compliant.

Of the remaining 10% of water access licences inspected, just over 4% had minor compliance issues and owners were sent advisory or warning letters. The remaining 6% were found to have major breaches and owners were issued penalty notices or will be the subject of further investigations and possible prosecutions.

The bore extraction limits campaign has been identified as an enduring priority for NRAR, and we will continue to be focused on changing behaviours through positive stakeholder engagement, particularly helping water users to better understand the rules, to achieve greater voluntary compliance.

Shepherding environmental water allocation in the Hunter

NRAR worked closely with the Department of Planning, Industry and Environment and Water NSW to facilitate the successful movement of Australian Bass through the Hunter River to their spawning grounds downstream. We actively monitored irrigators during the environmental water release to ensure water was not extracted without authority during the transit of the water through the river from Glenbawn Dam to Liddell Weir. Through our monitoring activities we identified a range of non-compliance including lack of logbooks, no meters installed, failing to place water orders and over pumping in one day. Compliance is important for the health of waterways and the animals that rely on those waterways to survive. We will continue to engage with the irrigators in this region to increase voluntary compliance.

Local water utilities' compliance with Special Purpose Access Licence

To better understand the level of compliance in the local government sector, NRAR ran a 2-phase campaign in the Sydney, Hunter and Northern Rivers regions. The campaign focused on assessing compliance with Special Purpose Access Licences for town water supply. The campaign found that 85% of local water utilities were compliant with conditions and works listed on approvals, 13% were non-compliant, requiring minor administrative changes, and 2% were under investigation.

All local water utilities held active approvals at the time of the site inspections and maintained current logbooks or relevant SCADA records to account for water take. Based on these findings, NRAR has made several recommendations regarding water carters, reporting systems, the clarification, promotion and education of the existing legislation surrounding town water supply and usage, and the development and transition to an online self-reporting model for local water utilities.

Floodplain harvesting

Our 'eyes in the sky' program, enabled by spatial technology, has been helping us keep a close eye on potentially unexplained water take around 3 flood events over the course of 2020-21. This program, undertaken in close collaboration with Department of Planning, Industry and Environment - Water, has facilitated the comparison of water accounting and satellite estimates of water take over the course of these events. The results of this analysis will be used to identify suspicious water activity, and if we have reason to believe water has been taken without authorisation, we may refer these matters for further investigation.

NRAR has also prioritised monitoring and auditing compliance of development on regulated floodplains that could potentially significantly affect flow distribution, particularly unlicensed flood works on floodplains that effect assets of high ecological, economic or cultural importance.

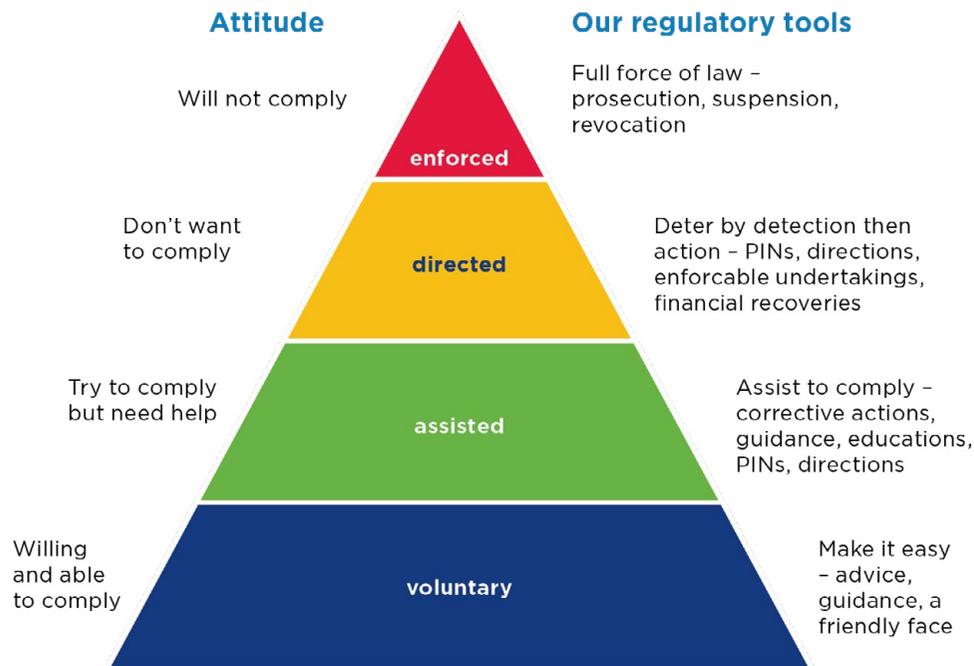


Investigations and enforcement

While we will always work closely with water users to assist them if they're unsure what they need to do, we act when needed to enforce compliance. We make sure there are appropriate consequences for people who break the law. This not only creates a powerful deterrent to breaking the law, but also gives the majority of law-abiding water users confidence that the system is working.

Rather than simply applying a punishment, our aim is to ensure that users know the rules and why they're in place, so they're more likely to take them seriously and avoid future breaches of the law.

Our approach to compliance



Actions at the top of the pyramid support actions at the bottom by clarifying expectations and demonstrating that those who don't comply will be held to account.

We approach investigations on a case-by-case basis and use our discretion to determine the appropriate response. We consider the following factors when investigating an alleged breach.

Harm	Culpability
Impact on the environment, community or individual water users.	Were the actions deliberate or a result of ignorance? Is there a history of non-compliance?
Public interest	Attitude
Has the conduct caused widespread community concern? Does action need to be taken to promote general deterrence?	Has the offending party cooperated? Are they willing to comply?



We have a range of enforcement tools available when managing compliance.

Punitive measures

- Statutory directions
- Penalty infringement notices (PINs)
- Civil action
- Prosecutions

Other tools

- Education or awareness campaigns
- Education measures (individual and collective)
- Advisory letters
- Written and verbal warnings
- Cautions
- Enforcable undertakings
- Corrective action requests

These regulatory responses allow a balanced approach to non-compliance that stops the improper conduct, deters future non-compliance and promotes changes in attitudes and behaviours.

