



Seabed Minerals Authority
Runanga Takere Moana
COOK ISLANDS

1100 YEARS

“The ocean has always supported us, and we will not do anything to impact it’s ability to continue to support our cultures and Cook Islands way of life” Prime Minister, Mark Brown

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Honourable Mark Brown
Prime Minister,
Minister for Seabed Minerals
July 2013 - current

Ten years ago, then Minister Sir Tom Marsters along with the Cook Islands Seabed Minerals Authority (SBMA) commenced activities under the Seabed Minerals Act 2009. This was seen as a major step towards the development of an industry that was still in its infancy globally but that offered so much potential if only we could realise it. This was, and remains, a great responsibility.

A few months later I took over as the responsible Minister, a portfolio I have held to this day. From its humble beginnings in 2013 we have developed our seabed minerals sector and achieved so much to date, for which we have rightly gained international recognition.

From the effective management of our role as a sponsoring state at the International Seabed Authority (ISA), to the adoption and implementation of a robust regulatory framework for exploration, and the historic granting of the Cook Islands first ever seabed minerals exploration licences. As a country we continue to build on our successes through a unified vision: a sustainable minerals future for Cook Islanders.

With the exploration phase well underway, I look forward to the unprecedented knowledge we will gain about our Marae Moana, the potential of our seabed minerals, and how we can responsibly and sustainably develop the sector

The Cook Islands has long understood that it would need to tap into global expertise to develop a world leading industry. It is a testament to the SBMA and relevant Government agencies that it has been able to form strong relationships with people,



organisations, and countries that share our values and have supported us to achieve our aspirations.

The Cook Islands has achieved so much over the last ten years, yet there is still much to be done and many challenges that loom on the horizon.

I have every confidence that the SBMA and relevant agencies have the capability, determination, and leadership to overcome these challenges and develop an industry that will benefit our current and future generations, and one that Cook Islanders can be proud of.

I look forward to seeing what we will achieve over the next ten years.

Kia Manuia and God Bless

Sir Tom Marsters
Kings Representative,
Former Minister
November 2010 - July 2013

There is so much to reflect upon over the last five decades, let alone the last 10 years.

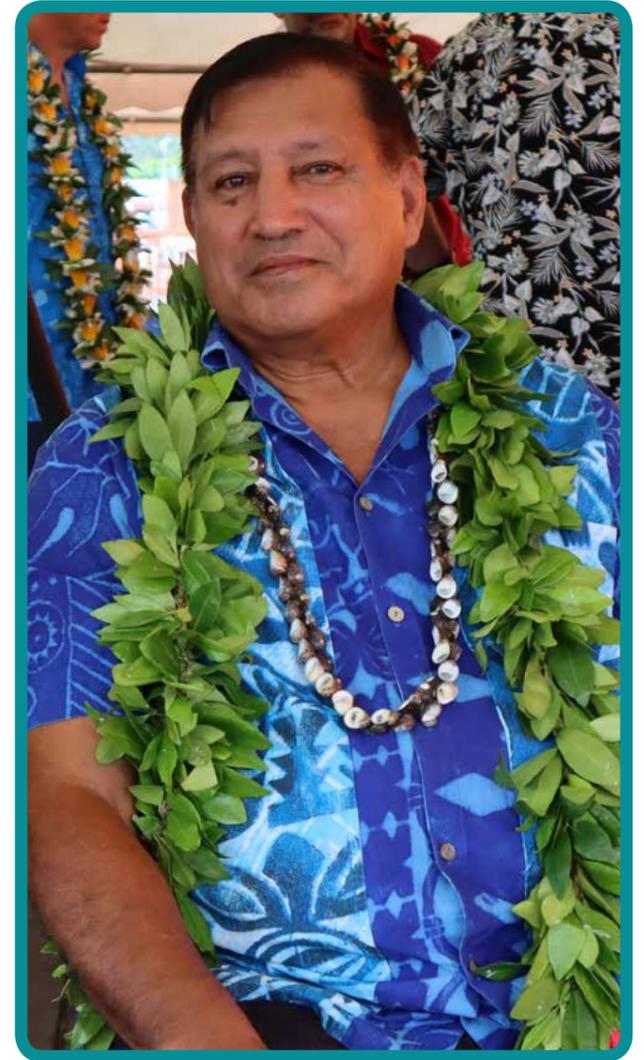
The term polymetallic nodules was an alien phrase to us here in the Cook Islands, until in 1974 I was attached to a Soviet expedition on RV Vityaz headed by the renowned Professor Bezrukov. Since then there have been ups and downs with the industry, but each time the ups got higher and the last ten years certainly have been some of the most exciting.

I want to congratulate all those who have been involved in this exciting journey: Firstly the Prime Minister, Mark Brown, Commissioner Alex Herman and staff of the SBMA and of course not to forget, the members of the Advisory Committee, headed by Bishop Pere, and the members of the Licensing Panel headed by Garth Henderson.

I also want to extend my heartiest congratulations and commendation to the former and very first Commissioner, Paul Lynch and his team who did a lot of the ground work to pave the way for us to be here today.

I salute those visionaries of the past, the likes of Sir Albert Henry, (Papa Arapati), Sir Geoffrey Henry, Sir Dr Terepai Maoate and others, who despite criticism and the barriers put in front of them, kept the flame burning.

Ten short years ago, I was serving as the Minister responsible, and with the assistance of the Commonwealth Secretariat, we engaged the services of Professor David Cronan of the Imperial College of London, a globally and highly respected oceanographer and geologist. Professor Cronan collected all the data and all of the past reports written and prepared on



our resources. This exercise began in February 2013, well and truly into the next year of 2014, and gave us the first complete view of what we had.

Since then, we have come a long way. Our legal instruments are now largely completed. We now have three strong companies all committing to explore our area and to try and develop the nodules into a real industry for us.

That is a brief snapshot into our history and I am so pleased that the team today is dedicated, that the team today has vision. What we need now is to support our team.

My best wishes to my successor Prime Minister Mark Brown, and to Alex and her team.

God Bless, Kia Orana

Alex Herman
Commissioner
13 January 2020 - current

SBMA's vision sounds simple: A sustainable minerals future for Cook Islanders.

In reflecting back over the last ten years I am impressed by the mountain we have had to climb and the mountains that are yet to come. We now have regulations, policies, standards and guidelines, databases, new seabed maps and estimates on the quality of deposit and future opportunities. We have environmental management frameworks, three exploration licences, and an exploration contract with the International Seabed Authority. We also have numerous articles, factsheets, videos, conference presentations and most importantly we have undertaken community consultations and received our peoples feedback directly.

SBMA's goals involve policy and regulatory oversight, knowledge management, partnerships and cooperation and capacity development for our Cook Islands people. Ten years ago, as a humble Legal Officer I was pretty confident about what all that involved. Today, that confidence is tempered with the appreciation of the support that we have received as we meet the challenges together. Today, I now know we can develop some of the best systems in the world, to protect our Marae Moana and to potentially transform our country for the benefit of our Cook Islands people.

We would not be here without the efforts of many people and organisations. As we like to say "Team work makes the dream work". So, I take this opportunity to once again thank everyone.

I would like to honour both our past and present Ministers for Seabed Minerals, Sir Tom Marsters and Hon Mark Brown. We have been fortunate to have Ministers' who have had the



vision to see the potential of this sector, and have given their full support to enable the Authority to do the necessary work required to progress this sector.

Likewise, I would also like to acknowledge my predecessor Paul Lynch, who helped pave the way for SBMA, along with the first SBMA team members Caroline Tiria, Darryl Thorburn and Marino Wichman.

I also honour the Chair of our Advisory Committee, Bishop Tutai Pere. I believe that through your leadership, we can build better and stronger engagement between the Government and our people. Likewise, to the Chair of our Licensing Panel, Garth Henderson, for your steadfast leadership in ensuring robust decision-making in our processes.

Lastly, and certainly not the least, I would like to honour the SBMA team (both former and current). I thank God for each and every one of you. These are the people who show up day in, day out to put in the work. They are: Dede Mingi, Derek Johnson, Kaitini Herman, Latishia Maui-Mataora, John Parianos, Rima Browne, Tanga Morris, and Te-Ara Henderson.

Te Atua te Aroa

Paul Lynch
Former Commissioner
29 August 2012 - 10 January 2020

In 2009, I was working in our Crown Law Office as a Senior Crown Counsel, responsible for our Legislative Drafting programme, preparing laws for Parliament. Little did I know that when the Seabed Minerals Act got passed in 2009, that 4 years later in 2013, I would be on the "other side" and now responsible for implementing that Act that we drafted in 2009.

In 2010/11, His Excellency the King's Representative, Tom Marsters was the first responsible Minister of Minerals and definitely had a clear vision on the need to get that Act commenced and implemented. In 2012, I was employed by the Government to take the Seabed Minerals Authority (**SBMA**) from just words in an un-commenced Act and an empty office space with no budget and no employees to a fully fledged, legitimate Government agency. Over time, the SBMA became known and respected in regional and international seabed minerals related arena and conferences. This could not have been done without Darryl Thorburn's great expertise and experience as the former head of the New Zealand Crown Minerals Office based in Wellington.

We started with an annual budget of \$50,000 in 2011/12, administered by MMR. In 2012, \$370,000 was allocated to set up the SBMA. As the budget slowly grew each year, we employed young, talented Cook Islanders to be trained to lead the many new activities required under the Act, from drafting new Regulations, holding community engagement opportunities and gathering and collating all the various seabed minerals data from around the world.

In 2013/14, I was able to lead the SBMA to engage at the International Seabed Minerals Authority (**ISA**) in Jamaica. This engagement led to the Cook Islands in 2016 becoming a Sponsoring State of our own Exploration



Contract in the Clarion-Clipperton Zone (**CCZ**). I was proud to present the Cook Islands application before the ISA's Legal And Technical Committee (**LTC**) at the ISA in Jamaica in 2014.

However, my lasting and proudest legacy, in my years at the helm of the SBMA, has been the development of educational and training opportunities for Cook Islanders. An effort that continues to bear fruit and benefit for the SBMA and the Cook Islands community and development partners generally.

In the future, I see a very bright future for the people of the Cook Islands through the continued diligent work of the SBMA

I remain confident that, if we can solve the technical and environmental challenges ahead in this new sector, that our national seabed minerals sector will become a wonderful new contributor to not only our national development and economy, but also to positively enhance our world's urgent climate change adaptations and our collective human development and well-being.

Kia manuia e kia toa



On 8 March 2013, a small ceremony was held in front of the SBMA office

- Commemoration of Seabed Minerals Act 2009 coming into force
- Commencement of Seabed Minerals Activities
- Establishment of first SBM Advisory Board
- Launch of SBMA website



MARCH 2013

SEABED MINERALS

ACTIVITIES COMMENCE

TE AKAMATA'ANGA O TE KAVEINGA

With the newly established Seabed Minerals Authority (SBMA) in June 2012, along with a number of SBMA personnel employed, the first key actions required was to prepare for the Seabed Minerals Act 2009 (2009 Act) coming into force. This included preparing documents and processes to allow exploration to take place, as well as establishing other mechanisms, including the Advisory Board



TE KAVEINGA E TE TURE POLICY & LEGAL FRAMEWORK

The Cook Islands seabed minerals legal framework was established with the passing of the Seabed Minerals Act in 2009 (**2009 Act**), developed with the assistance of the Commonwealth Secretariat. The 2009 Act received bipartisan support during its passage through Parliament. The 2009 Act allowed for the establishment of the Seabed Minerals Authority.

In 2014, the Cook Islands released its national Seabed Minerals policy, setting out the Government's rationale and vision to guide the sustainable development and management of its seabed minerals resources.

A year later, the Seabed Minerals (Prospecting and Exploration) Regulations 2015 was passed along with amendments to the 2009 Act, in order to enable the SBMA to run a tender licensing process.

