

Solomon Lecture 2025 transcript

MK Ladies and gentlemen, can I have your attention? Thank you. Well, good morning. My name is Madonna King and I want to welcome you to the 2025 Solomon Lecture, both those of you here and our audience in different States of Australia and New Zealand too. A special welcome to other information commissioners and ombudsmen from across the nation.

This is our annual signature event marking International Access to Information Day. And this year's theme, ensuring access to environmental information in the digital age. How do we do that? What kind of data exists in this space and how can it be used for good? How do we ensure that it can be accessed in a timely fashion? And in an age of disinformation, what can we trust? Just some of the questions we'll canvas today after our keynote speaker, Sheree Marris, takes us on a journey.

But first, let me introduce Rhan Hooper, who will begin our morning with a Welcome to Country. Rhan is a Kooma and Kunja man from Cunnamulla, known for his impressive career in Australian rules football, having played for both the Brisbane Lions and Hawthorn Hawks. Since his football retirement, he's dedicated himself to celebrating Indigenous culture through both art and education. He crafts traditional artefacts, such as didgeridoos and boomerangs, while also teaching children about the importance of cultural heritage. Please welcome Rhan Hooper.

[Welcome to Country by Rhan Hooper]

MK Can we give him another round of applause? That was just great, Rhan. Not only an acknowledgement to country, but we've also had a lesson in the didgeridoo. A few housekeeping matters before we get underway. Could I just request you turn off or you silence any device that you have with you? Our bathrooms are located downstairs on level 0, via the lift or past the lifts and to the right or alternatively past the Edge coffee shop on level 1. Seems like you have lots of options, at least here. We are in a space that is part of the State Library and as such are governed by its policies and its standards. And in the unlikely event of an emergency, we would just follow closely the instructions given to us by staff.

And now, to officially open our morning, I'd like to introduce the Information Commissioner, Joanne Kummrow, who was appointed to that post in April last year. An experienced public sector leader, she's worked across public, legal and integrity sectors and has a strong personal commitment to advancing Government

transparency, accountability and the public interest. Ladies and gentlemen, please welcome Joanne Kummrow.

JK Thank you Madonna. And thank you Rhan, before he leaves the building. I've got chills from his performance on his Yidaki. Good morning everybody. It's a privilege to be here today to welcome you to the 2025 Solomon Lecture. On behalf of my team at the Office of the Information Commissioner, I extend a warm welcome to everyone who's joining us here today at the Queensland State Library. And we also have a number of senior public leaders, RTI practitioners and also information commissioners and ombudsmen around Australia and as Madonna said in New Zealand, so a shout out to all of them and thank you for their support joining us today online.

The Solomon Lecture is a signature event held by the Office of the Information Commissioner each year to mark International Access to Information Day, known internationally as International Day for Universal Access to Information. Today's event celebrates the 10th anniversary of the designation of the 28th of September as the International Day for Universal Access to Information by the UNESCO General Conference, which recognises the fundamental right of the public to access information under Article 19 of the UN Declaration of Human Rights. This day was also adopted by the United Nations General Assembly in 2019.

The Solomon Lecture is named in honour of Dr David Solomon AM, who was the chair of the Independent Review Panel, appointed by the Queensland Government, to review Queensland's original freedom of information laws in 2007. The reforms presented to the Queensland Government in the Solomon report and the new Right to Information 2009, which was passed by the Queensland Parliament, provide our State with strong and clear access to information laws that promote and protect the public's right to access information held by Queensland Government agencies, departments, local governments, health and hospital services and other Government entities.

Now more than ever, the public need access to timely, accurate and up-to-date Government-held information and data. Accurate and factual information is necessary to counter increasing mis- and disinformation in the public domain. Information is power. It is vital to assist and empower members of the community in making decisions about their lives and livelihoods, to understand their personal histories, to help them exercise their right to vote, decide which school to enrol their child in and to understand the decisions of Government that affect them.

Government needs to be trusted as a source of accurate information and data and plays an integral role in ensuring its free and fulsome flow to the public. Queensland's

RTI laws need to be administered by a strong public sector that understands their fundamental role as custodians of Government information, not as gatekeepers. As such, they play a key role in ensuring that they record the work and decisions of Government, that information is accessible to the public, unless it would be contrary to the public interest to do so, and securely retained for future generations.

This is where the role of my office comes in, as we provide assistance, guidance and training to agencies and their staff to help them administer the RTI Act as Parliament intends. Through best practice administration of the RTI Act, we work with agencies to maintain public trust in Government and uphold the Parliament's intention in enacting the RTI Act.

This year's UNESCO theme for International Access to Information Day is ensuring access to environmental information in a digital age. Conjecture around the health of our environment and the impact of changes to our climate in Australia, including on our livelihoods, agricultural production, tourism, public health and wellbeing, the impact on our homes, businesses and natural environment around us, can be balanced through access to information on environmental matters.

In Europe, the UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters was adopted on the 25th of June 1998. This convention, known as the Aarhus Convention, named after the Danish city in which it was signed, protects every person's right to live in an environment adequate to an individual's health and wellbeing. The Aarhus Convention links environmental rights and human rights and Government accountability and environmental protection. It grants the public rights and imposes on parties to the Convention and public authorities obligations regarding access to environmental information. And it allows for informed public participation in the development of environmental policy and laws and Government decision-making.

The subject of the Aarhus Convention goes to the heart of the social licence that exists between people and their governments. The Convention is not only an environmental agreement. It's a convention about Government accountability, transparency and responsiveness.

While no such convention or agreement of this nature exists in Australia, Queensland's RTI Act has as its object to give the community a right of access to Government information, unless on balance it would be contrary to the public interest to do so. The public interest factors in favour of disclosure in the RTI Act make clear that information should be disclosed by Government agencies if it could reasonably be expected to

contribute to the protection of the environment, or disclosure could reasonably be expected to reveal environmental and health risks or measures relating to public health and safety.

Open data platforms are an important mechanism for proactive disclosure and provide access to a range of Government held information, data and information. For example, the Australian Government Department of Climate Change, Energy, Environment and Water website includes an environmental indicators dashboard providing scientific information about Australia's natural ecosystem. Similarly, the Office of the Supervising Scientist webpage provides information about protecting people and the environment, including Kakadu National Park, from the effects of uranium mining.

Closer to home, the Queensland Government's Department of Environment, Tourism, Science and Innovation website provides access to real-time data on air quality, which is updated hourly. These are just some of the digital platforms that promote transparency, accountability and empower citizens to participate in environmental issues of importance to them.

My message to community members, researchers, scientists and organisations, is that you have the right to access environmental information from Government. For example, information about water management, biodiversity, climate change and land use. My message to agency leaders is to champion the strong public interest in your agency making a broader range of environmental information and data sets available without the need for a formal RTI request. And where a decision is required to be made on a formal request, RTI practitioners need to undertake their decision-making role consistent with Parliament's intention that there is a strong public interest in making environmental information available where it can be used in the protection of the environment and ensuring it's accessible to all.

The public interest in being transparent about the risks and problems our natural environment, climate and communities face through access to information is fundamental in the protection of our environment and ecosystems. Today we welcome marine biologist and science communicator Sheree Marris to deliver the 2025 Solomon Lecture. Aligning with this year's theme, Sheree's keynote presentation is about the reef of truth, what coral can teach us about power, access and action. Looking through the delicate prism of coral reefs, Sheree will take us on a journey examining environmental information in shaping resilient ecosystems and informed societies.