In the past year, we commenced more than 1,500 cases, we finalised more than 1,300 and identified more than 400 breaches. We issued a total of 843 enforcement actions to water users for not complying with water laws such as taking more water than approved by their licence, taking water without the use of metering equipment, using unapproved water pumps, and constructing water supply works without approval.

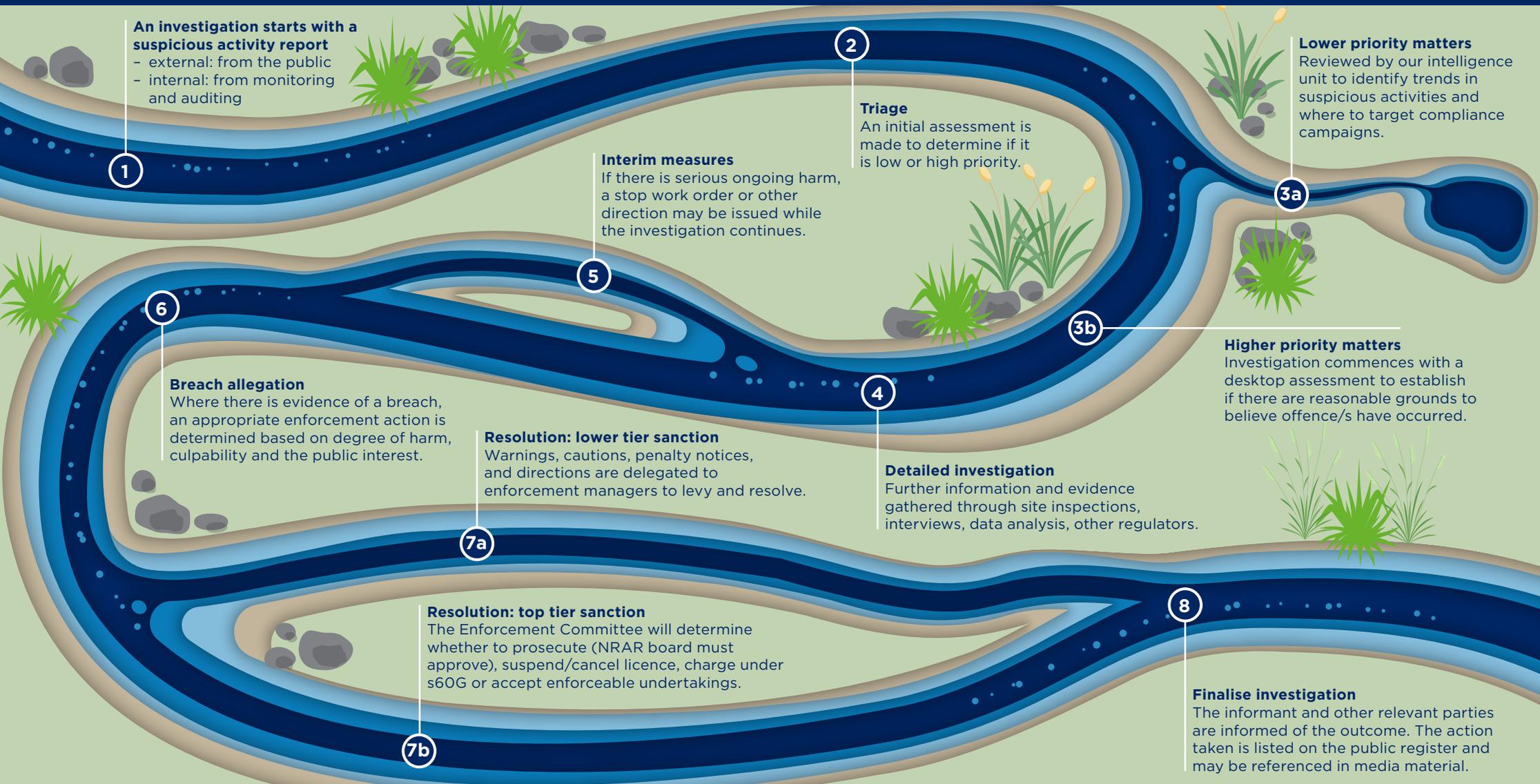
We completed 7 prosecutions, of which 4 were successful, and commenced another 8 during 2020-21.

843 enforcement actions taken in 2020-21



Lifecycle of an investigation

At NRAR, we approach investigations on a case-by-case basis and use our discretion to determine the appropriate response. This graphic demonstrates the process we follow.



CASE STUDY

Working with Fisheries to improve fish habitat

NRAR is working with Fisheries (a division of the Department of Regional NSW) to improve fish migration and habitat by removing unlawful structures along waterways across NSW.

One notable outcome of this collaboration was the removal of 2 block banks located in the bed of the MacIntyre River at different locations along the NSW-Queensland border, which were found to be unlawful following an inspection by NRAR in late 2020.

In addition to issuing a penalty, NRAR made the landowner remove the unlawful structure. As a result, Fisheries saved significant resources through not having to remove the structures themselves, which, in turn, could be reallocated to other fish programs.



Golden Perch
Image: NSW Department Primary Industry

CASE STUDY

Working with NSW Resources Regulator to remediate unlawful mining sites

In February 2021, NRAR worked with the NSW Resources Regulator on a joint inspection of a property near Inverell, where illegal mining in a creek had been identified.

NRAR worked with the NSW Resources Regulator on a strategy to remediate environmental harm to waterfront land at Frazers Creek, a fifth order waterway and a freehold property adjacent to the waterway. In addition to penalty notices, NRAR issued a direction to the landowner to remediate the waterfront land.

The landholder complied with the order, removing materials from the waterway in 3 locations that were having an adverse effect on flows and water quality, and stabilising several sites on the creek bank where vegetation and soil had been removed. Rock and soil were spread on the disturbed areas, sediment fences installed, and seeding and revegetation encouraged to address environmental impacts.

CASE STUDY

Unlawful water take on border

A vineyard owner in Wentworth Shire in the state's far south west pleaded guilty to 8 charges of unlawful water take in a case which concluded in November 2020. A total of 1,378 megalitres of water was taken from the Murray River between April 2016 and March 2019.