In 2017, the Marae Moana Act was passed, with SBMA one of the key Government agencies entrusted with implementing the objectives under Marae Moana.

In May 2018, the Minister put a temporary hold on SBM activities to allow current legislative frameworks and processes to be reviewed. This involved reviewing the 2009 Act and the licensing regime. As part of the legislative review, consultations were undertaken from October 2018 through to April 2019 both in Rarotonga and the Pa Enua. SBMA received 40 written submissions from a range of stakeholders including Government, Non-Governmental Organisation, the community, aronga mana (Cook Islands traditional leaders), and industry members.

In June 2019, the 2009 Act was replaced by the Seabed Minerals Act 2019 (**2019 Act**). The new Act introduced a revamped legislative framework in anticipation for a second licensing process. Key changes included:

- strengthening transparency and accountability within the licensing regime
- the establishment of an expert Licensing Panel to evaluate applications
- specific incorporation of environmental legal principles, including a precautionary approach and best environmental practices
- the inclusion of specific obligations and duties on licence holders

In 2020, the Exploration Regulations 2020 replaced the Seabed Minerals (Prospecting and Exploration) Regulations 2015. These new regulations set out the mechanisms for a robust exploration licensing process. This enabled the Minister to open the Cook Islands Economic Exclusive Zone (**EEZ**) for exploration in October 2020 resulting in the three Licence Holders the Cook Islands have today.

Further legislative amendments were made in 2021. In addition to Acts and Regulations, the SBMA, along with key regulatory agencies like NES are developing standards and guidelines to underpin the legislative framework.

Looking ahead, the Cook Islands will continue to build a robust legal framework with regulatory, environmental, financial and social considerations, in collaboration with relevant agencies and stakeholders.

SBMA

The Seabed Minerals Authority (SBMA) was formally established on 26 June 2012. Its first Seabed Minerals Commissioner, Paul Lynch, was appointed on 29 August 2012. Darryl Thorburn was attached as a Natural Resources Advisor, funded through the Commonwealth Secretariat. Shortly afterwards, its first employees were recruited: Caroline Tiria as Admin Manager and graduate Alex Herman as Legal Officer in January 2013. Later in the year, Marino Wichman joined as GIS Officer. This was the first core SBMA team for the first few years of SBMA's existence.

Between 2013 and 2016, the SBMA undertook preparatory work for developing the SBM sector, including through commencing SBM activities and running the first exploration tender, developing the processes and laws for licensing activities, participating in regional and international meetings, initial community consults and developing up the capacity of staff.

As SBMA evolved and grew, more staff would join the team, while others moved to other organisations, while still keeping in touch. Between 2016 and 2019, Cook Islanders Rima Browne and Anna Glassie joined SBMA, while Alex Herman, Marino Wichman and Darryl Thorburn left. During this period, the SBMA continued to undertake preparatory work. SBMA's responsibilities now extended to international waters through CIIC obtaining an Exploration Contract with the International Seabed Authority, with the Cook Islands thereby becoming a Sponsoring State. There was also increased interest from industry to undertake exploration activities. Although this needed to wait until the Cook Islands completed the legislative review of its SBM legislation, which

included improving its licensing process. On 13 January 2020 Alex Herman took over SBMA as Commissioner. With the 2019 Act in place, the short term objective was to run another exploration licensing process, which after passing new Exploration Regulations, launched in October 2020. What followed was a rigorous 16-month licensing process resulting in three exploration licences issued. This activated SBMA's monitoring, compliance and enforcement functions, and included the development of standards and guidelines.

Between 2020 and 2023, Dede Mingi, Eileen Macquarie, Derek Johnson, Te-Ara Henderson, John Parianos, Kaitini Herman, Latishia Maui-Mataora and Tanga Morris joined the SBMA team. During this period, Anna Glassie, Caroline Tiria, Eileen Macquarie left SBMA while still keeping in touch.

SBMA are fortunate to have had Darryl Thorburn, Chris Brown and John Parianos join our team. They have provided invaluable expertise and mentorship and have become part of team Cook Islands and the SBMA family.

The SBMA team has developed and matured quickly over its 10 year life span. We have achieved many milestones over the years through the hard work of many individuals and organisations who appreciate and understand the Cook Islands vision for its SBM sector.

One of the greatest achievements of this office has been the capacity building and development of Cook Islanders within the sector, whether through employment or internships. This will help to ensure the sustainable future of SBMA as well as the Cook Islands SBM sector.

Minister for Seabed Minerals
Honourable Mark Brown



Seabed Minerals Commissioner
Alex Herman



POLICY & REGULATORY OVERSIGHT

KNOWLEDGE MANAGEMENT

PARTNERSHIPS & COOPERATION

CORPORATE SUPPORT

Policy & Regulatory Oversight Director
Derek Johnson



Knowledge Management Director
John Parianos



Partnerships & Corporations Director
Edward Herman



Corporate Support Director
Beverly Stacey



Senior Policy & Regulatory Oversight Officer
Latishia Mataora



Senior Knowledge Management Officer
Rima Browne



Communications Officer
Kaitini Herman



Policy & Regulatory Oversight Officer
Te-Ara Henderson



Knowledge Management Officer
Tanga Morris



Communications Officer
Dede Mingi



RIMA BROWNE

Rima Browne first joined SBMA in May 2018. Today, she is a Senior Knowledge Management Officer, and has contributed to several recent scientific advancements by SBMA.

Her most notable accomplishment thus far is being awarded the 2023 ISA Secretary General's award for excellence in deep-sea research, for her new geomorphological map of the Cook Islands.

The award is for young researchers from developing states who have made outstanding contributions to the advancement of scientific knowledge of the deep-sea environment, or to the development of environmentally sustainable regulatory frameworks.

She is the first Pacific Islander to receive this distinguished award, her work receiving accolades from an international judging panel of distinguished experts.

Upon accepting her award, she said, "In a time where science and knowledge is recognised to be essential for us to learn and grow, we must be brave and step up to the challenge."

The management of the seabed habitat within our Marae Moana is another project I am involved in. Making decisions about key drivers and proposing management zones is really exciting. The responses from a variety of internal and external stakeholders, including some environmental experts, have been very positive and encouraging.

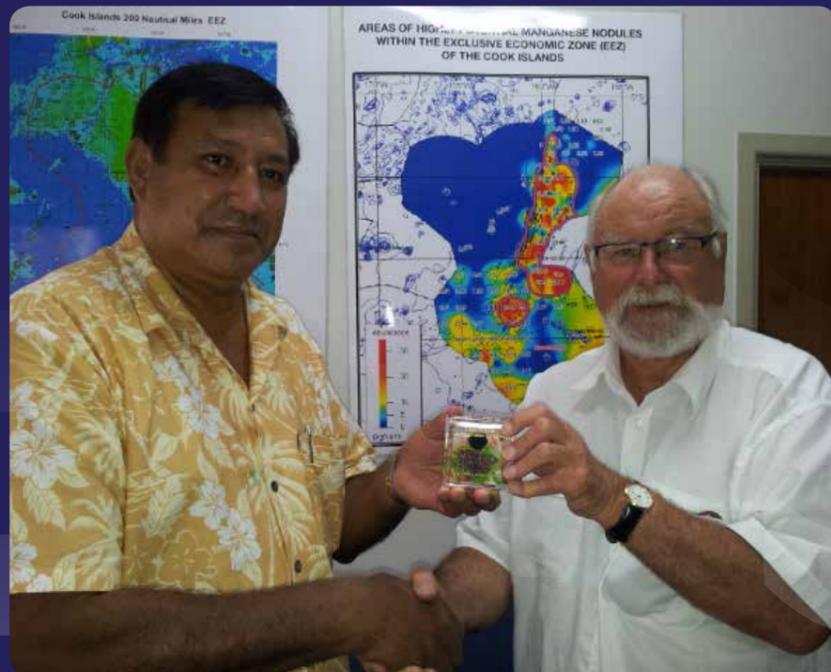
She has also played a key role in updating the Cook Islands' nodules' mineral resource estimation. In terms of information quality and interpretation, we have been able to make some significant new contributions, so we anticipate that this will be the most accurate resource estimate to date.

In her role she has also had the pleasure of representing SBMA at workshops and conferences as well as going onboard recent research expeditions as an Inspector. Both responsibilities adding to her professional development.



SBMA Through the years







THEN

Advisory Board 2013

On 8 March 2013, the first Seabed Minerals Advisory Board was appointed under the 2009 Act.



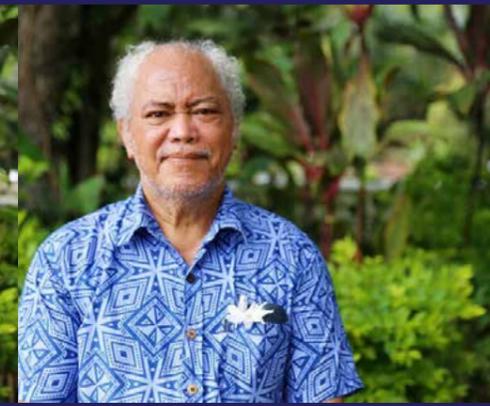
Gerald McCormack (Chair)
Tutai Pere
Teresa Manarangi-Trott

Kaumaiti Travel Tou
Tupe Short
Mike Henry

Willie John
Makiuti Tongia
Paul Lynch (as Commissioner)



Chair
Bishop Tutai Pere



Vice Chair
Makiuti Tongia



Committee Member
Makiroa Mitchell (SEP 2020 - JUL 2022)



Committee Member
Teaoakamaru Mariri-Tepou



Committee Member
George George Williamson



Committee Member
Sam Napa

NOW

Advisory Committee 2023

On 24 September 2020, the SBM Advisory Committee (**Committee**) was appointed by the Minister under the 2019 Act. The Committee is made up of community leaders representing religious, aronga mana, environmental, private sector, sporting, youth and academic perspectives, and includes the Commissioner.

The role of the Committee is to provide community perspectives to the Government on the development of the seabed minerals sector. The Committee makes recommendations to the SBMA on SBM policies, and provides a voice for the community.

Seabed Minerals Licensing Panel

EST. 2021

On the 23 August 2021 the Minister appointed an Expert Licensing Panel consisting of:

- **Garth Henderson (Cook Islands)**
Chair, Government Expert
- **Pamela Maru (Cook Islands)**
Maritime Expert
- **Chris Brown (UK)**
Financial & Legal Expert
- **Hannah Lily (UK)**
Legal Expert
- **Malcolm Clark (NZ)**
Environmental Expert
- **Alison Swaddling (UK)**
Environmental Expert
- **Richard Johnson (UK)**
Environmental Expert
- **Darryl Thorburn (NZ)**
Extractives Expert
- **Akuilla Tawake (Fiji)**
Extractives Expert
- **Andrew Lipman (USA)**
Engineering & Maritime Expert

The establishment of the Panel was the first of its kind in the Cook Islands. It was a proud moment to have Cook Islanders amongst internationally recognised experts aiding in the evaluation of exploration licence applications to ensure a robust and rigorous process.

The role of the Panel was to evaluate and score three applications against a prescribed criterion:

1. Proposed work plan and viability of the exploration operation
2. Financial resources
3. Technical competence
4. Compliance
5. Risk assessment and management
6. National interest
7. Commitment to Marae Moana

After 3 weeks of evaluations and a Q&A session with Applicants, the Panel met for deliberations from 13 to 17 December 2021 and followed a hybrid format of in person and virtual attendance in Rarotonga due to COVID restrictions. After almost 25 hours of comprehensive deliberations, the Panel recommended to the Minister to grant 3 applications for Exploration Licences.

“The calibre of our expert Licensing Panel is world class. It includes members who are well recognised SBM experts and who are also familiar with the Cook Islands SBM resource and context. The Cook Islands is building a world leading SBM sector, and this Panel is reflective of that.”