In the Coral Sea, off the coast of Queensland, we are privileged to have the largest and most diverse reef ecosystem, the Great Barrier Reef. Its scientific, cultural and

environmental value are world-renowned and more than 40 years ago UNESCO added the reef to the World Heritage List for its outstanding universal value. Many within and outside of Government are working hard to safeguard this natural wonder, which is at risk from land-based pollution, introduced pets, pests, sorry, not pets, such as the crown-of-thorns starfish, fishing and coastal development. Solutions to our big problems need the involvement and collaboration of many.

A keystone to addressing environmental problems is the availability and accessibility of accurate and timely environmental information to members of the public, environmentalists, scientists and the public and private sectors. Today's Solomon Lecture gives us the opportunity to dive into a unique and vulnerable ecosystem to explore our precious environment and the role access to information plays in its protection so it can be protected for the future. Thank you.

MK Thanks Joanne. I loved both the clarity of what you said about the information available and the roles that are played in making that both accessible and transparent. Now, our next goal, now our next guest will provide the Solomon Lecture, hosted by the Office of the Information Commissioner to mark this International Information Day. And as you heard from Joanne, the lecture is named in honour of David Solomon AM, a former Queensland integrity commissioner, as well as chair of that review of the FOI Act 1992.

This year, to be delivered by Sheree Marris, who says if she had her choice, she would have gills instead of lungs, a breath hold to rival the sperm whale and a sparkly green mermaid-esque tail. Since she doesn't, she spends most of her time blowing bubbles and developing innovative environmental projects that bridge the gap between science and the public. Sheree is a marine biologist, an award-winning science communicator and an adjunct at James Cook University in Townsville. She works at the intersection, I guess, of research and policy and public engagement, collaborating with scientists, governments and conservation organisations to make environmental science accessible, actionable and engaging. I won't say more other than I know you will love what she is about to present. Please join me in welcoming Sheree Marris.

SM Thank you. I would argue that pets can be pests in some context. So, I just want to say that. And because we're talking about the digital age, I'm going to be all techie. And instead of having paper, I'm actually going to use my iPad. So, look at me go. Ooh. Absolutely.

Thank you to the Office of the Information Commissioner Queensland and to everyone for joining in person and online, including my family and colleagues in Melbourne. I just

want to say it's a glorious 25 degrees and sunny here and if I don't return home you're going to know why. Now it's an honour to speak here on International Access to Information Day and to acknowledge Dr David Solomon whose legacy reminds us that access empowers action.

Now today's theme ensuring access to environmental information in the digital age couldn't be more urgent, especially in a world where disinformation moves faster than facts and the truth often gets buried before it's believed, sadly. Most people turn to policies or legal frameworks to understand why access breaks down or how to fix it. Me? I tend to look to saltwater systems where even the most unlikely life forms reveal that when the flow of information is right, ecosystems of all types can thrive.

Now, I want you to imagine a creature with no brain, no bones, that is stuck to one spot, unable to move. Yet, it creates living structures so vast they can be seen from space. And once a year, in perfect harmony, billions of these animals release new life into the ocean in one of nature's most spectacular events.

RECORDING PLAYED

SM Welcome to the world of coral everybody. What you saw wasn't just beautiful, it was a biological symphony, a vivid example of what becomes possible and the magic that can happen when everything flows, connection, energy, purpose, survival. And if we're paying attention, coral becomes more than one of the world's greatest natural wonders. It becomes one of our greatest teachers. You're probably thinking, how? Well, it mirrors the systems that we rely on above water, showing us that strength comes from connection and collapse begins when those connections break.

Now, coral might look simple, but believe me, it's quite an overachiever. It doesn't just build reefs, it builds systems. Kind of like a natural engineer, if you like, forming tropical seas or transforming tropical seas into vibrant, bustling, dynamic underwater cities. Ecosystems that are powered by diversity, cooperation, balance and flow. And like corals, societies flourish when information flows freely and fairly. When people are connected not by control, but by access. Access to data, access to timely, accurate environmental information. Access to each other in time and when it matters most.

Now, this isn't just marine biology. This is a masterclass in access, power and action. But also, coral, it's kind of like the gift that keeps giving. It also shows us what happens when that flow and when that access is broken, when that connection breaks down, when the water warms, when the balance tips, when the warning signs come too late. Reefs bleach, they die. Ecosystems unravel. Systems collapse. Because nothing exists

in isolation. Not in nature and not in society. Corals depend upon algae. Fish depend upon coral. Entire economies depend upon healthy reefs. Break one link and the whole system strains. Break several and it starts to fall apart. And believe it or not, it's no different on land. When essential environmental information stops flowing, ecosystems don't just falter, they fracture. Species vanish. Livelihoods suffer. And the ripple effects don't just stop at the shoreline. In a digital world, those ripples quickly become tidal waves, almost tsunami-like.

So let me ask you this. What if the biggest environmental risk we face today isn't just bleaching, pollution or warming, but the failure of access itself? What happens when vital information we need to act is buried, delayed, distorted, or it doesn't reach the people who need it when it matters most? And if we're looking for guidance on how we get this right, we just need to look to nature. It's spent billions of years refining what works and when it doesn't, it goes extinct. It is that simple. And it's really humbling to think that everything we need to build strong systems that are resilient, efficient, self-correcting, they already exist here.

But when nature and while nature listens to the signals, we tend to override them or ignore them when they're inconvenient. While ecosystems respond with balance, we often respond with bureaucracy, barriers, red tape. So we don't need to reinvent the wheel, we just need to pay attention. Because arrogance has never protected an ecosystem. But perhaps a bit of humility might.

Now, as a marine biologist, I've spent my career working with scientists, governments, communities. And as you can see here, the occasional octopus with no sense of personal space whatsoever. That's just one of the joys of my job. But if there's one principle that I keep coming back to in my work, it's this. You can't protect what you don't understand and you can't act on what you don't know. And that's why access to environmental information isn't a luxury, it is a lifeline. And it's a right. And like any right, it only works when people know that they have it.

Nature doesn't have a freedom of information process. It responds to the signals that it receives. But humans, we need systems that ensure reliable information that flows. And it needs to flow and we want it to flow when it counts, not just when it's convenient. And in a world of unprecedented change, that can be the difference between protection and collapse, between informed decisions and irreversible consequences.

And if you want to see that difference in action, you don't have to look any further than the ocean, my happy place. A single coral polyp is almost invisible. You wouldn't know it existed. But together, they build vast living structures, rich, complex, essential. They

generate economic power, shelter biodiversity and support cultures across the globe, including ours. They don't just survive, they shape the world around them. They're proof that small things and small actions when connected can achieve extraordinary outcomes.

And just like coral polyps build reefs, people, when they're connected through trusted, timely information, can be empowered to build something so much greater than themselves. Which brings me here.

Access to environmental information isn't a bureaucratic tick box or something that should rise and fall with political tides. It's essential infrastructure, core to good governance, and it's also a public right. So let's dive deeper, not just into coral, because I could talk about that until the cows come home, but into the currents of access itself, because what flows through marine ecosystems shapes their survival, and what flows through ours shapes our institutions. Excuse me.