The magistrate noted that there could be no doubt that the offences were committed deliberately by the defendant. The defendant had previously been issued a stop-work order and penalty notice in 2015 for similar conduct.

The defendant was fined \$131,250, ordered to pay court costs and publish a notice in *The Land* and the *Sunraysia Daily* about the judgement.

NRAR conceded that no direct harm to the environment was occasioned by the offending, but that there was likely harm caused by the unlawful taking of that amount of water during a drought as it could adversely impact other water users' rights to take water. This would then adversely affect the general allocation of water in the system, as well as harm the regulatory system.

The court rejected the evidence of likely harm but agreed there was harm to the regulatory system.



Demonstrating the results of our work

When NRAR was established in 2018, a large cross-section of the community felt that water regulation activities were hidden from view and that water laws were not being properly enforced.

We're pleased to report that we've come a long way since then. Each year, we keep stakeholders informed about what we're doing and why, whether through traditional media, social media, our website or stakeholder events. NRAR aims to be a best-practice regulator that is transparent in our operations and accountable to the people of NSW. We are committed to providing clear and specific information about the services we provide and the activities we undertake.

NRAR community benchmarking survey

In 2020, we commissioned our first community benchmarking survey to better understand the knowledge and needs of water users, key stakeholders and the general community. The survey also provided a baseline to help track high-level community views on the enforcement of water laws and the regulator since our inception.

Some of the key findings from the survey included:

- broad support for NSW water laws to be enforced so that water is shared fairly
- widely held views that most water users do the right thing, with only a minority of rule breakers

- moderate confidence in the enforcement of NSW water laws
- the level of awareness of NRAR and what we do
- most regulated entities and stakeholders want to hear more about water enforcement, licensing and regulation.

Reporting on our compliance activities across the state

In the past year, we developed an interactive and easy-to-understand dashboard on our website to keep the public informed about what we're doing to improve compliance among water users. These reports show exactly where we've been, what we've found, and what compliance actions we've taken.

Publishing our activities

We continually update our website with information that informs the community about our organisation's priorities and how we're investing our resources. This information includes:

- minutes from all Board meetings
- records of stakeholder engagement activities
- updated versions of our guiding policies
- water sharing plans and compliance campaign outcomes
- regular updates to our public register that details enforcement actions taken under the *Water Management Act 2000*
- speeches made by our Chief Regulatory Officer.

Our media presence in 2020-21



655 Tweets



621 Facebook posts



57 press releases issued

50 media interviews conducted

1,569 pieces of media coverage

Total reach



2.4% increase in Facebook reach

897.2% increase in Facebook impressions



38.1% increase in unique website views

Changing the approach – innovative compliance techniques and technology

Since our establishment, NRAR has stepped up the approach to monitoring and auditing water use across NSW, investing in best-practice technology that allows us to pinpoint exactly where water is being used and by whom. We've also put more people in the field to increase our understanding of what is happening on the ground, so we know where to focus our efforts to increase compliance. Our achievements over the past 12 months are setting us up to effectively and proactively monitor compliance and support deterrence of unlawful activities.



Creating a snapshot of compliance across NSW

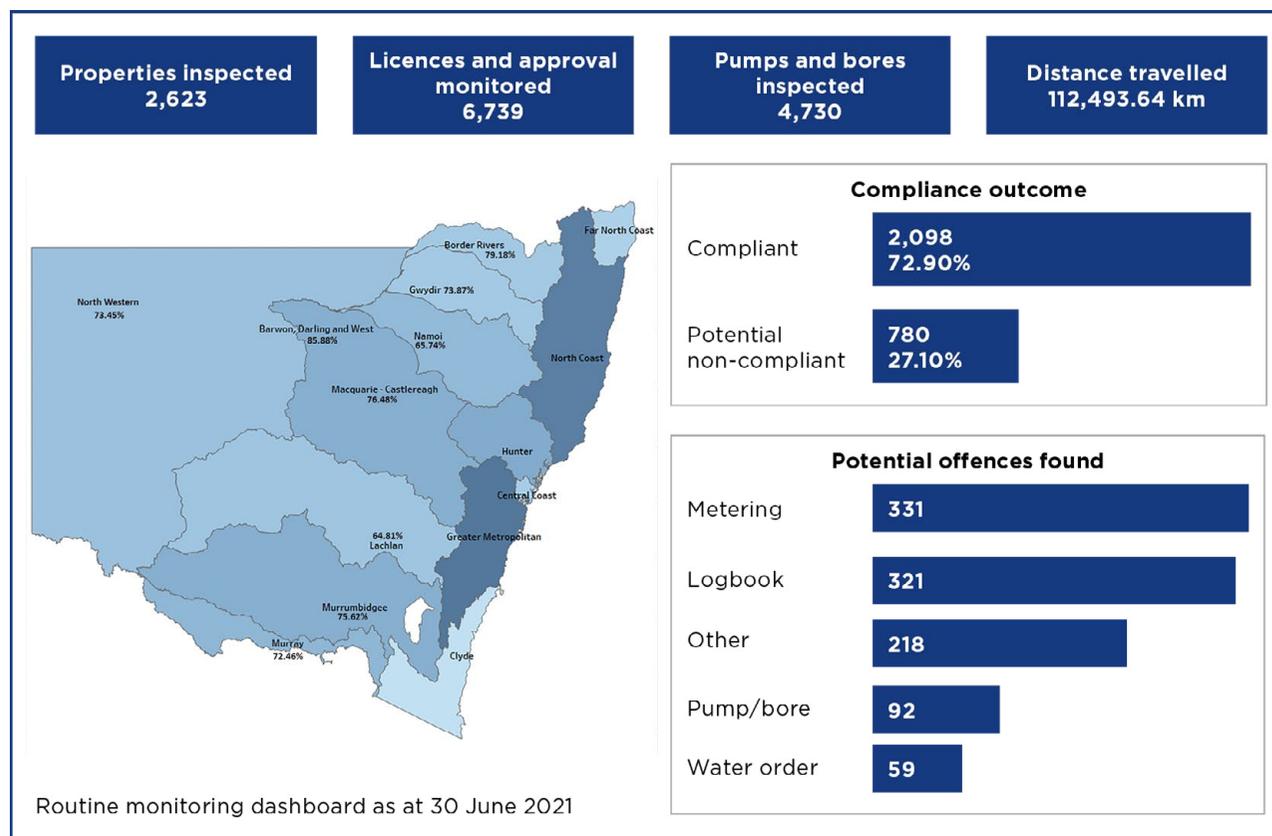
In October 2020, NRAR employed 30 new staff for a 12-month-long program to create a snapshot of compliance with water laws across NSW. This routine monitoring program set an ambitious target, with 2,623 sites visited between October 2020 and June 2021, more than double the amount visited in 2019.