**Prime Minister
Mark Brown**

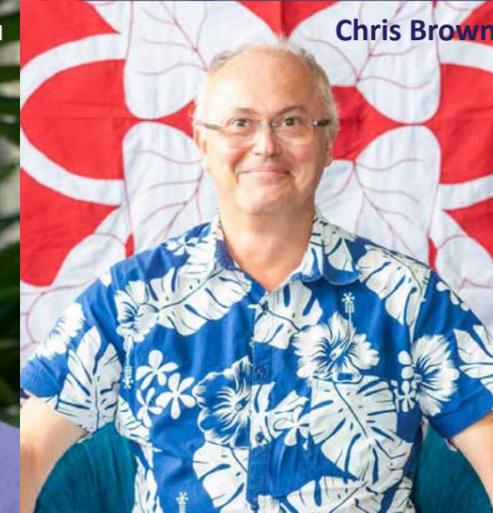


Garth Henderson

“I was very honoured to have the opportunity to chair this important body. I was impressed with the expertise and calibre of our Panel members. We had coverage of all the expert fields, which made for robust discussions during our question and answer sessions with the applicants, and in our evaluations of the applications” Garth Henderson.



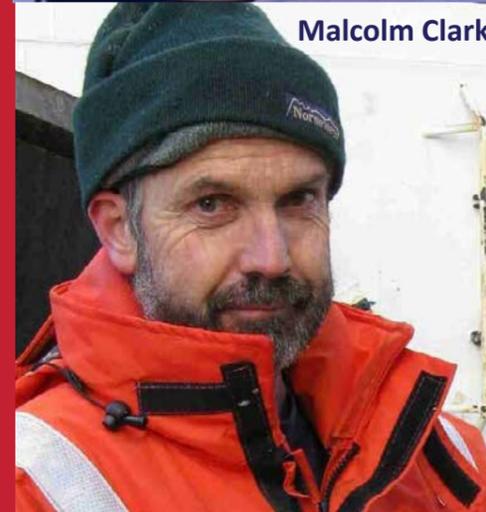
Pamela Maru



Chris Brown



Hannah Lily



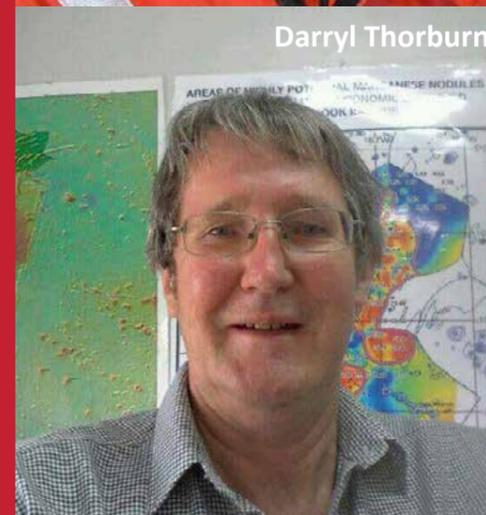
Malcolm Clark



Alison Swaddling



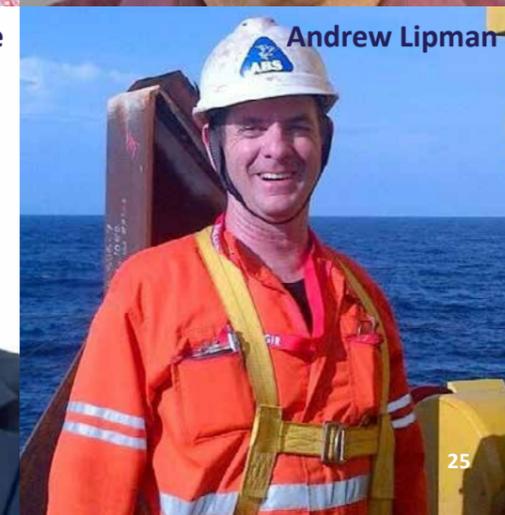
Richard Johnson



Darryl Thorburn



Akuilla Tawake

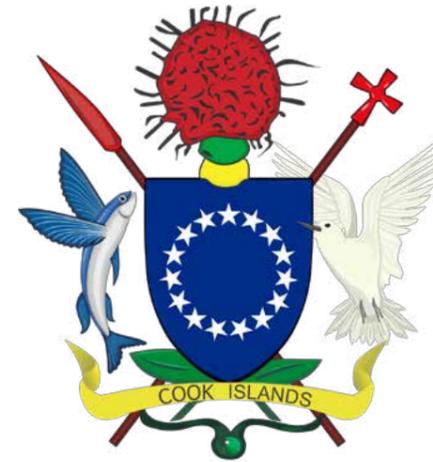
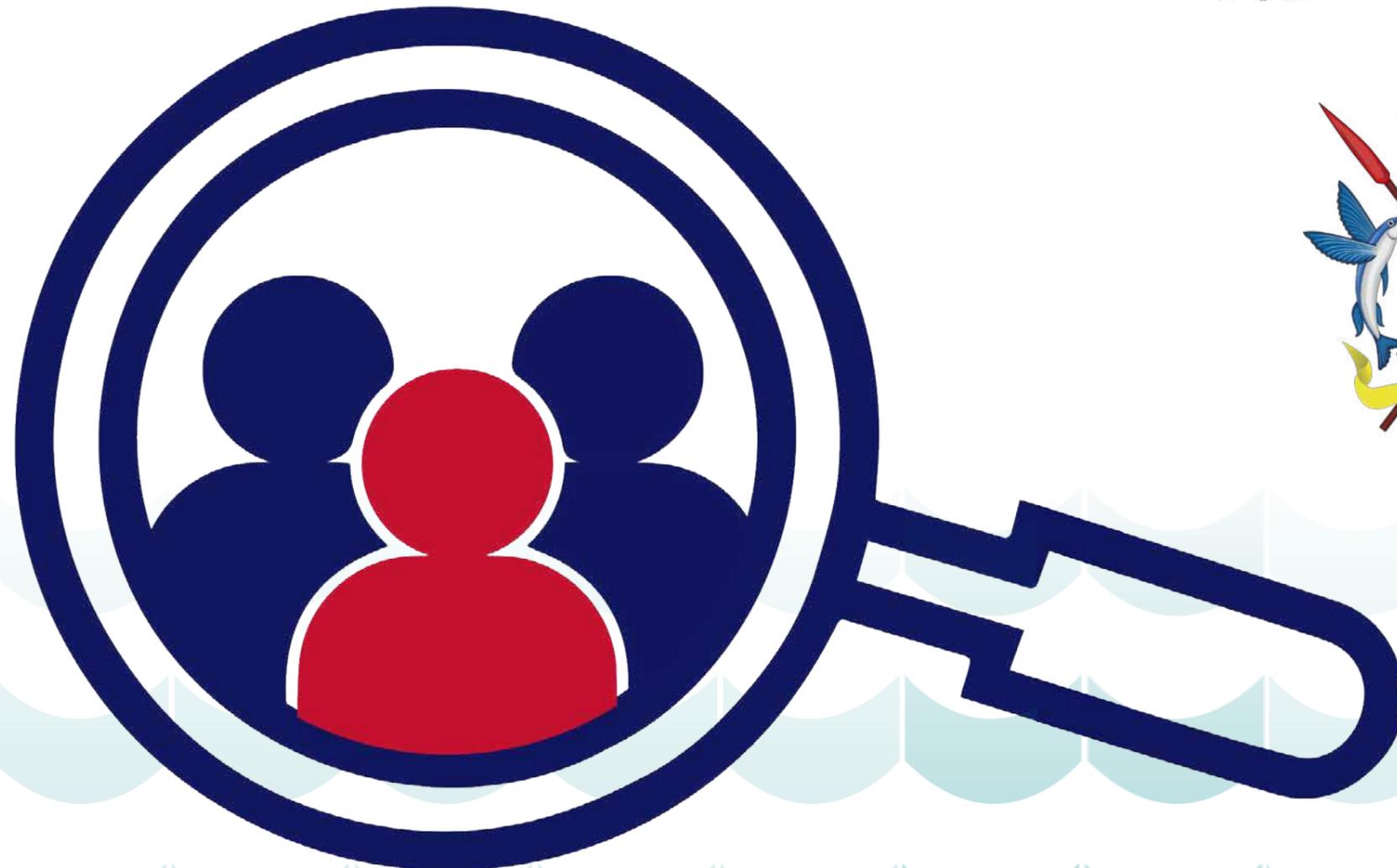
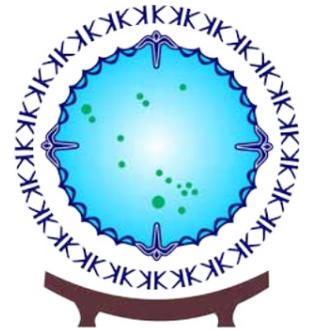


Andrew Lipman

Seabed Minerals Working Group

EST. 2018

In 2018, Minister Mark Brown established the SBM Working Group made up of relevant Government agencies including: SBMA, NES, MFEM, MFAI, CLO, CIIC and Marae Moana. The SBM Working Group chaired by SBMA, was formed to ensure that work undertaken to develop the SBM sector occurred in a cohesive manner, across relevant ministries and entities.



KO TATOU RAI EITERE KI MUA BRINGING OUR PEOPLE ON THE JOURNEY

The Cook Islands people are our most important stakeholder. SBMA is committed to developing this sector in a sustainable and transparent way by placing high priority on ensuring our people are leaders and partners in this journey. We do this by keeping our community informed, empowered and benefiting from sectoral development.

SBMA's core priorities is to reach out and engage with our Cook Islands communities. This allows us to:

- Raise awareness and understanding on SBM issues
- Be transparent about what the SBMA is doing
- Create avenues for stakeholder concerns to be heard and addressed
- Foster a collaborative approach to the development of the SBM sector with contributions and input from our Cook Islands people
- Provide accurate and science-based information
- Provide updates on current and upcoming SBM activities
- Collaborate with other Government agencies on public initiatives and events
- Contribute towards a well-informed Cook Islands public, who can engage progressively on SBM-related matters

Over the past ten years, SBMA have met with numerous community stakeholder groups throughout Rarotonga and our Pa Enua. The engagements involved a wide range of people from our Government, church and traditional leaders to our students and communities in English and Cook Islands Maori. SBMA are fortunate that our consultations in recent years have been ably led by Prime Minister Mark Brown, along with the support of our Advisory Committee.

Whilst we are very proud of the efforts made to engage with our people, we have learned key lessons to help improve future engagements. With the issuing of three exploration licences in early 2022, the Government will continue to inform our communities of progress and sector developments, demonstrating transparency and accountability to the people of the Cook Islands.

Our people have shared their concerns and hopes for the SBM sector, and we have come away with great suggestions on how we can develop the sector to benefit our people and country.



Why does the Cook Islands want to do exploration?

SBM is a developing industry worldwide. Currently countries are working on developing the best approach in the safe recovery of these polymetallic nodules, while ensuring the lowest impact on the marine environment. The purpose of the exploration phase is to collect scientific data to provide for better informed decisions for this potential industry that will affect us all

What does exploration involve?

Essentially data collection activities, such as:

- Mapping of the seafloor to better understand the sub-areas that might control geology and marine biology (see box below)
- Sampling to better understand the value of the mineral resource of nodules that are there.
- Sampling and measurements of the environmental baseline, so that studies of potential future impacts are referenced accurately to the current state.

EXPLORATION ACTIVITIES

Engineering, economic modelling of potential minerals harvesting systems.
Impact assessment of any proposed minerals harvesting systems, including testing

The discovery of polymetallic nodules

Polymetallic nodules were first widely reported from the global expedition by the HMS Challenger (1872-1876) which recovered nodules from the Indian, Pacific and Atlantic oceans. USSR and US marine expeditions in late 1960s made the discovery of nodules within the Cook Islands national waters.

What are polymetallic nodules?