And when it comes to access, access isn't just about transparency just for transparency's sake. It's not a portal or a PDF. It's the bridge, a critical bridge from data to understanding, from awareness then to action. Access means early warning, a faster response, public trust, and yes, cost savings. Because when people have the right information at just the right time, they can be empowered to act. When they don't, we can lose ecosystems, time, public confidence.

And in an age of misinformation or fake news, and in a time of ecological urgency, public confidence has never been more critical. Just look back at the oil spill that hit Moreton Bay in 2009. Over 60 kilometres of coastline was contaminated. There was a delayed response, preventable damage and if environmental data had have been clearer and shared faster, the impact would have been smaller.

Or take the giant spider crab aggregations in Port Phillip Bay, Victoria. Every year hundreds of thousands of crabs gather en masse to moult shedding their shells in a vulnerable ritual that draws naturalists, divers, snorkellers, photographers and fishers from all around the world. But despite its popularity, there was no baseline data, no research and no accessible information to guide its protection, no rules to stop the increasing number of people targeting them and fishing them while they were soft and defenceless. It was akin to shooting fish in a barrel. The community was calling for urgent action. Not to shut it down, but to pause the targeting by fishers until we knew that the population could handle this intense fishing pressure.

What we needed at that time was science. What we got was silence. So the community stepped up. We became data collectors. We recorded sightings, temperature, behaviour, and elevated this natural event nationally and internationally. Because when information isn't shared or it doesn't exist, communities are forced between watching things unravel, potentially go extinct, or taking matters into their own hands.

And ultimately, if we don't know what's happening, how can we protect it? That's the power of access. Not just receiving the information, but knowing what's missing, having the tools and the confidence to ask for it and to help fill in the gaps so we can actually take informed action that matters. Because in nature, delay often determines whether recovery is possible or whether it's irreversible. Without access, communities disengage, misinformation floods the space and opportunities for innovation, for early action, for shared solutions, they slip through our fingers.

Delaying access to accurate environmental data isn't just inefficient, it's costly, it's dangerous and ultimately, it's avoidable. And access isn't just about it being available, it's about usability, clarity, trust, having confidence in the information and making sure it's tailored to the audience in which it's targeted to.

And unfortunately now, we live in a world where deep fakes feel more convincing than documentaries and Facebook comments carry more weight than peer-reviewed science. We're drowning in content, that's undoubtable, but we're starving for truth.

So we don't just need facts, we need sticky, irresistible, undeniable information that can break through the noise. But too often, it doesn't. Scientific papers are locked behind paywalls. Government data is buried in dense reports, bureaucratic language, or selectively released to suit a narrative at the time. Meanwhile, media headlines twist science into panic or paralysis because that's what gets views. And fear sells, we know that. The thing is, in the digital age facts don't disappear, they're there. They just get outperformed. And when facts lose the attention war, fiction fills the void. And that's a dangerous place for people and the planet.

Take South Australia's ongoing algal bloom, the largest in Australian history. It should have been declared a national emergency. It was akin to an underwater bushfire. But there was silence. Citizens were panicked, environmental groups, fishers, businesses desperate for clarity. Was it safe to swim? Could I eat the fish? Is my business going to survive this? There was no leadership, no action. So the community acted. They collected photos, footage, recorded the damage, shared images so devastating they went global. Just look at this pylon, once vibrant and teeming with life. Now lifeless and

bare. This is a haunting before and after snapshot of what happens when warning signs are missed or ignored.

It wasn't until these images started getting traction, months later, did the Government respond. That's the cost of delayed information and that cost is going to cost people livelihoods. That cost is going to be felt for decades. And sometimes the facts just aren't delayed. They're denied. We're seeing Irukandji jellyfish, tiny little box jellyfish, move further south. It's a potential public health risk, massive financial risk and burden on the health system. But instead of transparency, there's silence. I've seen these jellyfish first hand around the Whitsundays. But fear of tourism losses keep the data in the shallows. Or the shadows. Probably both. And the science is denied.

Now, that kind of thinking doesn't just undermine public safety, it undermines public trust. Because when environmental information is withheld to protect reputation or economy, we don't prevent damage, we actually multiply it. And layered over all of this are the invisible gatekeepers, the algorithms, the platforms, where you get engagement over evidence. Algorithms feed us not what we want to hear, not what we need to know, but narratives that reward outrage over insight, which is why access must go beyond portals. It must be based on credibility, clarity, courage, because in the digital age, access is activism. And if factual, reliable information is to remain effective, it must do more than simply exist. It must be seen, it must be heard, and it must be felt. And we need environmental communication that is clear, credible, compelling and engaging.

Information that breaks through all that noise, that brings people together, that empowers, that inspires and that fuels action. Access doesn't just empower the public, it enhances Government performance, it reduces duplication, improves transparency, builds credibility, informs and it prevents costly delays. It's not just a civil right or a civic right, it's infrastructure, strategic infrastructure for a more efficient, informed public administration, a catalyst for smarter governance.

So we've talked about what happens when information is delayed, distorted or buried. But, you know, there's good news. What happens when we get it right? What happens when information is open, clear and trusted? Well, it becomes more than data. It becomes infrastructure. Just as essential as roads, hospitals or clean water.

Just look at Queensland's grey nurse sharks. Now, their comeback wasn't driven by Government alone. Once driven to the brink, with fewer than 2,000 left and only a few hundred breeding adults, their story now is one of hope. When data on their critical aggregation sites was shared and citizen scientists and divers added their observations, communities and governments could act together. Fishing restrictions

were introduced and key habitats like Wolf Rock were declared and protected. And now, populations are showing signs of a slow recovery, around 5% growth each year. It's proof that when data is shared, fear can turn into protection and knowledge into recovery.

Another example, Tangaroa Blue, they have a marine debris campaign. They've collected 20 million pieces of rubbish, which has now been removed, mapped, tracked. Their insights have informed bans on plastic items, sparked corporate accountability and achieved in months what would have taken years of formal investigation, not to mention the dollars to do it. That is where the real magic happens. Because when information flows both ways, from Government to people and then back, extraordinary outcomes become possible.

These stories echo the quiet brilliance of coral, where power doesn't come from control, but from connection. Quietly, cooperatively, polyp by polyp. No single coral builds a reef, but joined together, they shape coastlines and sustain communities. That's the blueprint. Not central command, but collective contribution. Coral just doesn't teach us how to connect, it models what thriving systems do when the right inputs flow in the right places. When information is timely, trusted and open, it doesn't just inform people, it empowers them. It moves communities from passive observers to powerful protectors. It transforms data into action and it builds something more durable than any policy. It builds trust, which seems to be a rare commodity.

This is the type of infrastructure we don't lay in concrete. We build in collaboration with shared knowledge and community. And when information flows, communities can become early warning systems. Local knowledge becomes really valuable intelligence. Action doesn't just trickle down, it ripples outward and magnifies its impact. And institutions grow stronger because they're rooted in the people that they're serving. From Tangaroa Blue's marine debris campaign to citizen science shark tracking, we've seen what is actually possible when access is shared.

But access to reliable information doesn't just happen by accident. It must be prioritised, protected and powered. Because when access falters, so does everything it supports. Ecosystems, communities, trust and action.