This program is giving us a snapshot of compliance issues and trends across the state. In particular, it has provided insights into whether:

- water management work is constructed in accordance approvals, such as the size and number of pumps
- water is being taken in compliance with restrictions on timing, such as by flow conditions, water ordering or specific extraction limits
- water users are complying with restrictions on what water can be used for, such as using water taken under a stock and domestic licence for those purposes
- water users are monitoring and recording water taken in compliance with their approval, such as having an accurate meter installed or maintaining a logbook.

To overcome logistical and reporting challenges of significantly increasing the inspection rate, we developed a fit-for-purpose planning tool that paired with software to maximise travel efficiency. Data was captured on site using smartphones or tablets, feeding directly into NRAR's case management system. Using this technology maximised field time, minimised office time and ensured we could spend more time with water users.

The program is delivering results. We are understanding rates of compliance, area by area, and have a dashboard on our website showing compliance rates by region and local government area. At 30 June 2021, the compliance rate was 72.9%. We are beginning to better understand regional differences and barriers to compliance and are engaging with water users face-to-face (in a COVID-safe way), ensuring they have the information they need to comply.



Using technology to increase our knowledge and support our activities

NRAR faces a significant challenge ensuring we have visibility and knowledge of water use in NSW. Our role covers:

- an area of more than 800,000 square kilometres
- more than 42,000 water access licenses across 58 water sharing plans
- 33,000 works approvals for irrigation infrastructure
- more than 10,000 constructed on-farm water storages greater than 1 hectare in size.

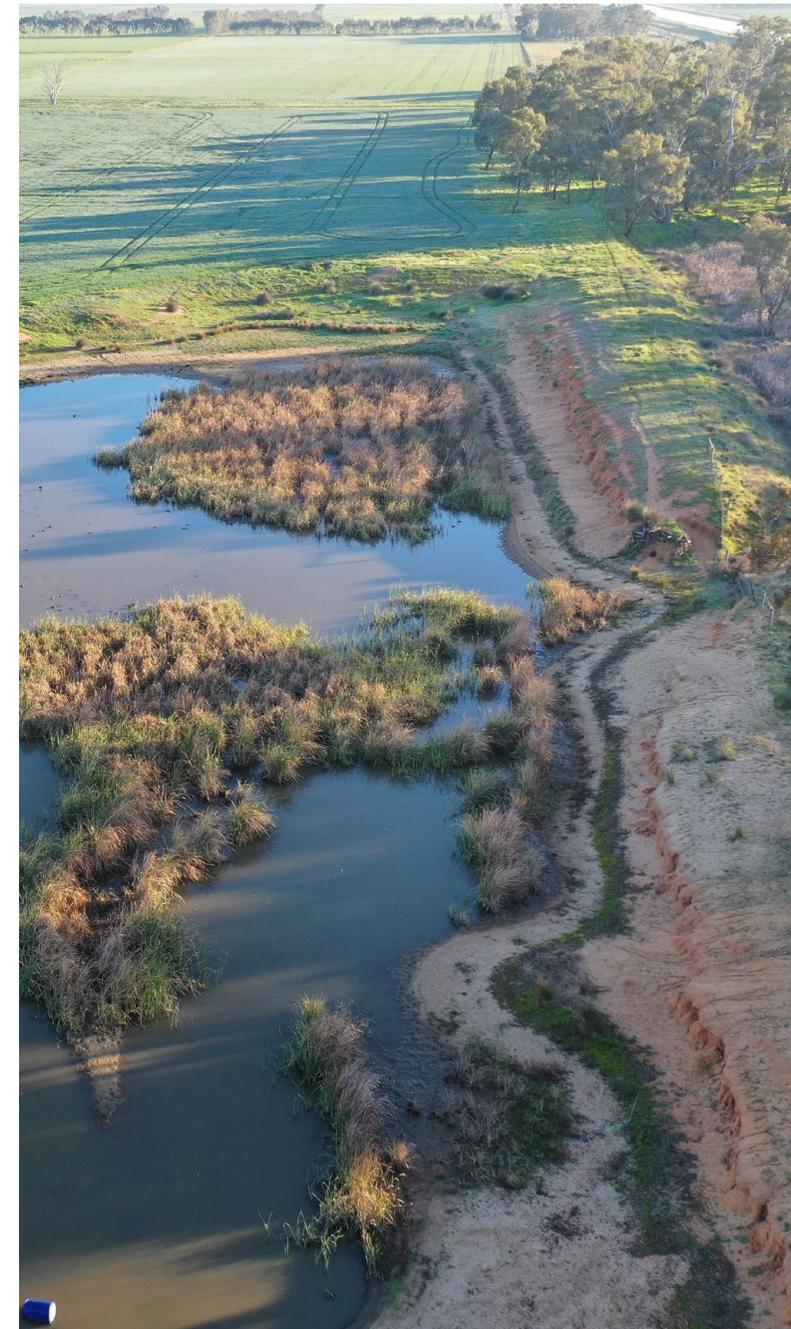
To meet this challenge, NRAR has developed an operational technology strategy to provide a framework, tools and guidance on how best to deliver results. As part of the strategy, NRAR has invested in a range of enduring and dependable technological improvements in 2020–21 to build our regulatory capability and improve our understanding and knowledge of where and how water is being used. With this information, NRAR can make better regulatory decisions and can focus our efforts where they are needed most.