Polymetallic nodules are mineral concretions (solid mixture) of manganese and iron oxides. These metals are found in ocean waters but are not stable in solution so precipitate out onto any stable surface. Nodules are formed on soft clay-ooze and where they are periodically moved by currents and seabed animals. Crusts form directly onto hard surfaces. Nodules can be as small as a dollar coin or as large as a potato. They can be smooth or have a botryoidal surface (shaped like a cluster of grapes). Some areas with high abundance of nodules are the Clarion Clipperton Zone (Central Pacific), Indian Ocean Nodule Field and South Penrhyn Basin (Cook Islands). Cook Islands nodules are most frequent at depths of approx. 4500 to 6000 metres where old oxygen rich currents run along the seafloor.

Nodule growth

Nodule growth is very slow at around 1 to 10mm for every million years. Depending on their location formation occurs in two ways.

The Hydrogenetic Process

This occurs when minerals precipitate from cold ambient seawater onto the exposed parts of nodule, and

The Diagenetic Process

This occurs when minerals precipitate from sediment-pore waters onto the parts of nodules submerged in the clay-ooze.

MAPPING THE SEABED FLOOR

Multibeam echosounding (MBES) is the most effective way to get a detailed map of the seafloor. Fans of sound are sent to the seabed and their echos listened for.

The resultant maps constrain the mineral resource model and help define habitats for environmental study. MBES is often mounted on expedition boats, but can also be mounted on AUVs and ROVs.

MBES produces:

- 1. Bathymetry**
This is the height of the seafloor and steepness of features

Cross section of nodules from (CCZ) and South Penrhyn Basin

www.sbma.gov.ck

The Cook Islands Seabed Minerals Journey

Seabed minerals in the Cook Islands Exclusive Economic Zone (EEZ)

Exploration for seabed minerals (SBM) within the Cook Islands EEZ was first carried out by US and USSR research vessels in the 1960s.

Further exploration undertaken in the early 1970s through to the early 2000s identified significant nodule resources containing in manganese, cobalt, nickel, and copper, currently estimated to total 12 billion tonnes.

To ensure the effective and responsible management of our SBM resources the Cook Islands passed dedicated seabed minerals legislation in 2009, through the advice of the Commonwealth Secretariat.

This was followed by the establishment of the Cook Islands Seabed Minerals Authority (Authority) in 2013.

Improving our regulatory regime

In 2018, the Minister responsible for Seabed minerals (Minister) made a decision to put a hold on SBM activities to allow Government to review its legislative frameworks and processes. In 2019 a new Seabed Minerals Act was passed to provide for the effective and responsible management of SBM activities.

The changes included a more robust and transparent licensing process, and introduction of an expert Licensing Panel to evaluate applications.

Following this, the Cook Islands launched a transparent and competitive tender process for exploration licences in October 2020.

In addition, the Cook Islands passed its Marae Moana legislation in 2017 which established exclusion zones and prohibits SBM activities within 50 nautical miles of its 15 islands.

The Marine Environment of Nodules

Where are Nodules found?

Nodules are found at the interface between the seabed and the overlying ocean. They may be partly or completely buried or fully exposed. Animals that inhabit this part of the seabed live on or around the nodules (burrowing, feeding, resting, swimming).

The Benthic Zone & the Benthos Community

The benthic zone is the environmental region located at the lowest level of a body of water. In the deep oceans, the benthic zone lies directly on the abyssal plains. The benthos is the community of organisms that lives in the benthic zone. At the depths where we find only animals (fauna) due to the unavailability of photosynthesis, deep sea marine fauna is classified by size, macrofauna, meiofauna, and microfauna. Macrofauna includes, for example, crustaceans, sea stars, and brittle stars. Meiofauna includes tiny worms (Nematoda, Polychaeta) and other small organisms. Microfauna includes tiny organisms like bacteria and archaea. Certain fauna move freely, whilst others are sessile and may even rely on nodules as a place to live. The benthic zone is the measuring of the quantity of animals.

1. Sea Sponges; 2. Deep Sea Fish; 3. Sea Sponges; 4. Deep Sea Fish; 5. Sea Sponges; 6. Deep Sea Fish; 7. Sea Sponges; 8. Deep Sea Fish; 9. Sea Sponges; 10. Deep Sea Fish

Source: Japan SOPAC Exploration, 1986)

Map of the Cook Islands EEZ, including islands, estimated nodule fields, exploration licence areas and Marae Moana exclusion zones.

www.sbma.gov.ck

Mangaia



Rarotonga



Atiu, Mitiaro, Mauke



Aitutaki



Palmerston



Manihiki, Rakahanga, Penrhyn



Pukapuka



Nassau



2020 Licensing Process



ORONGA'ANGA I TE TIKI'ANGA KIMI KITE LICENSING PROCESS

2015 Licensing Process

On 11 August 2015, the Cook Islands launched its first tender with an open Application period that was extended to 11 January 2016. At the closing of the tender, no application for exploration licences were received. There were a number of entities who expressed their interest in applying for Exploration Licences, however could not commit the resources required to prepare an application and apply for a Licence.

On 22 October 2020, the Minister for Seabed Minerals opened an exploration tender for areas within the Cook Islands EEZ.



Stages of the Licensing Process 2021 - 2022



It was imperative to the Cook Islands Government that only the most suitable applicants be granted licences to undertake exploration in Cook Islands waters. To help ensure this occurred, the licensing process consisted of the following five main stages.

1. Due Diligence assessment by SBMA against a set qualifying criteria. This took four months and only three of the four applicants met the criteria to advance to the next stage. SBMA contracted an international due diligence firm to assist with its assessment.

2. Public notification, extensive information about the applicants and their applications were provided to the public (including in Cook Islands's Maori), who were given the opportunity to make submissions on the applications.

3. Consulting with Crown agencies on the applications, and in particular with the National Environment Service on the need for any specific licence conditions relating to the protection of the marine environment.

4. Evaluation of the applications by an expert Licensing Panel taking into account the SBMA's assessment, public submissions, and consultation Crown Agencies. Following over three weeks of evaluation the Licensing Panel recommended to the Minister that the three remaining applicants be granted exploration licences.

5. Final consideration by the Minister and Cabinet. The Minister agreed with the Licensing Panel's recommendation and Cabinet gave the final approval for the Licences to be granted.



"I'm proud of the work done by the Panel, I'm confident that the recommendations we made to the Minister were the right ones for our country." Licensing Panel Chair Garth Henderson



"Leaving the legal and scientific tasks in the hands of the SBMA, our primary role as the Advisory Committee was to ensure that each and every member of our Cook Islands communities and population is reached and provided with the necessary information and understanding on SBM Exploration." Advisory Committee Chair Bishop Pere

"This has been a lengthy and robust licensing process since we launched in October 2020. We have put in considerable time and effort to ensure that we have followed each and every one of the licensing steps required, and that we have kept our Cook Islands public informed on our progress." Commissioner Alex Herman



Issuing of Exploration Licences 2022



On 23 February 2022, the Cook Islands issued three exploration licences to CIC, CSR and Moana Minerals respectively, after a rigorous 16-month licensing process. This was an historic occasion for the Cook Islands marking our first real steps towards the development of our SBM resources.



"Cabinet was impressed with the robust and comprehensive licensing process undertaken. This helped lead to our decision to grant these SBM exploration licences." Prime Minister Mark Brown





KIMI'ANGA KITE E TE PUAPINGA I RARO I TE MOANA EXPLORATION LICENCE PROGRAMMES

Government is committed to sustainably and responsibly developing our SBM sector for the benefit of our Cook Islands people. In line with the precautionary approach, any future decision on whether or not we will allow harvesting to occur needs to be scientifically based.

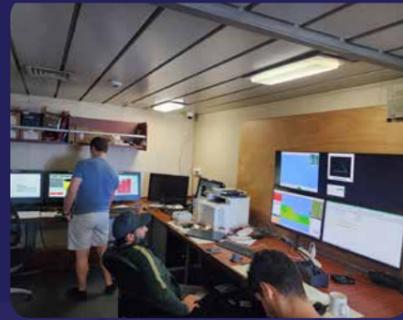
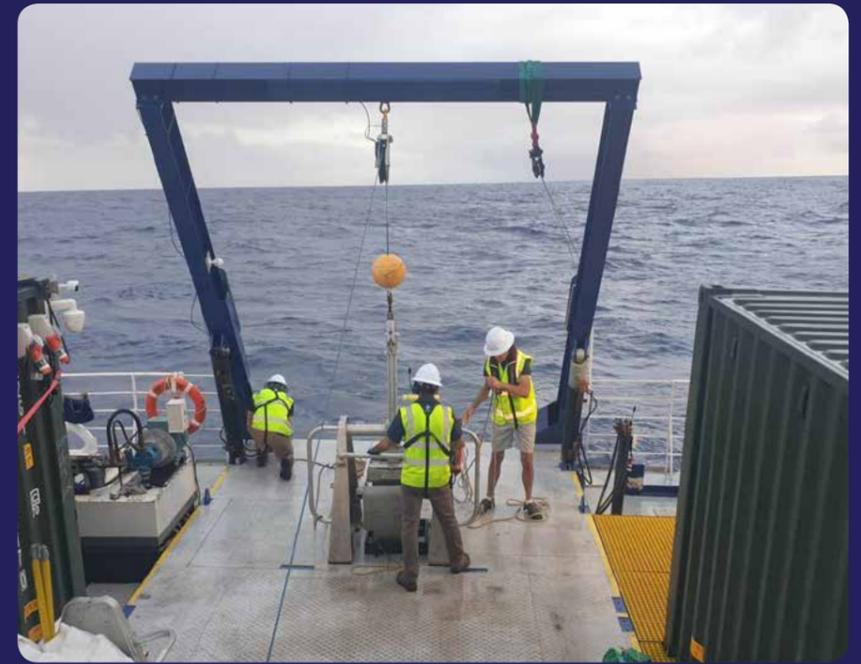
To do this, we need more data and information about the nature of our marine environment and our mineral resources. Only then can we properly understand and address the potential environmental impacts and likely commercial viability. This understanding can only be practically obtained through Exploration Programmes. These Exploration Programmes will teach us more about our Marae Moana and contribute to the global effort to better understand the world's deep sea marine environment and seabed.

With the signing of exploration licences in February 2022, the first ever licensed Exploration Programmes commenced with CIC Ltd running several sampling expedition legs in 2022. In February 2023 Moana Minerals Ltd launched the exploration vessel Anuanua Moana to start exploration work in its area. SBMA has placed inspectors on these vessels to monitor activities and ensure their compliance with requirements.

This brings in a new era of marine exploration for the Cook Islands.



“It was great to see first hand some of the exploration activities Licence Holders were carrying out and ensuring they were remaining compliant with their work plans we had approved”
Policy & Regulatory Oversight Officer,
Te-Ara Henderson



“There are real challenges to working out at sea, and to see how problems are solved in the field, on the go, has been a great learning opportunity.”
Senior Knowledge Management Officer,
Rima Brown

“Being an inspector allows me to put my theoretical knowledge into action as experience enhances wisdom. The marine environment is the most important and as a young striving scientist what better way to learn than being out at sea where all the action takes place.”
Knowledge Management Officer,
Tanga Morris



“From my extensive experience in deep sea minerals in the Clarion Clipperton Zone, I found being an inspector a perfect opportunity to compare and evaluate the practical effectiveness of the licence holders techniques and processes.”
Knowledge Management Director,
John Parianos

KIA RAUKA TE KITE E TE MARAMA SCIENTIFIC ADVANCEMENTS

Building on the work of the last three decades, the last ten years saw major progress in the advancement of our scientific understanding of the seabed through three main ways.