What we need now is a shift. From need to know, from right to know, to want to act. Because access isn't just nice to have. It's essential public infrastructure. And the public has a right to it. Because the power to protect ecosystems, restore trust and galvanise change doesn't just sit in Government offices. It sits with traditional owners, scientists, students with everyday people like you and I. And when people are

connected to trusted, timely information, they don't just absorb it, they use it, they defend it, they pass it on.

Now, the reef has always been our teacher. We've just probably been distracted by its brilliance and colour. It grows through connection, it flourishes through transparency, it survives through community. And healthy societies depend on healthy environments. And access is the key that connects them.

So let's be the reef. Let's build something extraordinary, layer by layer, insight by insight, person by person, community by community. Because when we get access right, we don't just inform. We empower, we protect and we shape the future that every one of us depend upon. Real change doesn't just start with someone else. It starts with us. And that, like coral, is how we build something that lasts. Thank you.

MK So good. So good. How good was that? Not only information-packed, but just wrapped in such lovely language. What was it, the term? Biological symphony. And this is a bit off track, but you look at that marine life. What is your favourite marine life of everything you've seen?

SM I should say coral. Coral, because it's so incredible, because it can teach me so many different things.

MK So many different animals, isn't there?

SM Oh, it's extraordinary. And the thing that I love about our marine world is that we know so little, so we're still discovering so many different species all the time, every day. So the magic just continues.

MK Okay, so let the magic continue. So if I could just take the opportunity to quickly reintroduce our guests. Sheree Marris, our keynote speaker, as you know. Professor Brendan Mackey, the director of Griffith University's Climate Action Beacon. And his research is focused on problems and solutions for advancing zero and climate resilience development in ways that are both socially just and nature positive. 300 academic publications to his name in related fields of environmental science and policy. Please welcome Professor Brendan Mackey. Thanks Brendan.

Suzanne Thompson is founder of Yumbangu Aboriginal Cultural Heritage and Tourism Development Aboriginal Corporation, which manages a 22,000-acre property in outback Queensland. And here Suzanne's redefining the very idea of social enterprise and appropriate cultural trading methods and practices that will ensure a safe and transparent economic future for Indigenous people. She also serves as the

First Nations integrity member to the Emissions Reduction Assurance Committee, Carbon Abatement Integrity Committee and is chair of the Advisory Committee in the Queensland Decarb Hub. Suzanne, welcome.

ST Thank you.

MK And Suzanne Winson is our Right to Information commissioner. Sorry, Stephanie. We've got one Suzanne. Stephanie. Stephanie is an experienced executive public sector leader and lawyer with a significant interest and focus in constitutional, regulatory and administrative law matters. Her experience runs across three countries. And here in Queensland, she has been appointed right to information commissioner until next year. Stephanie, a big warm welcome.

And just as I sit down, I'm going to start the first question to you Brendan. I want to look at what kinds of information exists. Sheree made the point in her speech that access gives power. And Joanne raised a few areas, websites with real-time digital information many of us would not have heard of. How big is the scope of information out there environmentally?

BM Thanks, and thanks for your presentation. That was great. And I really enjoyed our First Nation person and his didgeridoo playing too. That was such powerful, powerful music, I thought. Coming to your question, I think it's kind of useful to, I like to draw the distinction between data and information, and information and knowledge. We can also draw the distinction between knowledge and wisdom, which some people think is only achieved by a minister in their third term of office, but sometimes a bit earlier. That was my information joke for today.

MK Okay. Can you flag the jokes before you say them, perhaps?

BM Other audiences got a bigger laugh, but not to worry. It must be in the delivery. But, you know, just taking the example of the Great Barrier Reef, we now have an enormous amount of data, but it's that, to translate that to information, even scientific information is a major task. It requires a lot of scientific expertise to do that. But then to translate the scientific information into information that is, say, policy relevant is another form of translation. And then to translate it in ways that what I like to call the common and concerned citizen needs it and, in order to be able to act upon it, again is another translation exercise.

So when we talk about data, we're talking about it can be observational data, it can be qualitative, semi-qualitative, it can be quantitative. To turn that into information, I guess

my point is there's not just one form of information. It really depends upon who the audience is.

So when it comes to the environment, and climate, of course, is the, is really the outcome of all the environmental processes in, of the Earth system. What we call the climate is the interaction between the atmosphere and the oceans and the land and the geosphere. It's vast. Absolutely vast in terms of data.

MK Okay, so can I go to you Stephanie? Essentially on the same question, we're told it's vast, it comes in different types of types, categories, if you like. You and I offline talked about flood mapping, the treasure trove of information in our waterways. Tell us about some of the data that might exist out there that we don't value enough.

SW Thank you very much and thank you very much for joining us today everyone. I'm really pleased that you're here. I do wish to acknowledge the traditional owners and custodians of the lands on which we meet today and pay my respects to their elders past and present.

I think what's important, following on what Sheree and Jo said this morning and Brendan has now said as well, is that in the public sector we have treasure troves of information, whether in the form of data or in analysed information sets, that are critical for our community. And that can include things like flood risk mapping. That could include things like the information of science research done in agricultural influences on the land. It can include impacts on mining and the like. And those sorts of information stocks and pieces are often available publicly already. So they are out there and Joanne gave some good examples this morning in her presentation and I think that is the sort of stuff that people are interested in.

MK Okay, so that's current stuff, I guess. Can I go to you Suzanne? I suspect dream time stories in the modern sense has captured data on extinctions, really important times. What kind of data do you know about that we mightn't?

ST Yeah, and I too want to acknowledge the Turrbal and Yuggera people of the land that we stand on and all of our ancestors, I think, that brought us here today and my Iningai ancestors. And I think that brings me to the idea of what Indigenous Dreamtime stories are and their very existence of the data capture that they did when it came to the climate extinction periods. You know, and witness to some of these things that are etched in very ancient stone walls or through art that's kept in these sacred places that they're not just captured because it's a bit of graffiti or something of curiosity, but there's

actually a spiritual meaning and a meaning of capturing, you know, that period of time that went through.

And I think I can be very much witness to that being a custodian on Turraburra Station that houses the whole Seven Sisters lore story in its entirety on the coastline of that ancient inland sea where the dinosaurs are found and knowing that there's a plesiosaurus etched there and meteorites of the extinction of megafauna. And I like to share around those ideas of, you know, there are Dreamtime stories, in particular in our Seven Sisters lore story, when we talk about songlines and those things that define the songlines of, you know, Uluru and Kata Tjuta are mud pies in our first lore story.

And if we think of Old Testament and then if we think of New Testament, and the understanding of how then the super highways were created across the landscape that created all of the very unique cultural landscape. You know, again, Uluru, Kata Tjuta mud pies in the story and the Glasshouse Mountains and their significance in that story. But also then the New Testament where the ancients had an understanding of our migratory patterns and our watersheds and what defined that. But also reminding us that the story was told when the continents were connected. So it's actually the global human story that captured our existence as humanity. So our stories are about that and that sharing of that.

MK So, and I guess over hundreds of years what's happened in that time, some of those examples have been destroyed or not protected properly. You've got no Excel spreadsheets spreading back into history. What methods now do you employ to gather data and what kind of governance do you put around that?

ST Oh, look, there's a whole lot of things and I think this is where oral storytelling is really important but it's not just about the oral storytelling, it's putting it into context of the importance of protecting and preserving these places of knowledge sharing and where the data's being kept and etched in stone. I think that then when we think about the modern context and what that is, I think then it's about, again, that sharing of story and knowledge. So when we start to think about how we capture that and also place-basing it so that its relevance is about why that story was etched and told in a certain area, because that's what then sets the balance of the system that our ancients created for us.