Remotely Piloted Aircraft System

NRAR began developing a drone program in mid-2019, with the program becoming fully operational from September 2020. NRAR now has 18 drones located in 14 offices across NSW, along with 44 CASA-accredited NRAR pilots. The program has given us rapidly deployable ‘eyes in the sky’ that reveal details not apparent from ground level, and of some features that are inaccessible by foot. It gives us safe access to dangerous locations and facilitates contactless inspections where required to meet COVID-19 restrictions. Drones can also be used to map sites at very high resolution.

Drones cover large areas quickly, collect a large amount of data in one trip and can be deployed on demand to get real-time data – all this delivers improved detection of non-compliance, stronger evidence and a deterrent effect to drive voluntary compliance.





Spatial and satellite data

NRAR has substantially advanced our monitoring and auditing capabilities over the past 12 months with integrated database, spatial and satellite data analytics to support our work.

A crucial element of undertaking our activities is having access to the best available spatial and satellite data. We have access to:

- medium resolution Sentinel and Landsat satellite imagery, providing global coverage every 5–16 days
- high resolution Planet satellite imagery, providing daily coverage across NSW
- very high resolution SkySat, which we can task to image any area in NSW with less than 72 hours' notice
- very high resolution aerial photography from Nearmap, mostly across NSW coastal areas.

We use these sources both in near real-time and for historical audits to monitor and assess:

- changes in on-farm water storage volumes through detection of surface area changes
- wetting and drying of irrigation canals
- changes in river channel bed and bank conditions over time
- assessing the spatial area and timing of irrigated cropping on properties
- direct application of irrigation water to crop fields during cease-to-pump flow rules.

NRAR is leveraging the rapid advances in global satellite data accessibility and availability by partnering with Geoscience

Australia who has developed the Open Data Cube satellite image repository.

This repository includes almost every Landsat and Sentinel satellite image captured across Australia since the 1980s, creating a useful tool for analysis. We also partner with the Murray–Darling Basin Authority, NASA and the CSIRO as well as being supported by the supercomputer processing facilities at the National Computational Infrastructure at the Australian National University in Canberra (pictured below).

We use our partners' datasets, programming expertise and the supercomputer to quantify any changes in the area of surface water extent for man-made dams or other water storages we are interested in assessing. This site-specific information is then merged with water licensing, water accounting and property ownership databases to prioritise a shortlist of sites for further desktop and/or field assessment.



During 2020–21, we’ve used our spatial and satellite data capabilities to deliver some important outcomes including:

Bore extraction limits dashboard

We’ve created an automated process for assessing whether a groundwater bore is compliant with its bore extraction limit, a 10-fold improvement on the manual process. We can combine this function with detailed satellite image analyses of crop water usage and dam volume changes to further investigate any potential non-compliance against volumetric entitlements and metered usages for surface water resources.



Routine monitoring mapping

The routine monitoring program visited more than 2,600 sites during the year, across sometimes remote locations. To support the team on the ground, we used our spatial capability to develop hundreds of maps from ArcGIS that showed property boundaries, ownership details and licensed works overlain onto the latest high-resolution aerial photography available for each site. These georeferenced maps, when used within NRAR’s iPads and Avenza Maps system, allowed us to see exactly where the field team was on the ground and when on the move, and clearly identified the locations of the licensed works to be inspected.

Integrated data analysis

Data about water management and regulation is held across many different databases, and the lack of integration between data sets has created challenges in proactively detecting non-compliance. Data analysis is a key part of regulating water use, undertaking investigations and enforcing the rules. NRAR has invested significant resources in developing bespoke database views through our NRAR Intel initiative. For the first time, we are able to provide automated linkages between key databases and spatial data sets such as property boundaries. This underpins our monitoring and compliance activities and provides NRAR officers the ability to independently analyse information and data.

CASE STUDY

Identification of oversized dam under construction

In July 2020, NRAR received information that there was a dam under construction that was larger than its approved size, posing a threat to nearby sensitive creek systems. It was important for NRAR to act quickly, however the area was difficult to access with farm storage under construction.

NRAR deployed a drone to quickly and accurately map and measure the dam construction without exposing our staff member to risk. The information from the drone was used to calculate the area and volume of the dam, identifying that it was in breach of approval conditions. A significant water take had not yet occurred, but was imminent, and it was only because of NRAR’s ability to quickly assess the size of the dam via drone that this was avoided.

NRAR shared the evidence with the landowner and issued penalty notices to both the landowner and the contractor constructing the dam. The landowner voluntarily complied with rectification measures including reducing the holding capacity of the dam and revegetating the disturbed area. The contractor also created a new procedure to prevent any future non-compliance in constructing dams. This was a non-adversarial and pragmatic resolution, achieved on time to prevent excessive water take and subsequent environmental harm.

Fostering and supporting regulatory change

We know the regulatory framework is complex, and we work closely with water users and industry to support them with regulatory change or to navigate existing regulations. We take the time to simplify information on complex rules to help water users comply. We understand the regulatory framework, and we collaborate with other government bodies to foster regulatory change where needed to deliver more effective and efficient regulation, as well as improved compliance.

Championing improvements for better outcomes

During 2020–21, the Regulations under the NRAR Act were amended to add 14 agencies as ‘relevant agencies’, including NSW Police, enabling NRAR to more readily exchange information to:

- help ensure the safety of NRAR field staff
- support cooperation with agencies in other states and at the federal level for cross border matters
- promote increased regulatory effectiveness and efficiencies in line with NRAR’s legislative objectives.

We also worked closely with Department of Planning, Industry and Environment during the year to provide feedback on water law, where we believe improvements could be made to make the rules easier for water users to understand and comply with, and also for NRAR to enforce. Some of the key areas we provided feedback on during 2020–21 included:

- metering legislation
- excluded works exemptions
- mandatory compliance audits
- charging for water illegally taken
- civil regulatory tools.

To ensure a structured and streamlined approach to formal feedback about the operation and effectiveness of legislation in practice, we established a process for the NRAR Board Chair to submit an appraisal of key legislative and policy issues to Department of Planning, Industry and Environment’s Chief Executive Officer, Water, every 6 months.