Past Research Expeditions

After numerous exploration expeditions in the 1970s, 1980s, and early 2000s marine exploration quietened in the Cook Islands. Interest was revived in 2016 with the signing of a joint venture between the Cook Islands Investment Corporation (CIIC) and Belgium based company Global Sea Mineral Resources NV (GSR). This led to the joint venture conducting a successful sampling expedition in the 16-159 area north of Aitutaki in September 2019. A few months later, Ocean Minerals LLC (OML) conducted a similar expedition in an area immediately to the south. Whilst the Exploration Programme is currently underway, with two of the licence holder commencing activities, SBMA continues to pursue avenues for further research expeditions in Cook Islands waters.



Minerals Deposit Modelling

At the time SBMA was established in 2013, Professor David Cronan, Imperial College London, used his decades of experience and expertise to provide SBMA with very detailed data compilation and mineral inventory estimates, highlighting nodule fields focused on today. Around the same time the Commonwealth Secretariat provided hypothetical modelling that helped inform the forthcoming Seabed Minerals (Royalties) Regulations 2013.

A year later in 2014, New Zealand consultants Kenex completed probabilistic valuation and prospectivity studies, to try to better understand the commercial potential of what was known and new places to explore.

In 2015, the United States Geological Survey, Japan Oil, Gas and Metals National Corporation, SBMA and South Pacific Applied Geosciences Commission (SOPAC) collaborated on another estimate again, this time including other potential metals of interest such as molybdenum, rare-earths and titanium. A year later, this estimate was used as the basis for a cost-benefits scoping study on the cost-benefit of seabed minerals development by

Cardno on behalf of Pacific Community (SPC). The study outcomes were positive, in that profitable operations seemed possible, and at the order of magnitude level, seabed minerals returns were potentially comparable with then current tourism and fishing.

In 2019, Massachusetts Institute of Technology (MIT) looked at modelling approaches to help define tender zones within the Cook Islands.

Most recently in 2022 and early 2023 SBMA worked with RSC Consulting to produce the first mineral resource estimate to industry-Government code, including some material at a high enough confidence level to allow for preliminary engineering design.

To date, the mineral resource estimates have been based on historical data and the studies have been high level and desktop only. With the advent of commercial exploration activities in 2022, it is expected that more confident mineral resource estimates will be made and more rigorous studies completed.

RSC: SBMA 2023 Mineral Resource Statement

Classification	Cut-off (kg/m ²)	Abundance (wet) kg/m ²	Nodules Mt (wet)	Metal Grade (%)				
				Co	Cu	Fe	Mn	Ni
Indicated	5	26.7	304	0.50	0.15	18.5	15.4	0.25
Inferred	5	14	6,400	0.4	0.2	17	16	0.4
Global	5	14.4	6,700	0.44	0.21	17.4	15.8	0.37

- Notes:
1. The Mineral Resource is reported in accordance with the JORC Code 2012.
 2. The Mineral Resource is contained within the Cook Islands Exclusive Economic Zone.
 3. Mineral Resources have been rounded to reflect their confidence. Some totals do not add up exactly due to rounding.
 4. Abundance is the wet weight (kilograms) of polymetallic nodules per square metre.
 5. Dry tonnages were not estimated, free moisture levels (i.e., not water of crystallisation) vary but are in the order of 30% on a wet basis.
 6. The proportion of the area composed of large seamounts and chains and oceanic plateau has been excluded from the resource.
 7. The Inferred Mineral Resource in the estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that a proportion of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

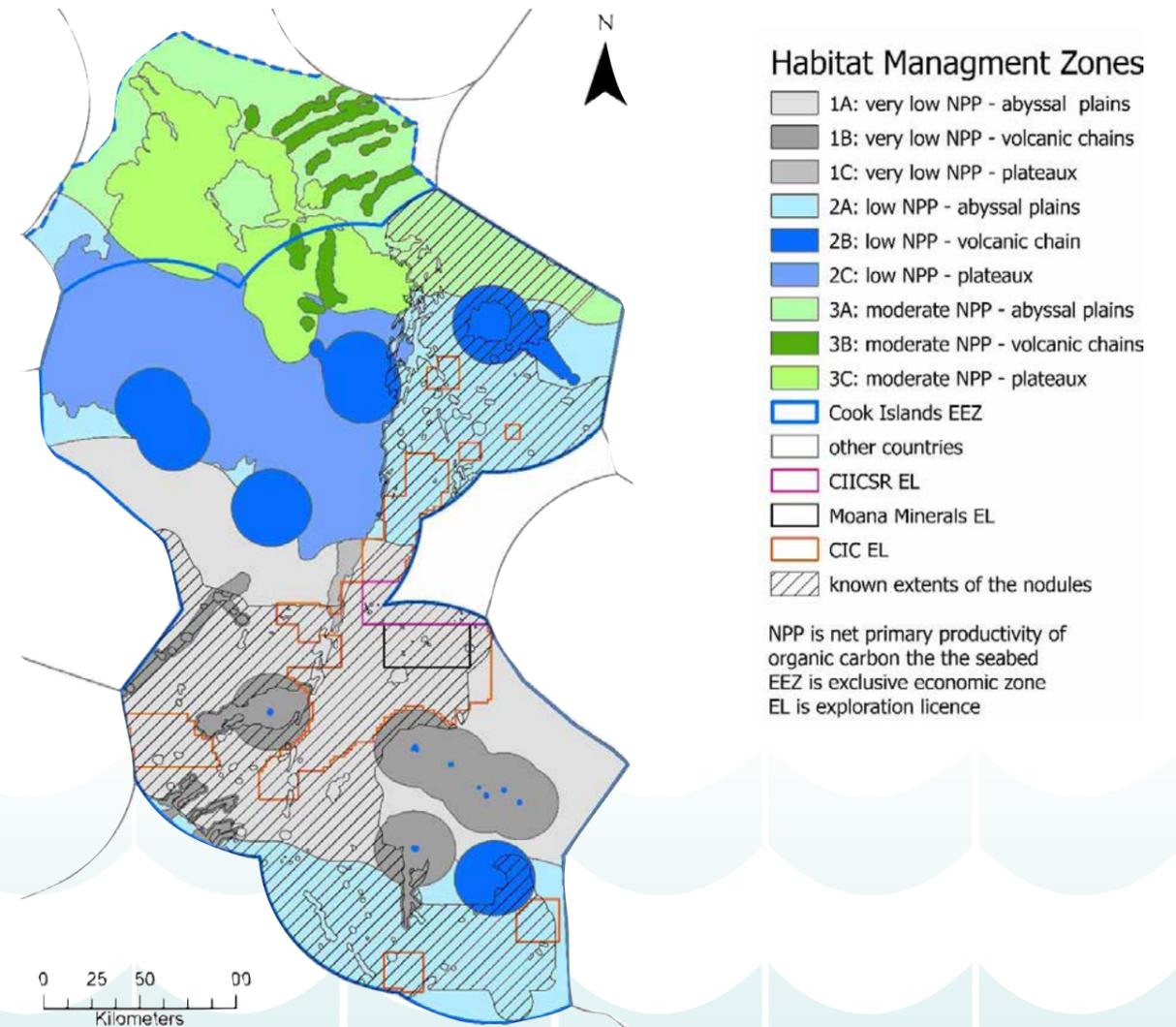
Marine Spatial Planning

Since the Marae Moana Act came into force in 2017, several spatial plans have been proposed for the Cook Islands seabed. The SPREP/IUCN/GIZ led Marine and Coastal Biodiversity Management (MACBIO) project of 2018 was one of these, part of a regional spatial plan that included the Cook Islands. Then in 2020, the Ridge to Reef project workshopped the extent of biophysically special, unique marine areas (SUMAs).

In 2022, SBMA led the definition of high-level Habitat Management Zones (HMZs), before seeking

the input of other TAG members and stakeholders. This approach built on the earlier studies but took leads from recent practice in international waters.

Looking to the future, more regional environmental planning is expected as more environmental information becomes available, and as potential impacts are assessed both regional and at planned project levels.



AKAMATUTU'ANGA I TE ITI TANGATA TRAINING & CAPACITY DEVELOPMENT

SBMA prioritises the employment and training of Cook Islanders to empower our people, build capability and most importantly retain long-term human resource capacity in the country. Our people have benefited from capacity development programmes within the sector at national, regional and international levels.

Over the past 10 years, SBMA has pursued avenues to upskill Cook Islanders and create new career pathways through training, scholarships, research apprenticeships, secondments, internships and employment.

SBMA INTERNSHIPS



Seth Solomona
June 2021; December, 2022

“SBMA has proven to me that anything is possible when you have a team working together as one unit. Though SBMA may be busy, they make the effort and time to go out to the community” Seth Solomona

“I think that the environment at SBMA promotes curiosity, learning (education) and connection. As an intern and student I appreciated the unique pathways and opportunities that came from this sector and how much more learning is possible about our natural environment.” Mikara Ringi



Mikara Ringi
June, 2020



Nouma Marsters
June, 2021



Athina Karika
January 2022



Inano Harmon
January 2022



Tuira Enoka-Henderson
January 2022; December, 2022;

“I really enjoyed the internship as I got to work on a number of different tasks. I also enjoyed being part of a collaborative work environment as it’s easy to help and learn from others” Tuira Enoka-Henderson



Luke Areai
December 2022



Marino Whichman
December, 2012



Thomas Whiddon
August, 2016



Manine Lynch
June, 2018



Tamyra Bullen
December 2022 to current

“My favourite part of the internship is working alongside my colleagues and learning from them as they are talented and inspiring individuals with their own interests” Tamyra Bullen



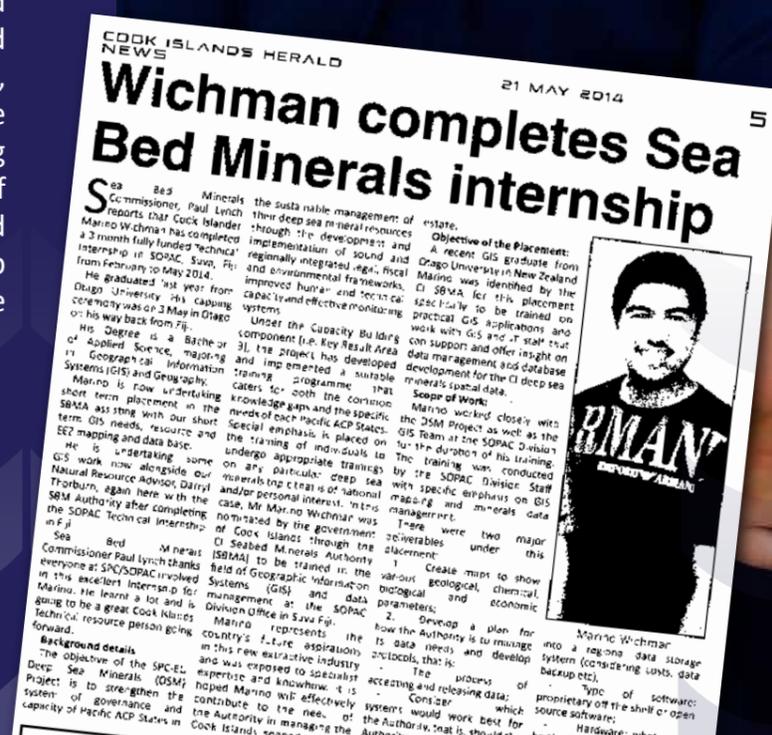
Aaron Punua
October, 2023

MARINO WICHMAN

Marino Wichman was SBMA's very first intern, joining in December 2012. Marino was later employed at SBMA as a GIS specialist officer in December 2013. Marino now works for SPC as a Fisheries Scientist, and still maintains connections with SBMA.

"Looking back on my journey at the Seabed Minerals Authority, I am filled with immense pride and gratitude. I had the opportunity to experience and learn about the complexities and nuances of the deep-sea minerals sector, embark on an incredible journey of self-growth, and develop a network of passionate individuals who share the same vision of creating an equitable seabed minerals industry that empowers the Cook Islands and Cook Islanders in reaching self-sustainability.