MK Thank you. Stephanie back to you. You know, as more and more effort is put into understanding the environment and there's more available digitally, is there a risk that it becomes almost too big or too impenetrable?

SW Yes, indeed, and I think that's what Sheree mentioned very beautifully today in her presentation. La Trobe University published a paper in 2021 describing it as an infodemic. And I think increasingly, research that is available shows that we are drowning in information, but we are not necessarily better informed. So the information age has brought with it many, many benefits. Communities are benefiting from those, and I think we shouldn't only look at the negative, but I think it is increasingly evident that the mis- and disinformation age is playing a really important role in destabilising the systems, the processes, and societal norms that we might know.

And this isn't entirely new. I think what's really important to remember is that misinformation has existed for a very long time. The 17th century philosopher Voltaire, the man who coined the phrase, common sense isn't that common, also said that, the more frequently an untruth is spoken, the more it gets the appearance of wisdom. And that's in the 17th century. So this isn't something that is new. I think what is new or different is that the digital age has brought with it an exponential increase in information in a way that has low barriers to entry as far as media is concerned and has extremely high levels of ability to spread the information in a way that when it isn't true, it is difficult to tell the difference.

MK Okay. I think there's also an echo chamber thing there that we'll come to in just a moment. But Brendan, just on Stephanie's point about we're drowning in information, she said, but not necessarily better informed. I'm thinking of some of the big weather events we've had here that were not properly or accurately announced in a timely fashion. And I'm wondering the importance of the complexity of the information and whether hazards, for example, need to be prioritised in the data that is released.

BM Yeah, so, you know, the ability of the Bureau of Meteorology, right, to make accurate and timely predictions about extreme weather events entirely depends upon a few things. One is the data that's available and the extent to which we understand the physical processes involved and how these are all simulated into Australia's climate model. So Australia has a climate model. It's absolutely world's best, but it's parameterised by data, observational data gathered in real time by the network of met stations around the world. When you go to all the airports in Australia, there's a box, Stevenson screen, there's instruments in it recording data in real time. The oceans have got buoys in them which are recording sea surface temperatures. They're not ours. They're, most of them are United States of America. All of those data are critical for what we call parameterising or running this model of Australia's climate so it can tell us what's going on today, tomorrow, next week, next month, in 10 years' time, in 100

years' time. It's basically the same computer model. So our data is not perfect. It's, there are big gaps in it.

MK And it's huge.

BM And it's massive. There are big gaps. And our knowledge of the physical processes is imperfect. And also we're dealing with a system which has a random component, a stochastic component. And when it comes to certain extreme weather events like extreme intense rainfall are highly localised, highly localised. So there's a limit to what our models can do in terms of the accuracy and precision of certain extreme events. Some, they're accurate up to a point, put it that way.

MK Okay, thank you. Sheree you've had a bit of a breather. Can I keep on that point about the priority of information? That is really important to put into the public arena. And you talked in your speech about the little box jellyfish that you'd seen at the Whitsundays. And while it was seen as a tourism disruptor, it was also potentially a public health hazard. How much information do you think is not being made public that could help advance health or even our understanding of climate?

SM Gosh. Excuse me. A lot. There is a lot of data. We are overwhelmed with information. I personally think one of the biggest problems is in getting that data from the incredible scientists that capture it and then translating that information so the average person can use it in a way that they can be informed to create the change that they want. And that's, I think, one of the biggest barriers. We haven't really put enough resources or time in translating that information.

So communication is something that we really need to be investing in. We've got these, you know, brilliant minds. And some scientists are really great communicators. Others just want to be in the science. They're not interested. And that's what I love about my job. I get to work with some of these brilliant minds who aren't interested in telling the public. And I'm like, I want to tell the public. You know, let me share that information. So communication, we haven't got an issue with data. It's getting it out there and translating it in a way that is targeted for your specific audience, because that'll be different depending on who your audience is.

MK Thank you. Suzanne, this is what you do really well, amongst other things. I mean, what kind of information exists that we can actually learn from? And I think you told me a story about the flux towers.

ST Yeah, 100%. At the moment, we've, because we're looking at Indigenous indicators around that space, and of course we've got the carbon and the nature repair market, and those two markets that, you know, when we're looking at that. But the flux tower, what it's allowing us to do, and I had this question of why have I had, you know, four blossoms of the wattle this year in 12 months. One species has given me four blossoms, and I want to know why. We also want to know how do we sequester and maintain carbon store in, you know, because we're in the Desert Uplands region, so what does our unique region and our soil type tell us on how we can actually create healthier soils? And so then through our traditional cool burn practice, what does that mean when we're looking at an indicator, meaning black ash is telling us that it's biochar through the cool burn, being very mindful of what's being captured there. But the flux towers I love because we've got, you know, what we've got is I call the whitefella lens and it's capturing their stuff and how it's going to complement our lens because what we see through those indicators.

MK Certainly. You're a good communicator aren't you? Can I just stay with you for one moment? We've got these masses of data, these digital initiatives and you're working I think with both QUT and with James Cook around bush food in the medicine space.

ST Yes.

MK How crucial are those partnerships in terms of transferring the data into something else and where are you headed there?

ST Yeah absolutely. So firstly you know when we think about Spinifex Country and how we're capturing you know the emissions or the greenhouse gas that's captured from the growth of grasses, how that's captured. But also then being mindful of then how do we sustain our food and our medicinal security into the future for the globe? And what does that look like? And what is our knowledges as Indigenous people that have sustained themselves for many millennia off this very supermarket that we walk in amongst and pharmacy that exists out there?

So I think about then, you know, that knowledge even with our soils, our minerals and all of those things that actually complement and blend into that very existence of our survival for humanity. And I think with the medicinal plants, you know, knowing that there's a knowledge, one of the things that we're working on with JCU is looking for a cure for inflammatory bowel and for lung cancer. Because evidence and science says that Indigenous people don't necessarily suffer from some of these diseases. And is it

because of that dietary? Is it because of what's in our genetic DNA? And how do we translate that across with that knowledge?

MK And just a quick final supplementary question there. Is this information that there's a belief needs to be kept on country or is it information you want to tell and sell to the world?

ST Oh, 100% tell and sell to the world. You know, we've got a discovery of an emulsifier in one of our acacia species, which is very, very, very important when it comes to stabilisation of pharmaceuticals, of every product that we can think of. And if we don't share that knowledge, because I made note of, you know, because there's a starvation of truth that Sheree had brought, and if we don't, so that starvation of truth, and that's the importance, I think, of what I call the two-world walking.

MK Stephanie, we hear of all this data available and people have raised different pieces today. We've just heard what Suzanne said. I'm wondering how accessible is the data we have, particularly digital?

SW It's a good question. I think in the Queensland context, it's very important to understand that the Right to Information Act really sets the foundation, and in my view is a leading piece of legislation, because it advances the case that public sector information should be pushed out, pushed out to the community, not held on to until it's requested. And that model is a model that I think is very successful. The examples, as I say, we've spoken about this morning. Possibly there's more information than people can cope with.