The COVID-19 pandemic was also a source of regulatory change to ensure we could continue to undertake our investigations. NRAR actively participated in ensuring the extension of legislative measures under the *COVID-19 Recovery Act 2021* to allow use of audio-visual links for conducting investigative interviews remotely. We are championing the permanent adoption of this change by the NSW Government. Allowing use of audio-visual links makes it easier for people being interviewed by NRAR and their legal representatives to attend interviews in a more efficient way for both water users and NRAR.

Non-urban water metering framework

The NSW Government is implementing a robust metering framework to improve the standard and coverage of non-urban water meters across NSW. This is an important step in helping to build community confidence in how the state's water is managed.

The new non-urban water metering framework began in December 2018 and will be implemented through a staged roll-out over 5 years.

The new rules apply to water supply works (such as pumps) that take water from regulated rivers, unregulated rivers and groundwater systems under a licence, where the take can be measured with a meter.

Ensuring all relevant water users have an appropriate meter installed will mean:

- the vast majority of water take is accurately metered
- meters are accurate, tamper-proof and auditable
- undue costs on smaller water users are minimised
- metering requirements are practical.

In 2020–21, NRAR played a significant role in supporting implementation of the NSW non-urban water metering framework through increasing water users' knowledge and understanding of the metering rules and designing a program to verify compliance. The program will be run annually until 2024.

The aims of the program are:

- to deliver an effective compliance and enforcement program that builds transparency about market and industry performance and holds water users to account to comply with the non-urban metering law
- to deliver consistent, proportionate, firm and fair compliance and enforcement responses to water users
- to engage with broader water users to enable and encourage them to act early to ensure that they comply with future laws on non-urban metering.

In the past 12 months, the focus of the program has been on:

- verifying compliance with metering rules for Tranche 1 water users that were required to have a meter in place for all surface pumps 500 millimetres and above by 1 December 2020
- communicating with Tranche 2 water users in NSW inland regions that must comply with the rules from 1 December 2021.

We've focused on providing clear and accurate information to stakeholders about metering requirements to overcome uncertainty and misinformation, and ensure water users understand their obligations. We also undertook site inspections of all entities that were required to be compliant in Tranche 1 by December 2020. We've collected quality data to inform further decision making and actions to achieve compliance.

Tranche 1 compliance results

As at 30 June 2021, we had inspected 364 active pumps above 500 millimetres that were required to have accurate meters installed, be validated by a certified professional and be able to transmit water take to a central database by 1 December 2020.

Twenty-three per cent of those were fully compliant with the rules and a significant number of water users who owned other works had made a reasonable effort to comply.

In the 3 months since 30 June 2021, we have inspected a further 210 pumps and the compliance rate has increased to 54%. We will continue to work with water users to increase compliance.



Changing our level of service for better outcomes

Our service delivery has come a long way since we were established in 2018. Over the past year we've made important progress in our journey to maturing as a regulator by delivering more efficient and effective services that, ultimately, help us to deliver better outcomes for the community and environment.



The importance of licensing and approvals to the regulatory system

Licences and approvals are the entry point into the regulatory cycle. They are a critical part of the regulatory framework as they provide conditions which licence holders must comply with. These conditions are imposed to avoid or minimise impacts of the activity. Licences and approvals are the key tool that translates water legislation and water sharing plan rules into rules for licence and approval holders to follow. Licences and approvals are therefore an important preventative regulatory tool. Additionally, licences and approvals provide certainty to holders that they can undertake their licensed activities in a lawful manner.

Faster approvals and improved service

Councils, developers and landholders have benefited from our efforts to make application processes easier and faster. Over the past year, we've:

- achieved a 50% reduction in the average completion time of integrated development referrals
- achieved a 75% reduction in the average completion time of controlled activity approval applications
- reduced the number of open controlled activity approvals from 174 to 70
- reduced customer complaints following the introduction of a duty officer to receive and answer general enquiries.

These improvements were reflected in our customer survey results.

 **79%** of respondents were very satisfied with NRAR

Cutting down on unnecessary applications

We developed a waterfront land e-tool in response to the significant number of landowners who had been making unnecessary applications for controlled activities, which were resulting in unnecessary expenses and time delays. By guiding them through a series of questions, the waterfront land e-tool helps landowners determine whether they require approval for controlled activities on their land.

Since its launch in the second half of 2020, the tool has been accessed

230 times

IPART's draft decision on water licensing fees

Over the past 2 years, NRAR has been participating in the IPART process to determine how our water licensing fees will be set from 2021 to 2025.

NRAR's business case, which was submitted to IPART in June 2020, was supported by engagement with water users and other government agencies to ensure water compliance activity is funded in a way that supports the enforcement of water laws and protects water users' entitlements.

One of the key challenges in this business case was for NRAR to justify the substantial increases in funding relative to the 2016 IPART determination, which was necessary for meeting the statutory obligations under the NRAR Act.

Latest update

In September 2021, IPART released its final determination recommending that over 98% of forecast compliance costs be recovered from water users and government contributions. The final determination capped water user prices meaning the bulk of these compliance costs will be recovered via government contributions. Overall, this IPART final determination is an endorsement of the prudence and efficiency of NRAR's operational model which has been implemented by NRAR in its first 3 years.





‘I am looking forward to encouraging higher compliance numbers through our activities to increase awareness and understanding, improve our monitoring and auditing capability and enforce non-compliance where required. For me, success looks like consistently high levels of voluntary compliance, and we are putting in place the strategies needed to achieve this.’

Grant Barnes, Chief Regulatory Officer

Our people

As at 30 June 2021, NRAR had 155 staff across 21 locations in NSW. Here's just a snapshot of our diverse team.