I've been fortunate to have participated in a consultative process that ensured that all local stakeholders had a voice, which has helped SBMA shape the future of the Cook Islands mining sector. I am proud of the hard work of current and former SBMA teams, and look forward to continuing to develop a sector that is grounded in science and protective of the environment."



OTHER TRAINING INITIATIVES

SPC-EU Deep Sea Minerals Project

- Initiated in 2011, this collaboration between the Pacific Community (SPC) and the European Union (EU) helped build capacity in the areas of marine minerals resources, policy development, fiscal and taxation regimes and environmental monitoring.

At-sea training

- There has been immense at sea training opportunities for our very own Cook Islanders, including: Eusenio Fatialofa, Rima Browne, Chloe Wragg and Junior Tapoki, Anna Glassie, Sam Napa, Tom Whiddon

SPC-EU project internships

- Alex Herman, Legal internship at SPC November-December 2012
- Marino Wichman, Technical internship at SPC, February-May 2014
- ISA internships
- Alex Herman, Legal internship July 2014
- Tanga Morris, Knowledge Management Officer internship September - October 2022

Rima Browne, Senior Knowledge Management Officer "It was a glimpse of the kind of research that would take place in the Cook Islands... and to have Cook Islanders be part of it was extra special"

Tanga Morris, Technical Officer "During my internship that was supported by the National Oceanographic Centre, I worked in the ISA headquarters on the development of a deep-sea image catalogue. It was an excellent opportunity as a representative from a Small Developing State to support the effective implementation of UNCLOS"

Other internships

- Alex Herman, Rhodes Academy of Oceans Law and Policy in Rhodes, July 2013
- Marino Wichman, Technical internship at Kenex in New Zealand, 2014
- Alex Herman, UN Nippon Foundation Fellowship in New York and Brisbane, April to November 2015
- Rima Browne, Technical internship at RSC in New Zealand, May 2022





TE AU TAEAKE PIRIMOU PARTNERSHIPS

SBMA are profoundly grateful to all of those that have helped us over the years. We have space to mention just a few from the last 10 years here.

National

Our national partnerships are critical as they help align our work programmes and offer opportunities to leverage limited resources between us.

The key national partnership organisations for SBMA are the SBM Advisory Committee, SBM Working Group and the Marae Moana Technical Advisory Group.

We are also privileged to have received technical input from or worked alongside:

- House of Ariki
- Koutu Nui
- Religious Advisory Council
- Office of the Prime Minister
- Ministry of Marine Resources
- National Environment Service
- Cook Islands Tourism Corporation
- Crown Law Office
- Ministry of Finance and Economic Management
- Ministry of Foreign Affairs and Immigration
- Ministry of Transport
- Ministry of Internal Affairs
- Ministry of Infrastructure
- Ministry of Education
- Business Trade and Investment Board
- Maritime Cook Islands
- Cook Islands Investment Corporation
- Te Ipukarea Society

We also deeply appreciate our relationship with the various Island Councils and other stakeholder groups as we progress our mission to bring our people along on the voyage of learning about our Marae Moana and seabed mineral resources.

International

Seabed minerals is a growing area of interest around the world, and SBMA is grateful for the partnerships formed and nurtured at the international level. International partnerships are invaluable as they: keep us informed of developments and current affairs within the sector; help us contribute to and learn from best leading practices; facilitate capacity building opportunities; and provide us with financial and in-kind support.

Over the last 10 years we have developed relationships with:

- International Seabed Authority
- Pacific Community (SPC)
- Commonwealth Secretariat
- New Zealand Ministry of Foreign Affairs and Trade
- New Zealand Environment Protection Agency
- National Institute of Water and Atmospheric Research
- New Zealand Parliamentary Counsel's Office
- Australian Department of Foreign Affairs and Trade
- Geoscience Australia
- South Australian Department for Energy and Mining
- International Marine Minerals Society
- Massachusetts Institute of Technology
- Norwegian Petroleum Directorate
- British Natural History Museum

Based on the dynamic and growing nature of the seabed minerals sector, our need for partners will continue to grow and expand as we enter the next phases of the sector's development.

SBMA IN THE NEWS

Seabed mineral exploration takes a 'huge step' forward

THE COOK ISLANDS Government has been given the go-ahead to explore an area of seabed minerals in international waters, in partnership with Belgium.

A license was approved by the International Seabed Authority (ISA) in February 2022, for exploring the Clarion-Clipperton Zone (CCZ) for polymetallic nodules, which contain a range of commercially-valuable metals. The 75,000km² area, about two-thirds the size of New Zealand's North Island, is receiving the license is a "huge step" in the Cook Islands towards exploring its offshore resources. The ISA requires development of a regulatory framework for the zone.

Cooks teach region on minerals law

THE COOK ISLANDS is giving presentations on the country's laws on deep sea mineral mining at a regional workshop to encourage other countries to follow suit.

Three staff from the Seabed Minerals Authority are in Tonga this week at a Pacific-ACP states workshop on deep sea minerals law and contract negotiations. These are commissioner Paul Lynch, minerals advisor Darryl Thorburn and legal officer Alexandrya Herman.

Herman is leading the team's presentation – the first time the 24-year-old has had a chance to do so.

She was recently hired by the Authority after completing a law honours degree, specialising in deep sea minerals.

"It's not old white-haired people leading, it's the young people leading and that's what we need," said Lynch.

The three are joined by Cook Islands environmentalist Teina McKenzie, who is keen to learn more about the checks and balances being put in place in the region.

Cook Islands is the first country in the region to develop and pass legislation regulating the environmental impacts, exploration, extraction and national rights of seabed minerals. The Seabed Minerals Act 2009 came into force at the start of March this year.

Many Pacific island countries also have possible large amounts of rare mineral deposits in their exclusive economic zones. Tonga has three deep sea mineral exploration companies established, but no deep sea mining legislation in place – although it is understood a bill was drafted last year.

Cook Islands is putting out an international tender later this year for exploratory work to be started in the next few years. This will involve assessing environmental impacts, developing equipment and taking out samples.

The workshop this week is part of the Deep Sea Minerals (DSM) Project being run by the Secretariat of the Pacific Community (SPC) through funding from the European Union. It aims to provide technical advice and assistance to Pacific-ACP states to develop national policy, law, and fiscal regimes to regulate seabed mining activities.

There is concern over the likely power imbalance between small island developing states' government resources and the negotiation tactics and resources of mining companies.

As the industry develops, Pacific-ACP states may be approached by purported deep sea minerals operators or investors and pressured to sign up to a deal for mining activities which in practice may pose great risk or present little benefit to the state.

The DSM Project was set up to make sure regional governments are equipped to negotiate – and recognise – a 'good deal' when one is on the table. It is the second of five regional technical workshops, and is being attended by government officials, non-governmental organisations, environmental groups and others from 15 countries.



Cook Islands Seabed Minerals Authority staff are minerals advisor Darryl Thorburn, legal officer Alexandrya Herman, Minerals Minister Tom Marsters (not staff), office administrator Caroline Tiria and commissioner Paul Lynch. Thorburn, Lynch and Herman are at a workshop in Tonga this week.

MUSEUM ENTRANCE
CHILDREN: \$2.50
ADULTS: \$5.00



Seabed Minerals Commissioner Paul Lynch holds a genuine Cook Islands manganese nodule, as Finance Minister Mark Brown and Museum Society president Gerald McCormack look on.

Keeping Cook Islands interests at its core in seabed minerals issues

This week was a historic milestone for the Seabed Minerals Authority (Authority). We announced the three seabed minerals companies that met the qualification criteria in the Act, and would be proceeding to the next stage of the exploration licensing process, writes Seabed Minerals Commissioner Alex Herman.

- Provide meaningful benefits to our Cook Islands people and businesses;
- Provide us with valuable exploration data and information so we can make informed decisions on whether or not to proceed to harvesting;
- Place environmental best practices at the forefront; and
- Importantly, share the values that we hold in relation to our sacred Marae Moana.

WHEN we received these applications for exploration licenses many months ago, I don't think we quite appreciated the amount of work that would go into assessing the application and then undertaking the necessary checks and verifications so that we, the Authority, can be confident that the suitable companies to carry out exploration research in Cook Islands waters. It has been a complex process, looking at the applicant's financial and compliance history, structures, risk management and whether the

companies have been approved by the Minister and Cabinet on whether to grant or decline exploration licenses.

"We expect that this licensing process will be completed, including decisions on whether to grant or decline licenses, by early next year," Herman said.

"Potentially, exploration expeditions could begin in 2022. This will depend on the completion of this licensing process and when the contractor plans to begin exploration."

The criteria the companies had to meet was in the Seabed Minerals Act 2019. The next steps in the exploration licensing process is public notification, followed by the Licensing Panel's evaluation, and finally recommendations to the Minister and Cabinet on whether to grant or decline exploration licenses.

"We expect that this licensing process will be completed, including decisions on whether to grant or decline licenses, by early next year," Herman said.

"Potentially, exploration expeditions could begin in 2022. This will depend on the completion of this licensing process and when the contractor plans to begin exploration."

The three companies that have progressed to the next stage: CIC Limited have headquarters in Rarotonga with consortium members in Florida and the Netherlands. CIC Seabed Resources Limited is based in Belgium and Rarotonga while Moana Minerals Limited is based in Texas.

Seabed minerals policy revised

THE COOK ISLANDS national Seabed Minerals Policy from 2008 has now been fully reviewed, updated and released to stakeholders and the public.

The policy was reviewed and re-drafted with technical assistance, approved in September 2013, following an application by the Cook Islands to the Cook Islands Technical Assistance Fund (CITAF). The approved CITAF arrangements were then coordinated by the Cook Islands Seabed Minerals Authority and, as usual, are being supervised by the Office of the Public Service Commissioner (OPSC) and the Ministry of Finance and Economic Management (MFEM).

Initially, a comprehensive Issues Paper was developed by an external expert legal technical advisor employed under CITAF. The Issues Paper, which was based on the old policy and our national Seabed Minerals Act 2009 then led onto the drafting of this revised Policy.

A copy of the revised Policy is available from the Seabed Minerals Authority and also can be viewed on its website <http://www.seabedmineralsauthority.govt.nz>

The final revised Policy will then be submitted to Cabinet for approval.

This will then help prepare for the next step in the steady development of our national seabed minerals sector, as highlighted in the Act, the SBMA Business Plans and the revised policy. The next required step is the drafting of the effective, international standard regulations for the licensing of exploratory blocks in the mineral rich manganese exclusive Economic Zone.

Seabed Minerals Authority release.

Seabed Minerals Authority release.

Seabed Minerals Authority release.

Companies...

Community on seabed board

FIVE community members have been appointed for the next three years to sit on an advisory board to the Seabed Minerals Authority.

Pastor Tutai Pere represents Aitutaki, Manihiki, Penrhyn, Neaputuru as well as the Religious Advisory Council. Michael Henry represents Aitutaki and Teresa Manarangi-Trotter represents Rarotonga and the Chambers of Commerce.

Tupe Short Taiiri Te Rangiri Rangitira represents the Kouru Nui and Nakiuni. Tongia represents Rarotonga as a teacher and senior academic.

Chair of the advisory board is Gerald McCormack of the Natural Heritage Project and secretary is Seabed Minerals commissioner Paul Lynch.

The board members are given powers under the Seabed Minerals Act, which comes into force today.



A community advisory board has been set up to advise the Seabed Minerals Authority on community views of seabed mining.

Industry will help keep talented Cook...

Industry will help keep talented Cook Islands in the country.

The young woman has been launched into the deep end – she will make her first international presentation at a seabed minerals conference in Tonga next week – but Marsters and Seabed Commissioner Paul Lynch are confident that she will succeed.

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We will protect it and we will harvest it': PM



ANU ANUA MOANA

Seabed Minerals Authority deliberations...