The experience of that regime shows us that the community is actively engaging in that system. 80 to 90% of people who do make formal requests get the information they are seeking, whether in whole or in part. And those are the exceptional cases because, of course, the model is that most of that information is already out, whether that's on websites, on other media forms that are made available by the Government.

So, I think it would be fair to say that the system works well and the information is there. The difficulty that we are exploring today and talking about is making sure that the right information reaches the audience in the right way because that's always the challenge.

MK Yes but can I just have a quick answer to this to follow up though. How far has that access to information moved since FOI was first introduced in Australia?

SW Well, I'd say it's moved considerably. I mean there's always more to do.

MK Yeah sure.

SW We do audits of agencies to test whether the system works well. We did an audit, for example, in 2022 on legislative obligations for departments to publish waste management information. And those audits discovered that many agencies were doing well but could do better. And that is an example of our oversight of the actors in the system, making sure that they're doing the right thing and getting it out there.

Over the years, I think the information access regimes have improved access to information to communities generally. Research done by information commissioners across the jurisdictions, I'd say, would suggest that. I think the bigger issue in recent times, other than disinformation and misinformation, is that there seems to be a correlation, research done, there's a thing called the Edelman Trust Barometer that's published annually and surveys countries across the world.

There seems to be a correlation between a growth in distrust in governments and the disinformation, misinformation era. I'm saying correlation, not causation, but there definitely seems to be a correlation between those two. And that is an issue that I think governments need to take seriously. And a model like Queensland, where governments are given the power to push the information out, not wait for it to be requested, I think really advances a better solution in regaining that trust.

MK Thank you. Brendan, you've been a little bit quiet and we've just raised disinformation. I wonder if it can also come from a lack of understanding rather than bad actors. And accessibility varies with your understanding, as a point you made earlier. Data's becoming more complicated, but many people wanting it or needing it are not scientists, nor are they academics. What's the impact there?

BM Yeah. So one of the challenges, as my fellow panellists have pointed out, as I said earlier, is most people don't want access to the data. They don't know what, they wouldn't know what to do with primary observational data or raw measurements of things. But they want reliable information that's evidence-based, that comes from the data, but they need it in a form where it's relevant to the kind of decisions they need to make. And a really good example of this in the climate space is what the Queensland Government is doing with current and projected climate data and information.

So they, within the, I think it's actually now within Treasury, there's actually a climate information services unit, which take the, so we have Queensland universities funded by the Queensland Government to run climate change models that project how the climate is predicted to change in the future, given different scenarios about how

successful or unsuccessful we are at mitigating greenhouse gas emissions. That generates humongous volumes of data, mind-boggle, terabytes of data. And they've got a science unit there that take that data and translate that into information, what we call climate information services, for particular user groups. And it's all available through a website called Long Paddock. It's called Long Paddock because it started providing the kind of information that farmers and the agricultural sector would need, but now it's gone on to other sectors as well.

So you can, and for example, health. So they have a lot of, they have a whole dashboard about current and projected impacts of climate on health. And they've done it geographically, so you can zoom into different regions in Queensland. So really, that's the antidote to misinformation. But that means you, in addition to having the data translated into a form that the user needs it, the user also has to have confidence in the institution or organisation doing it. And that is now really the key.

To me, the key to disinformation is the authority and reliability of the institution that's generating that information. And in the case of Australia, it remains very solid. Australian Government agencies, CSIRO, Bureau of Meteorology, our universities, they're all, the information and reports and websites they produce or provide are, you know, can be trusted. It's trusted data sources.

MK Okay, thank you. Sheree, Stephanie just raised the T word, trust. We've got to be able to trust it. How much is disinformation an issue that you see? I'm thinking more broadly in climate change, I guess, but how often do you encounter it as a marine biologist?

SM All the time. We're drowning in information and I think that's one of the challenges is to find out where that content and if that content is credible. Data can be manipulated really easily. And so as a consumer of information, I think it's about questioning everything that you see, following the trail and looking at the signals and not the noise because it can be quite noisy out there. But also questioning it. So where is the data coming from? Is it credible? Who benefits from the message? Because everyone's got a different agenda. And I think with science, I think one of the great things about science and published papers, and you would know this better than most Brendan, is that it's peer-reviewed. So it's not as though they can just put it out there into the universe. So that is science that is credible.

But we're also time poor and people are lazy. You know, they don't want to be digging around. And we've all been down that rabbit warren where we look at something on

social media, two hours later, we're not where we expect to be. And so I think that's where communication is extremely important. But just questioning what you see.

MK Questioning what we see. Brendan the theme of our conversation is ensuring access to environmental information in a digital age. What's the role of generative AI there? Questioning what we see.

BM Yeah, well, you know, our role is to question what we get back from what we ask generative AI, right? Because it's, people have to understand it's not particularly intelligent. All that generative AI does is really, it's an algorithm that predicts the next piece of text or the next pixel in an image. That's all it's doing. And it's drawing upon everything. It's trawling and accessing everything that's uploaded to the internet to do that. So here's a little experiment you can do. I do this with my students. There's a website called duck.ai and it gives you access to half a dozen different generative AI tools. There's a little menu and you can, and ask this question of them and it's a question I get my students to put in. Write me a 100-word abstract for a scientific journal paper with references on this topic, the contribution of wombat meat to the diet of ancient Egyptian royal families. And see what you get. For about half of them, you'll get back a really authoritatively sounding, well-written abstract with references. And if you look at what's written, every item of text there exists somewhere in the internet but not necessarily in the [unintelligible - "(ui)"].

MK Yeah. We laugh, but that's scary, isn't it?

BM It's scary. Now, how do we know that that's funny or not true? Well, it's really our prior knowledge. I mean what is it that we know? We know that wombats are endemic to the Australian continent, there's no evidence of them occurring anywhere else, there's no cultural knowledge in Australia about trade with ancient Egypt, there's no written or oral history in ancient Egypt about trade of live animals from Australia, they did in the African continent. Now, we have prior knowledge that enables us to know that that's you know problematic. And we can probably think of some other sources of information we could go to independently. So this is the challenge with generative AI, you know it threatens to be an echo chamber that amplifies misinformation. It's got its uses definitely, but in terms of sources of information we have to use it very, very carefully and critically.

MK Okay, so Suzanne can I just go to you there? That's on one end. Sheree made the point that scientific papers are often locked behind paywalls. If we're talking about disinformation, social media and those echo chambers that Brendan just referred to means people are just repeating and amplifying their own view.

ST Oh, don't I know that? In light of what's happened probably in the last couple of years for First Nations people here in this country. But I, you know, and I think about then the misinformation and when you have that understanding of an ancient storyline and how that sits within that context and the disinformation that can come from that, I think it just starts to, and I made a note of what would happen if our cultural knowledge disappeared? What would happen? And what would happen if we didn't have the opportunity to be heard?

Because one of the things, again, I talk about being witness to understanding our stories and understanding there's two galaxy clouds that sit underneath the Milky Way. And why there's a mob still here in Australia that still maintain this ancient ceremony in December and January to keep those galaxy clouds in the sky? And I said, how come brother, how come you do that? Because Sissy we can never ever, ever let them come to Earth because if they come to Earth, bad things in them, bad insect, bad things. I sat and I thought to myself wow, how many of our ancient practices for all of us that have been disrupted, no matter what culture, that have taken us and sent us on this trajectory. So AI, when it comes in, how does it inform and what happens if we start to surrender that knowledge over?