Dr Ivars Reinfelds
Spatial Information and
Modelling Specialist

Ivars gained a PhD in fluvial geomorphology from Monash University in the mid-1990s and has a breadth of experience across water, geomorphology and ecology, and the use of spatial and modelling tools to manage rivers and streams. At NRAR, Ivars has the role of Spatial Information and Modelling Specialist. Ivars manages a small but talented team of spatial and database analysts whose work underpins many of the compliance initiatives undertaken by NRAR. With a strong background in the science of rivers, catchments and aquatic ecosystems, Ivars has a keen interest in applying science and technology to improve compliance and water management outcomes across the Murray-Darling Basin and NSW. Ivars is often called upon by NRAR's and the Crown Solicitors Office's legal teams to provide expert opinions and reports for NRAR's prosecutions.



Sharon Ryan
Senior Project Officer
Secretariat Support

Sharon joined NRAR when it was established in 2018, and is the Executive Assistant to the Chief Regulatory Officer and Secretariat for the Board. Her experience working in a variety of roles including human services, real estate, criminal justice, and energy and resources, underpins her ability to support NRAR's role to serve the people of NSW. As the Chief Regulatory Officer's Executive Assistant, she is a key member of the executive team and is uniquely placed to provide trusted and valued assistance, guidance and support to all levels of NRAR. Sharon won the NRAR Kindness Award 2020 in recognition of her work supporting the psycho-social well-being, health and safety of the NRAR team.



Sarah Walsh
Field Safety Supervisor -
Routine Monitoring

Sarah joined NRAR in late 2020 as part of our newly established routine monitoring team. Her role involves leading, scheduling, organizing and guiding a team of up to 10 field officers to undertake property inspections and audits, stakeholder engagement and data collection. Sarah has a background in biotechnology and research and development, and brings a wealth of experience in project management to the role. She was attracted to a role at NRAR following recent droughts and bushfires, which highlighted for her the importance of natural resources management. Sarah was keen to play a part in improving compliance and environmental outcomes, which she is successfully achieving through her role in routine monitoring.



Rabee Shreet
Paralegal

Rabee was previously a lawyer in Syria before coming to Australia as a refugee. Unfortunately, due our strict legal admission rules he has to undertake further study in order to practice as a lawyer in Australia. Rabee joined NRAR through a program called CareerSeekers that supports refugees to rebuild their professional lives in Australia. At NRAR, he prepares legal briefs for our prosecutions and court work, as well as providing general support for the legal and investigation team. In May 2021, Rabee was accepted into a law course to work towards becoming a practicing lawyer in Australia.



Margaret Sexton
Director Regulatory
Innovation

Margaret joined NRAR when it was established in 2018. Her experience working on a range of difficult problems in areas such as child protection, education and disability services is invaluable to NRAR's role overcoming some of the challenges of water management in NSW. Margaret leads the development and implementation of NRAR's regulatory framework and regulatory priorities. She has been instrumental in 2020-21 in developing organisational capability in intelligence and innovation, research, data analytics, remote sensing and technology. Prior to NRAR, Margaret ran the NSW Leadership Academy, a program for high potential senior executives, where she worked with and learnt from incredibly talented people. The experience strengthened Margaret's commitment to taking on new challenges and striving for excellence.



Susan Johnson
Field Officer - Routine
Monitoring

Susan is a proud Anaiwan woman of the Gamilaraay nation and plays an important role at NRAR, meeting landowners and water users and working with them to understand how they use water and helping them comply with the rules. Susan is the face of NRAR, and uses her interpersonal skills to sensitively manage her monitoring activities to build trust and respect. Susan came to NRAR after a career as a freight train driver and small business owner. She applied to NRAR after seeing the impact the drought was having on farmers in her area, which brought home how critical effective water management was. Susan is also the current Chairperson of NRAR's Aboriginal Support Network and she enjoys helping out when our members need support with any issues.

Governance

NRAR Board

The NRAR Board is a statutory body representing the Crown. The Board is independent and any directions by the NSW Minister for Water, Property and Housing are made in accordance with the provisions of the NRAR Act. The Board consists of 4 members appointed by the minister. Members (including the Chair) hold office for 3 years.

The Board operates under the NRAR Board Charter and members adhere to the NRAR Board Code of Conduct. The NRAR Board Operating Manual outlines the Board's governance and working arrangements. The NRAR Board meets monthly, or more frequently, as required. The regulator makes decisions under the authority of the Board.



From left to right: The Hon. Craig Knowles AM, Bruce Brown, Ilona Millar, Leslie (Phil) Duncan

Chair

The Hon. Craig Knowles AM

The Hon. Craig Knowles AM is the inaugural Chair of the NRAR Board. He has held the role since 15 December 2017. In addition to this role, Craig is Senior Trade Commissioner Auckland for Austrade, with responsibility for Austrade operations in New Zealand, Papua New Guinea and the Pacific Islands. He also holds the position of Consul General of Australia to New Zealand. Craig was previously Chair of the Murray-Darling Basin Authority (MDBA) (2011-15) and a member of the Central Sydney Planning Committee (2009-15).

Craig was a Member of the NSW Parliament for 15 years (1990-2005), representing the electorates of Macquarie Fields and Moorebank. During this time, he held a number of senior ministerial roles in the NSW Government, covering a variety of portfolios, including Planning and Housing (1995-99), Health (1999-2003), Infrastructure, Planning and Natural Resources (2003-05) and Forests and Lands (2003-05).

Board members

Ilona Millar

Ilona Millar is an inaugural member of the NRAR Board. She has held the role since 15 December 2017. Ilona has more than 20 years' experience advising on natural resources law, including complex, multi-jurisdictional transactions. She also advises on the development of innovative responses to climate change and sustainability problems. In May 2008, Ilona joined Baker McKenzie, where she is currently a Partner in the Environmental Markets team.

Bruce Brown

Bruce Brown is an inaugural member of the NRAR Board. He has held the role since 15 December 2017. Bruce is a Director of Coleambally Irrigation Co-operative Ltd (as well as the Chair of its Finance and Risk Management Committee) and Coleambally Irrigation Mutual Co-operative Ltd. He has served as both director and member of several state government and Australian Government committees, including the National Rural Advisory Council (1999-2005).

Leslie (Phil) Duncan

Phil Duncan joined the NRAR Board in 2020. Phil is Gomeroi man with more than 38 years' experience working with Indigenous people, communities and government. He is well-respected within the water community and has acted as the Chair of the Basin Community Committee of the Murray-Darling Basin Commission since January 2020. He also represents the rights and interests of Indigenous people in NSW as a member of numerous other committees and councils.