TE AU TAEAKE PIRIMOU REFLECTIONS



**Prime Minister Mark Brown,
Minister for Seabed Minerals
(July 2013 - current)**

There have been a number of key milestones achieved by the Cook Islands over the last 10 years, from the opening of the SBMA through to the opening of our tenders for exploration in 2021. 2022 saw the issuing of the first three licences for our three exploration companies, again a very significant milestone. Then this year, with the arrival of a locally based research vessel. These really demonstrate key tangible things that we can all be really proud of in the 10 years of the Seabed Minerals Authority.

The major achievements by the SBMA A-Team have been the establishment of a strong, robust regulatory framework, the updating of our legislation to ensure the protection of our assets, the protection of our ocean and the protection of the resources that our people have. In our discussions and public consultations with our people right across the country, three key messages reiterated include: 1. protecting our ocean is most important, 2. that we can harvest the treasures that lie in our ocean and 3. that the rewards benefit the Cook Islands people.

If I can leave a message for our future generations, I would say that sometimes you have to have the courage to be able to take a line or a path that is not taken by others. Sometimes you have to have the conviction to be able to lead the way into an area that has been unexplored or uncharted. So my message to them would be, don't be afraid, don't be fearful of this. We come from a people who traversed the ocean hundreds of years ago on voyages of discovery. We are now undertaking a voyage of discovery which doesn't take us across the ocean but it takes us below the ocean. So there are unknowns, but we are going to go and find out what those unknowns are.



**Alex Herman, former Senior Legal
Officer (January 2013 - April 2016),
Commissioner (January 2020 -
current)**

Reflecting on the last 10 years, SBMA has grown and evolved over the years into fulfilling its functions

at the lead agency charged with the regulation and management of seabed minerals under Cook Islands jurisdiction.

Our vision for the SBM sector is simple: A sustainable minerals future for Cook Islanders.

The key words in this vision are our Cook Islands people. This has guided our decision-making and development of the sector. My proudest moments with the SBMA over the years has been seeing the growth and development of our people in this sector, whether within Government, within industry or within our communities. It is awesome to see our country and people taking the lead in this sector, and showing to the world how we can develop a sustainable and responsible extractives sector in line with our cultural, environmental and social values.

For all of our achievements, we give the honour and glory to God. He has put us in our leadership roles and positions at this time, and He has plans so that we may prosper. Plans to give us hope and a future.

Finally, I want to thank everyone who has been part of SBMA's journey both current and past. Your input and contributions have been most appreciated and valued.

Looking ahead I look forward to the future of the SBMA - we are in for exciting times.



**Darryl Thorburn, Former SBMA
Natural Resource Management
Technical Adviser (March 2012 –
December 2017), SBM Licensing Panel
member (September 2021 - current)**

I arrived in Rarotonga, mid-March 2012, on a hot steamy fragrant afternoon on a 3 year contract with the role of advising the Cook Island Government on how best to develop their vast seabed minerals resource. My immediate boss in the Cook Islands was Sir Tom Masters, the then Minister of Minerals as well as Minister of Internal Affairs and Immigration. I started work at the office behind Boogies Bar, where Sir Tom Masters and his small office team worked. My other boss was the Commonwealth Secretariat.

My time as Advisor as a Technical Advisor has involved providing technical advice on;

- the establishment of the Seabed Minerals Authority with a can-do attitude as the agency responsible for managing the Cook Islands

- mineral estate,
- the growth of that agency into possibly the best minerals regulator in the Pacific,
- the development of a diverse comprehensive minerals inventory of the Cook Islands mineral estate and technical information on seabed minerals in general,
- guiding the development and implementation of an improved regulatory and fiscal regime,
- the successful promotion of the Cook Islands' seabed minerals estate,
- the successful allocation of minerals acreage using best practices for allocation,
- bringing on board nationals into the SBMA and develop them into expert mineral estate managers with a can-do attitude with the confidence to engage with international experts in the mineral development sector.
- day-to-day operational matters

This was done on a minimal budget and SBMA can be proud of what it has achieved over the last 10 years. The groundwork has been done, the next 10 years will be very exciting, and SBMA will be instrumental in making this happen.

I have enjoyed working on this assignment. Working and living in Rarotonga and travelling around the Cook Islands has been a real privilege for me. Cook Island people have taught me so much of "how to live and enjoy life". Thank you all. It was a sad day for me when Lee and I left Rarotonga and returned to New Zealand after 5 years in Rarotonga.



**Marino Wichman, former SBMA GIS
Specialist (Dec 2013 - Feb 2017)**

The Cook Islands are embarking on its journey of discovery with our Marae Moana. Filled with many unknowns, yet we know it holds the greatest potential for discovery and progress. The future belongs to those who have the courage to take the first steps



**Rima Browne, SBMA Senior
Knowledge Management Officer
(May 2018 - current)**

I started with SBMA pretty much straight out of university. I didn't know much - just that we had these special rocks, and the office needed a GIS officer.

Five years later, and what a journey it has been. Consultations, meetings, conferences, legal reviews,

training, interviews, projects, events, and way too much coffee in between. Was it easy? Not even close. Did I enjoy it? Most times. Has it changed me? Hell yes!

Public speaking, at-sea experience, international representation. All steps towards my growth. Today, I am out at sea on the Anuanua Moana, a state of the art research vessel carrying out pioneering seafloor mapping in our Cook Island waters.

A result of years of commitment and perseverance from those before me. But this is only the beginning, and I'm excited to see where this leads.



**Beverly Stacey, Corporate Support
Director (August 2023 - current)**

My short time with SBMA have been nothing short of an enlightening and enriching experience. I am overwhelmed with gratitude for the opportunity to work with this remarkable organization and the incredible team that makes it all possible.

From day one, it was evident that the SBMA is a hub of talent, expertise, and unwavering drive. The passion and dedication of my colleagues have left me in awe.

Working at SBMA has broadened my horizons and deepened my appreciation for the complex and vital work they do in managing seabed minerals. I have witnessed firsthand the organization's commitment to environmental stewardship, social responsibility, and the development of policies that will shape our future.

As I reflect on the last couple of months, I can't help but feel a profound sense of belonging and pride in being part of this exceptional team. I look forward to the continued growth and learning that this journey promises and am excited to contribute my part to the noble mission of the SBMA.



**Eileen Macquarie, Former SBMA
Corporate Services Director
(September 2020 - August 2022)**

A very warm Kia Orana, Alex and team, The speed and growth has been exponential, and it has been a pleasure to work with passionate, committed individuals who are focused on the end goal and towards realising a long-term national dream. Happy 10th Anniversary, Team SBM!

Beginning with the first SBM Act 2009 and the subsequent establishment of SBMA, significant progress has been made in this sector. The exploration tender and issuance of three exploration licences were significant steps forward for SBMA, as was the exploration legislation and standards and guidelines that govern this activity. I like to think of SBMA as a bullet train, with individuals who are/have been part of SBMA locally and in terms of technical assistance abroad as the fine gems of the Cook Islands. Serving as the “tea lady” with SBMA for a time and being part of that journey has been a blessing. Alex, your ambition and drive to grow SBM and develop in-house capacity from Licensing to Comms (it’s not all Tech) says much of your leadership. I’m confident of the future of SBM.

What do I see in the next 5 years? SBMA has grown into a full-fledged seabed minerals powerhouse in the Region, demonstrating a balance between environmental protection and harvesting.

Alex, I wish you the best of luck as you build the capacity and lead SBM in the next phase. You can do it!



Derek Johnson, Former SBMA Policy & Regulatory Oversight Director (March 2021-November 2023)

Having previously worked as an advisor on economic development in New Zealand, I was drawn to the SBMA by the huge potential of the Cook Islands seabed resources and the prospect of working in a new and exciting sector. Although I had previously had some involvement with seabed minerals in the Cook Islands, it was over ten years ago, and I was excited by the progress that had been made since. Moreover, when I joined SBMA in 2021, I was thrilled to return home to the beautiful Cook Islands.

As for working at SBMA, there is never a dull moment. The work is fast-paced and dynamic and the team highly professional and dedicated to achieving the best outcomes for the people of the Cook Islands.

For me, the highlights have been driving the process for the granting of the Cook Islands’ first ever exploration licences and seeing exploration activities underway, once again, in Cook Islands waters. Looking ahead, I am excited about what the next 10 years has to offer, and I look forward to continuing to contribute to the growth and development of the Cook Islands’ seabed mineral resources.



Te-Ara Henderson, SBMA Policy & Regulatory Oversight Officer (February 2021-current)

Coming fresh out of Victoria University of Wellington at the end of 2020 I decided to return home for a holiday to escape the pandemic. I knew nothing of deep sea minerals or the Seabed Minerals Authority. One Saturday morning at the Punanga Nui market some family members were discussing this new industry with the potential to be “the future of the Cook Islands” and suggested I apply for a job opening.

A ‘holiday’ turned into 2 years with SBMA. Though it has been a demanding experience, it has been equally rewarding working alongside a small office of intelligent and dedicated Cook Islanders.

It’s incredible for me to think that when SBMA was first established, I was a year 13 student at Wellington College. SBMA has accomplished much since then, developing this industry from the ground up. Even though I have contributed to a small part of this history, I am proud of the role I have played in getting us to where we are today.

Through this exploration phase, the Cook Islands is taking strides towards realising the true potential of our seabed minerals resources. In 5 years, we will have access to more scientific information to help guide the development of this industry. I’m looking forward to the future and challenges ahead.



Kaitini Herman, SBMA Communications Officer (May 2021 - current)

Before beginning my journey here at SBMA, my knowledge of the SBM sector was limited to information published on the SBMA website, print and social media, including community views of the sector’s development. As a young Cook Islands mother, I want a better ‘tomorrow’ for my child, and the Cook Islands in general.

I understand there may be some hesitancy in developing a novel sector in the Cook Islands with limited technical expertise in SBM exploration and harvesting, and concerns for the environment. However, I take comfort in the exploratory phase of the sector’s development with expeditions, research and data to enhance our knowledge and understanding of SBM resources along with studies to ensure our marine environment is protected.

It is a privilege to work with fantastic people in an organisation that is continuously growing and learning. It keeps us accountable and our work interesting, triggers curiosity, and stimulates innovation to support our quest to address uncertainty and concerns surrounding the exploration and harvesting of our seabed mineral resources.



Anna Glassie, Former Licensing and Compliance Officer (Apr 2019 - Dec 2020)

Seabed Minerals Sector—to put it simply, I knew nothing about it; well, I fib, I knew a little amount, and oh, did my understanding of the sector alter once I started working for the Cook Islands Seabed Minerals Authority. Paul Lynch was SBMA’s Commissioner at the time, and it was an honour to work with him and the rest of the group, which included Rima Brown and Caroline Tiria.

Then, in 2020, Alex Herman was appointed as our new Commissioner, and our staff grew to include Eileen Macquarie, Dede Mingi, and Chris Brown. My experience at SBMA has helped me comprehend and value the various perspectives and viewpoints that people have about the mining business, particularly seafloor mining. I know that during my tenure at SBMA, the cautious strategy was always at the centre, and I appreciate many people’s mistrust, particularly when it comes to abuse. I, like many others, will be keeping an eye on this area.

I am thankful for the chance to have worked with Chris Brown, a previous SBMA adviser and current member of the International Seabed Authority. His expertise in this field was astounding, and being taught by someone of his level was not only an honour, but also a fantastic chance to learn and engage in difficult and important conversations.

In 2019, I had the opportunity to participate in a once-in-a-lifetime study assessment of the Cook Islands Exclusive Economic Zone. This was the second mission conducted by the Cook Islands. It was unquestionably a hands-on study chance with 12-hour rounds. This study trip would include biological monitoring as well as the collection of a restricted number of deep seafloor nodules. The goal was to use low-impact gathering tools to collect and analyse tiny samples of polymetallic clusters for makeup and chemistry studies. There

is only one method to gain knowledge about the sector.