MK You asked that question, but isn't the counter-question, how do the rest of us ensure access to information like that in a digital age?

ST Oh, we've got to find a place to sit within that and find our place of relevancy, really, I think, as Indigenous peoples. You know, how does that knowledge sit within that? How does it actually complement AI?

MK Yes.

ST And how do we inform the algorithm? That's, I think, that's the key because it's who develops the algorithm and whose knowledge is actually the one that's developing that?

MK Brendan, there's also just a brief answer to here, if you can think of something. But there's also that concern that with social media and the amplification of that, that disinformation is spread during something really important, like a flood or a bushfire. Have we had examples of that?

BM Well, we certainly had examples post-disasters where you get a lot of speculation being amplified on the media about the causes of things, like people blaming the 2019-2020 fires on this or that or the other. So, and I think that happens not just with natural

disasters, you know, it certainly happened with the 2019-2020 fires. And, you know, we've also got the situation where, again, we've got certain, I'm trying to be politically...

MK Just say it.

BM ... diplomatic here. But, you know, when you have governments or certain Government leaders saying things which we know are fundamentally true, they get picked up and amplified on social media. So again, it comes back to us as ecologically informed democratic citizens, making sure that our institutions stay strong and that we can trust the information that they're providing to us. I mean, I think that's the best antidote to the kind of false disinformation through the social media echo chambers.

MK Sheree, can I ask you then, if you're sitting in this audience or listening from anywhere across Australia or New Zealand, you're probably thinking, well, how do we know what's true and what's not? We can have trust in our institutions, but that only goes so far.

SM Absolutely. And it's finding that truth, which is getting harder. But that's where the responsibility is part on us to actually dig deeper and question things and not accept everything for fact. If we accepted half the things that we saw in the media, oh my gosh, I'd probably be in a padded cell. So you have to question, you've got to look at where that source is coming from. Can it be trusted? Is there an agenda? Is it credible? And I think especially with the science, you know, looking at it, you know, if it's a published paper, you know it's peer-reviewed, so you know it's going to be credible. And a lot of the time you've got to be careful of the science not being twisted to suit a specific agenda. So it's just questioning, I think.

MK Stephanie you're nodding there. How do you think we address misinformation or we know what to trust?

SW I think it's a very big challenge worldwide. The OECD published a paper in 2024 entitled Facts Not Fakes and it looked deeply across a worldwide suite and identified that there are three big things that can probably be done by governments worldwide that might help mitigate and some of that has come through in this panel discussion.

The first one is social resilience. We need to have societies more resilient in being able to deal with information sources and recognising, as has been said already, when they are dealing with things that are different, that may not necessarily match what they are thinking. And if it's matching what they're thinking all the time, they should question that. So it's a social resilience.

The other thing is institutions should be strengthened. I am a big believer in the public sector being a strong institution that stands the test of time, despite the waves of political variation. They are the stewards of the system, they serve the public, that's why they exist, and they are the authoritative source of information and they should make sure that they perform that function. And in Queensland, under the Right to Information Act, that is what they need to be doing.

And finally, I think it is really important that sources of information have a plurality of sources of information. So if you are thinking about looking at or finding information, do not rely on a single source. Do not rely on Facebook only. Test the sources of information you have. Get your media from a variety of sources because internationally that has shown to strengthen the, on research that's been done by the OECD, to strengthen the confidence that people have in the information and the more likely that it will be accurate.

MK That's terrific. Social resilience, strong institutions, e.g., the public sector, a plurality of sources of information. The role of the public sector then, in this conversation, has never been more important. They're the stewards of this credible data in a sense. Do you think there is an onus on lower-level public servants to understand what is available and proactively steer the public in the right direction, for example?

SW Yes, I think the reason why public sector was called the public service when it originated in the UK is because they are the servants of the public. It is a fundamental constitutional and democratic construct that we serve as public servants, the community. I mean, that is the point of the public service. And I think it is really, really important for all public sector employees to recognise that that's what they do, they are serving the community. And yes, there are reasons why sometimes information will not be made available to the public. There are public interest factors that Jo mentioned why that may be the case. The Solomon Review looked very deeply into that and provided some really foundational insights into that. That I think still stands the test of time.

What is different though is and ironically, some of these things Solomon foreshadowed, even though the digital era hadn't quite developed to the way we have today. But what it really identifies is that we are actually, probably through waves of time, going to come across new technology. AI is the scary new thing. In 20-30 years' time, it'll probably be not the thing we're talking about. It'll be something different. So I think what is really important is the stability, the confidence and that stewardship of the public sector in understanding that it is the custodian of the information on behalf of all of us, because

we are all citizens of the land and we are all interested in making sure that we have access to reliable information.

MK Do you think our public service is culturally form-fit for the digital age?

SW I have confidence that in the Queensland Government, they are doing a lot and Brendan gave some really good examples of that. We certainly, in our role at the Office of the Information Commissioner, are very actively observing and involved occasionally in things that they are initiating. So yes, I think, I would say that the Queensland Government certainly is active, conscious and you know forward-looking. That's certainly my impression.

MK You're nodding Suzanne, what does transparent Government look like for you?

ST Oh, you know, transparent Government, I'll put it in the cultural context, I think, and I think about my upbringing and how we understood our governments. And I think then trying to put it then back into Western governments and what that's about, and understanding history and where and how we evolved to where we are.

Thea Yimba Naka was what my great-grandmother and my grandmother told us, that that was told to them, that's your learning time, stop, look, listen. Come in, you stop, you look, you listen. And then when we start to think about then some of those other learnings we have, which is you believe nothing of what you see and half of what you hear. No, nothing of what you hear and half of what you see. They're really important things. And I think when we're thinking about a transparent government, and I know in the time when I was in the public sector, in understanding how firstly to balance with my cultural knowledge within a system that not necessarily was transparent. You know, because we all, I suppose, in the public sector go on a journey and we aspire to achieve an outcome on behalf of the people we serve. But there's not transparency when it comes to the agenda, and I'll be controversial here in the sense of when politicians in particular have something very different because it's something that actually puts us to a place of, you put me in so I have this power and therefore this is how we're going to go. So I think when I think of that, I don't think there is too much of transparency within government.

MK Thank you. Brendan, can I ask you for an academic's view here on the role of the public sector or the culture in it? You said earlier academics want data. As a member of public, we want information. How do we build a public sector that, where the culture is

transparent and accountable but actually deals with both of those demands in a digital age?

BM Yeah. Well, I think a cornerstone of all of this is having properly funded and independent university sector. And ones that have high integrity and (ui) academic independence. And that means having academic independence supported. All universities have signed up to a kind of charter of principles of academic independence, which also puts the obligation on the academics to have high integrity in what they do.

MK But if that's then hidden behind paywalls, how is it accessible?

BM Well, the journal articles that they're talking about are increasingly becoming open access. Like, for example, if you get a grant from the Australian Research Council, the publications from it have to be open access. The universities have all negotiated agreements with academic publishing companies that allow us to publish, actually give money to these for-profit academic publishing companies that enable the academics to publish without the academic being charged a huge fee. So there's a whole, the whole sector has become, is very much tuned into this problem and trying to make the research publications open access.