Throughout his career and volunteer community work, Phil has worked extensively with Indigenous people and government to improve the lives of First Nations people. He also provides high-level policy, strategic advice and leadership to key Indigenous representative organisations, universities and state and federal government agencies.

NRAR is humbled to have Phil on the Board. He brings a current and well-practiced understanding of community concerns and the cultural importance of water to our Board.

NRAR Chief Regulatory Officer



Grant Barnes

Grant Barnes is NRAR's inaugural Chief Regulatory Officer. He has held the role since April 2018. Grant has more than 10 years' experience in senior leadership roles in freshwater science, strategic planning and science leadership in both established organisations and startups. As NRAR's Chief Regulatory Officer, Grant is responsible for day-to-day operations. This includes building NRAR's regulatory capacity and capability to deliver on the NSW Government's commitment to best-practice regulation, building and sustaining effective relationships with key stakeholders, establishing good governance and high levels of ethical practice within NRAR, and working with the Board to progress its agenda. Grant was previously General Manager, Licensing and Regulatory Compliance Services for Auckland Council, where he was responsible for ensuring compliance across a wide range of building consent, environmental protection and resource management matters.



The year ahead

Our regulatory priorities

NRAR has identified 4 annual priorities for 2021–22, in addition to our 4 enduring priorities, which give us a sharp focus to positively impact matters within our legislative remit in the year ahead.

[NRAR's regulatory priorities document](#) sets out our annual priorities for 2021–22, how we use the priorities as part of our strategy and what our approach is to setting priorities.

In addition to the regulatory priorities, our [strategic plan for 2021–23](#) is a clear statement of our purpose, strategic goals and priority actions that will enable our team to do their best work. It also lets the public know why we are here, what we do and the future we are working towards.

Our 4 regulatory priorities for 2021–22 are:



Water metering and duly qualified persons

The non-urban water metering framework will ensure accurate measurement of water take, supporting us to deliver an effective and efficient compliance program. Duly qualified persons (DQPs) are integral to ensuring the effectiveness of this program, so we will undertake checks to ensure consistency and accuracy of their work.

Region: statewide



Irrigated agriculture

We will target a range of irrigated agriculture activities, which may include certain crop types and irrigated agriculture activities that extract large volumes of water.

Regions: Hunter, Murray, Murrumbidgee and the Far North Coast



Overdrawn accounts

Water take that is unaccounted for can affect river flow conditions, which may negatively impact local communities and river environments. The water taken can also impact downstream water users and prevent them from accessing water at times critical to their livelihoods.

NRAR is notified of all overdrawn accounts and will be targeting those who repeatedly go into deficit. We will be targeting this problem with a combination of education, communication, audit and enforcement to change attitudes about accurate water account keeping.

Region: statewide



Extraction limits in at-risk sources

Bore extraction limits will be implemented in at-risk sources, which will allow for the management of water extraction from often complex and fragile sources that play an important role for natural habitats and the quality of dependent ecosystems.

Region: Lachlan, Lower Murrumbidgee and Namoi

Building our capability

NRAR has spent 2020–21 working on a number of new initiatives that will be launched in the year ahead to continue to build our capacity and maturity as a regulatory.

Some of the key initiatives that will be implemented in 2021–22 include:

Bathymetric boat

We will soon roll out a SonTek HydroSurveyor M9 (pictured right) to allow us to:

- accurately measure dam storage volumes for any size dam
- create height to volume storage rating tables and 3D models used to benchmark dams
- accurately measure flow rates in open channels, as typically found in large irrigation.

Panametrics flow meters

The bathymetric boat will be supported by panametrics flow meters, which give us the ability to measure in-pipe flows accurately on virtually all pipes from 50 millimetres to well over 1 metre in diameter.



Paperless operation

To improve efficiency and transparency, NRAR's drone program will move to paperless operation in 2021–22, which will automate logbook entries for pilots, record actual flights, monitor pilot accreditation and drone registration, and book and plan missions.

E-tools

Following the success of the waterfront land e-tool, NRAR is developing a controlled activity approval exemption e-tool. The controlled activity exemption e-tool aims to help controlled activity applicants and consultants determine if a controlled activity approval exemption may apply to their proposal under the Water Management (General) Regulation 2018. The tool is available from August 2021, and will:

- help identify if there is an exemption that applies to the site or proposed activity
- provide support in the interpretation of exemptions
- be used in conjunction with the waterfront land e-tool.

NRAR portal

To improve our licensing and approvals service to customers and stakeholders, from August 2021, all new controlled activity approvals and integrated development approvals will be processed through the NSW Planning Portal. Using the portal will allow for online submission and payment for controlled activity approval applications, as well as provide the ability to track assessments and delivery timeframes. The portal supports online applications for all transaction types and eliminates the need for processing of low-risk controlled activity approval applications by issuing an automated approval. Applicants will have more transparency over their application than ever before and will enjoy faster turn-around times, with payments and helpful links all built into the service.

NRAR Assist

NRAR Assist is a self-service tool available from August 2021 that will empower stakeholders to find their own answers to general enquiries. It will make it easy to identify the correct agency or entity to assist with the enquiry or application. The tool can also be used to report suspicious or unauthorised activities. NRAR Assist will make it easier for stakeholders to find the information they need and make sure they are quickly directed to the right agency to meet their needs.



How you can help

We are here to ensure the safe management of our precious water resources in NSW. We can't do it alone – water users and the community have a vital role to play in water management. Here are some of the things you can do to help.

Learn more

 Visit our website nrar.nsw.gov.au

Follow us

 [@NRAR](https://twitter.com/NRAR)

 www.facebook.com/NaturalResourcesAccessRegulator

Report suspicious water activities

 1800 633 362  nrar.enquiries@nrar.nsw.gov.au

Contact us

Natural Resources Access Regulator
Locked Bag 5022
Parramatta NSW 2124

 1800 633 362  nrar.enquiries@nrar.nsw.gov.au

www.nrar.nsw.gov.au

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