But that's not enough, because what we're really talking about is translating those research findings into information. And that's where the universities, I think, have an obligation for what we call outreach engagement and impact, where they're actively endeavouring to communicate and do that translation to different audiences in society where that information is needed.

So the kind of primary research products are becoming much more open access but there's still a huge opportunity for universities to play a more active role, a more positive role in contributing to public debates based upon that knowledge. But they can only do that if their academic independence is supported and if the institutions are properly resourced.

MK I'm missing the link between the public sector, though. You're saying if the universities get it accurate, that makes, I mean what about all that...

BM Well, we're part of the public sector. I mean, there's 30, whatever it is, 36 or so universities in Australia. Well, there's, I think, three private universities in Australia and 34 public universities. Universities are actually part of the public sector.

MK Can I go back to you thereon, Stephanie? Because there's also all that information. Local government is a trove of information from traffic lights to waterways, etcetera. I

mean, how do we ensure that the right information is being collected and then the second step is being made available through our public sector?

SW Well, I suppose it depends on what you think is right. But I think local government is probably a very good example of how they get it right in the sense of local governments are very close to their communities. Therefore the relationship between the community and the council invariably means that information sharing happens more actively. The community feels closer. Public council meetings for example, are good examples of making sure that the information that affects the community is available. Members of the public can watch or attend those meetings. The information that invariably affects their life day-to-day, and this goes back to the theme of today around environmental information, whether it is the fire risk hazards, the flood mapping, the agricultural information, whatever, and how those councils, for example, regulate.

Because ultimately, the reason Government, whether it's local or State level or Federal, has so much information is because we, the electorate, create structures in our constitutional frameworks that enable governments to control us, I suppose, to regulate behaviour, to make sure that there is order. That brings a lot of power and the ability to bring in information. And the level of information that they have, therefore, is quite important to the community. I think what's important, though, is in all of this, the majority of the, and this is consistent across most jurisdictions in Australia, the majority of access applications for information does not relate to media access requests or the big story to hold Government to account. Most of it, 80% or more, is individuals asking about information the Government holds about them. So really personal stuff.

And that is really why it is so important, because it is the stuff that's important to us as individuals, whether it's your health information, information about why you were incarcerated, your education records, whatever the source is. These are the things that the public sector holds on our behalf for good reason, but is important to the community.

MK Do we know what they hold, though? So holding them and proactively releasing it, there's still that step of us having to know that it exists.

SW True.

MK Are we doing that well enough?

SW Yes, I think, look, like everything I've said today, there are very good examples of what's going on in the system, but there are areas for improvement. Our audits show that time and time again. The Act requires in Queensland that agencies have what are

called disclosure logs and access regimes. So they are required to publicly put out information to tell you what sort of information they hold and where they might be able to access it and whether that's administrative or through formal access. And most agencies do that exceptionally well.

MK Brendan, you gave me a great example, I think, of the Gold Coast City Council.

BM That's right. So, Gold Coast City Council has a excellent, interactive, online GIS map of every street and building and structure in the Gold Coast.

MK Car park.

BM Everything. And you can go online and look at what the flood level warning is, one, two, three-metre, what the risk of flood is for a given property. So if you're buying a property on the Gold Coast, a home or a commercial property, you can go see what the risk of flooding is. And it's very accessible and very easy to interpret.

MK Do you think many people know about it?

BM No, I don't. I think this is part of the issue here. So it's one thing to make the information available and it's another to get people to know that information is there and how to make use of it. And I think a lot of people, you know, would even, knowing that that online tool was there, mapping tool was there, would even feel comfortable, you know. They would probably need a little bit of guidance on how to use it and interpret it. But it is there. My understanding is that people selling properties are not required to tell potential buyers that it exists. And I've never seen an advertisement for it by the local government.

MK No.

BM So, and I only found out about it because someone pointed it out to me. And you'd think I'd know all about these things.

MK And I only found out about it because you pointed it out to me.

BM Yeah. So it's a tremendous resource. It's the right information delivered in the right way to, and, you know, it's very useful information. But very few people know about it.

MK Okay, Sheree, we started with you. Can I ask you this? You said in your speech that the power lies with us, whether we're rangers, fishers, teachers, or I think you said students. What do you think all of us could do on leaving today that might help advancing access to environmental information in the digital age?

- SM** I think we can start by being curious, ask questions. Don't just accept the headlines and dig deeper. If something seems off, it probably is. If you're in Government, push for transparency. If you're in business, share your data. And if you're in the community, contribute what you know. I mean, that combined can be incredibly powerful.
- MK** So we're going to draw this to a close in just a moment, but I'd love to go to each panellist just for 30 seconds or so. And when we all wake up in two weeks' time, what's the point you want us to remember, the message in your role that you would like us to remember from today? And if I can start with you Stephanie and go down the line.
- SW** For me, the number one message is access to information is a right and it is critical to our democratic existence. And I would like to strongly encourage the public sector to take its rightful stewardship role in advancing that as actively as it can.
- MK** Can I just have a supplementary? Sorry. How would you like them to advance that?
- SW** Well, in most of the things we've discussed today, I'd like them to really live and adopt the push model, put the information out, but in light of today, broadcast it. Make sure you get it out there. Use your Facebook and Instagram pages to let the people know what it is that you hold. Really be proud of what we have because it is really important that people have that information.
- MK** Great message. Suzanne what are you thinking?
- ST** Oh, I'm very proud of the knowledge that I hold. At times I can get very frustrated because I'm waiting for that moment when we're heard about the knowledge we have and I just want to, just even in reflection, thinking about the GIS mapping and for flooding mitigation, disaster resilience, all of those things comes from an ancient knowledge of people that lived and maintained their existence for survival on this planet and on this land here, Australia, for many, many millennia. And so my message to everybody is that we're waiting. We're waiting very patiently for you fella to listen.
- MK** Thank you. Brendan.
- BM** Yeah. Well, everyone needs to be informed about the state of the environment and current and projected impacts, particularly in relation to climate. So I think everyone has a obligation to be informed about those things. You do need to be careful where you're sourcing your information from. There are, I would encourage you to go to the well-known authoritative sources, The Intergovernmental Panel on Climate Change is a international effort supported by all the governments, including the Australian

Government. Its reports are the most authoritative. But certainly in Australia, the CSIRO, all our universities and Bureau of Meteorology are reliable sources of climate and other information.

MK Thank you. And Sheree we started with you. Can we end with you?

SM Sure. I think that when we look at some of the environmental challenges that we're faced, it can be almost like environmental paralysis. You think, how can I actually do anything? But I think we need to reflect and remind ourselves, as a person, we all have a responsibility to act. We have the power to act. But collectively, together, we can shape a healthy future and environment that we all want. We have that power to do that. But it's bringing together all the different knowledge, like traditional owners, and you know who have this incredible knowledge that we're not utilising. So it's bringing that all together and collectively, we can be unstoppable.

MK Yeah, use critical thinking skills to know what is right and what is not and to let people know about it. Ladies and gentlemen please put your hands together for Sheree, Brendan, Suzanne and Stephanie. Can I thank you all for the generosity of your time but also the generosity and the spirit with which you've answered those questions. I hope we've prompted you to think about ensuring access to environmental information in the digital age.

And that brings to a close the 2025 Solomon Lecture and Panel discussion hosted by the OIC to mark International Access to Information Day. We hope you've enjoyed it, learnt something and look forward to you joining us again next year. Thank you.