Finally, I’d like to pay tribute to our forefathers, Sir Albert Henry (Papa Arapati), Sir Geoffrey Henry, Sir Terepai Maoate, and others. I thank you for your contributions in this area.

Lastly, I applaud the Cook Islands Seabed Minerals Authority, former Commissioner Paul Napa, current Commissioner Alex Herman, and the Seabed Minerals Authority on their 10-year milestone and look forward to SBMA’s next steps. I rejoice and lift a drink to this unique event. SBM Authority, congratulations on your ten-year milestone!



John Parianos, SBMA Knowledge Management Director (October 2021 - current)

I first interacted with Cook Islanders over 7 years ago, meeting them at international events where I was working with the Tongan ISA contractor. I recall them certainly making an impression with their charm and determination to be part of the industry. Back then, I would never have guessed that I would end up working here, but it’s been a real pleasure both professionally and with my wife personally.

We are all on an exciting voyage together, sometimes it gets challenging but for sure we are discovering new things, almost every week and making a contribution in such a situation can only be rewarding. It is always a privilege to work in a role where you can make new scientific discoveries, big and small alike. The next few years look to be especially challenging as stakeholders come to terms with the potential reality of this sector and try to look ahead to what will be needed, if we are to progress further. I am looking forward to it.

Perhaps most importantly, working at SBMA involves a lot of laughter and kindness, even as we strive to work through issues and build this regulatory and knowledge-based agency. Thanks everyone!



Tanga Morris, SBMA Knowledge Management Officer (June 2022 - current)

Joining the SBM sector in June 2022, fresh ‘on’ the boat. Coming from a fisheries

background I was very eager to develop and grow within this new yet similar space, still offshore but five to six thousand metres deeper. As I'm sure, with many others, my perception before joining this sector has changed drastically throughout this short period in understanding the great importance the SBMA is entrusted to do by regulating seabed mineral activities on behalf of the Government together with other agencies.

Science has and will always be a big part of my life. From a very young age till this present time, my knowledge has grown immensely and it will never end. As a young and proud Cook Islander I have been blessed with opportunities throughout my career, previous and current, these experiences have equipped me to be the technical officer I am today.

I care for the environment just like everyone else; this is where my role comes into play. I am proud to have joined this sector at this time where things are still developing and busy, it poses many challenges and sacrifices which I can prove myself capable of accomplishing.

My team continues to inspire me every day to do and be better so as they shape me, I can do the same by shaping others big or small.



Latishia Maui-Mataora, SBMA Senior Policy & Regulatory Oversight Officer (March 2022 - current)

After spending several years in the fisheries sector, I made a career shift with the same enthusiasm – eager to embrace new opportunities and contribute to building a sustainable future for the minerals industry in the Cook Islands.

When I first joined the Authority, I embarked on this journey with a mix of confidence and a bit of imposter syndrome due to my limited knowledge of this “new” sector. Such chances don't come by often, so I decided to seize the day and joined the Authority in March 2022.

Although I'm relatively new here, it's fascinating to discover that this journey began many years ago as a Pacific nation established maritime zones and asserted sovereignty over our oceans. This historical legacy fills me with pride as a Pacific islander and remains a constant presence in my mind, especially during meetings.

I'm currently enjoying the challenges, excitement,

tight deadlines, occasional frustrations, and the interactions with individuals. Just like the fisheries sector, this isn't your typical 8 am to 4 pm government job. The work demands a radically different mindset as it involves juggling various moving parts, each with its own set of priorities. Every day at the office is a unique experience, and I appreciate the dynamic nature of the work.



Dede Mingi, SBMA Communications Officer (June 2020 - current)

Kia Orana to all my fellow readers,

In the year 2020, the world was shaken up by a number of significant events, this is where I decided I needed to do bigger and better things for myself. Little did I realise that year that my journey would take me down a path so fresh, new and yet so beneficial to our Cook Islands people. From hospitality and customer service to Government, I entered a field about which I knew nothing; I was completely clueless. To be honest, I would never have predicted that I would wind up working in this industry.

Three years and a challenging journey later, who would have guessed that yours truly would be working alongside some of the most talented and smartest people in the country? If there's one thing I've learned, it's that there's never a boring time, and you're always discovering new things. From content production and development to media, meetings, consultations, workshops, events, design, and planning, I can confidently claim that it has shaped me into a better version of myself. I want to appreciate everyone who has been a part of this adventure, particularly Alex and my exceptionally gifted SBMA colleagues.

It's not always rainbows, unicorns, and happy hour. The team's effort behind the scenes is certainly full of high-powered contrast in motion. I am extremely pleased with how far we have all come thanks to our high standard of expertise, ambition, and devotion. “Teamwork makes the dream work!” as the expression goes.

Over the last ten years, there has been significant growth and development, laying the groundwork for our Cook Islands people to move ahead. With the constant work of the exploration phase, we will undoubtedly have more scientific knowledge and data of the seabed available within 5 years, giving our Cook Islands people a greater grasp of our resources and ensuring the protection of our marae moana.



Edward Herman, Director Partnerships and Cooperation (October 2023 – current)

I have enjoyed the learning and development from my short time with SBMA as Partnerships and Cooperation Director.

Key themes I picked on:

1. Agency environment: Very encouraging and innovative. This is a new and exciting industry that I feel all staff and stakeholders understand and believe in. The information and structures in place are the result of the rapid growth and ingenuity by all stakeholders that are motivated by the vision to explore this opportunity the Cook Islands government has boldly ventured into.
2. Content: The information and data SBMA are caretakers of is invaluable for the Cook Islands from a historical and progression perspective. There is a simple and interesting history that gives any user an appreciation of where and how this journey started. The flood of information, data, technology, skills, development and opportunities coming into the Cook Islands is overwhelming and not yet realized. SBMA are the key to harnessing and promoting all this by working with all stakeholders and communities domestically, regionally and internationally.
3. Focus: The foundation is solid. There is plenty of work to be done to fulfill SBMA's potential. Improvements have been continuous and expanding as the industry evolves at all levels. With the appropriate support and resourcing, SBMA can pioneer a way forward for the Cook Islands to grow at all levels sustainably.



Bishop Tutai Pere, Advisory Committee Chair (September 2020-current)

It has been an awesome honour and privilege and by divine providence to be on this Advisory Committee since the first team in 2013 to this day 2023.

We together celebrate our 10 Years Anniversary of our SBMA. From only a vague first sighting of this mineral nodule in our ocean depths to positively acquiring more and more scientific knowledge and information at this pivotal juncture of time is certainly a marvel and wonder. The culminating factor at this time is that we have 3 Research and Exploration Companies with 2 vessels already doing mapping, surveying and collecting scientific data for greater acquisition

of knowledge for precautionary measures of safety and protection of our ocean depths and marine environment.

We will need to ensure legislation, policies, scientific proven facts for safety, eco-friendly and socio-economic safety measures are put in place first before any move for future harvesting is ever considered – we are already heading in those directions since we started and looking very promising right now.

The establishment of our sovereign rights over our own EEZ and set up of our protective Marae Moana and with Licences already issued out to three Companies for Research and Exploration Expedition is inevitably a positive, and unquestionable efforts are already set in place and in operation. With the faith of our Ui Tupunas and our Prayers and Trust in our Almighty God above – we do right and do good that is Godly and who can come against us! Let us rally more to win more support from our own local people here and abroad – the available means of technological advancement is waiting to be tapped at any moment.



Makiuti Tongia, Advisory Committee member (September 2020-current)

First it was a new experience and none of us on the Advisory Board of 2013 knew much about minerals in our deep sea. But Gerald McCormack's workshops helped close the theoretical gaps and opposition views from others. He opened my eyes and gave us answers on many environmental issues.

Real samples of nodules also closed the visual gaps as well. On top of that the translations that Bishop Pere, To'u Ariki and myself did in the first Maori bulletins challenged our knowledge of our reo and its limitations in certain technical words. It was a journey that tested our knowledge of our reo and I think we all loved the challenge because that is what deep sea minerals is – a challenge that is quite unique to our situation.

It is a challenge to get down to our depth and a challenge to bring back what is on the sea floor at our depth in large volumes to make it economically feasible. Tools for our depth had not been invented yet 10 years ago. But the industry persevered globally as a team and have come a long way in learning more about our environment and how to progress carefully in some technical ways.

This is a learning and discovery journey every time we meet. There is always something new to learn, something exciting because of the novelty. That is what I like about this industry. It is the challenge of knowing her and talking to her to let us into her private world.

We are trespassing in her world. We need to respect the deep sea, in order to trade and exchange ideas and new hopes with her. We need to involve her persona closely as real life tutors in and about her private world – in the deep sea. Let her teach us and let us listen willingly as students and novices in order to enjoy sharing her material goods perpetually.



Sam Napa, Advisory Committee member (September 2020-current)

This has been an exciting journey as I have sailed our Oceans all the way to China and all the way to USA. I have been aware of this resource in our EEZ since I was a child here in Rarotonga and have had numerous conversations with some of our elders about their thoughts and options that were offered to them and when the technology is available, it should be harvested.

A lot of thoughts and precautions have been put in place to achieve the best possible advantage to the Cook Islands as a whole, also bearing in mind the investments from the companies involved in this emerging industry

The next 5 years will be exciting for the SBM sector, and I believe there will be huge interest from our people living overseas, including those currently working in the mines in Australia. The industry will also involve opportunities in agriculture, maritime engineering, and gaining knowledge of our deep sea. A lot can happen in 5 years, plenty of research and knowledge to acquire in the years to come. God be with us all and thank you Lord for the wonders of his Creation.



Makiroa Mitchell, former Advisory Committee member (September 2020-July 2022)

I am privileged and honoured to have served on the SBM Advisory Committee since 2020. I have found it challenging to educate myself in an area that has global implications and demands. It has been a fascinating experience to be having roundtable discussions with local, regional and international experts and to understand widely from an international level the need for these

minerals. It is about our survival for all mankind while comprehending the responsibilities that we need to preserve and nurture our natural resources for generations to come.

The policy direction from the SBM sector in each of the key result areas give us confidence that we have a framework that outlines what we will undertake as a country to meeting our global responsibilities and demands. I love how our Commissioner Alex Herman and SBMA staff, who alongside the Committee and our international seabed minerals organisations, have collaborated to complete the work required. They have articulated and carved a strategic direction and plan that will work over each phase and carefully.

Looking at it from the “outside now” I see a much clearer and organised pathway for everyone within this industry. Education and building awareness was the key to implementing the policy directions amongst our people and communities. We have taken a bottom up approach taking into consideration our cultural, religious and customary values and have created a plan that empowers our people in this world.



Chris Brown, Technical Advisor (February 2020 - current), Licensing Panel member (September 2021 - current)

It has been a privilege to serve as a member of the Cook Islands Licensing Panel, working alongside recognised experts in this field. I am indebted to the professionalism of the Commissioner and her team for supporting us in our role and providing us with timely information and responses to our questions to applicants which allowed the panel to critically assess applications.

The Cook Islands is leading the way in delivering a robust, transparent and accountable legal framework to regulate exploration in its exclusive economic zone with a view to future mineral harvesting. It will be fascinating to see the results flowing from exploration to inform a sustainable and responsible path to mineral harvesting and the collection of marine scientific data and information to advance knowledge of the Marae Moana and its management. Much can be learned by the international community from the approach taken by the Cook Islands in this sector and I feel honoured to have had the opportunity to contribute to the work of the panel.



Hannah Lily, Licensing Panel member (September 2021 - current)

I’ve had the pleasure to work with SBMA continuously over the past decade, first as legal advisor at SPC, then Commonwealth, and finally as Licensing Panel member, and it’s been a privilege to support the team’s step-by-step approach towards developing the sector.

I will partly remember the licensing process, for having to read quickly but carefully over 1000 pages of documents, plus the long zoom calls taking place – because I’m in the UK – at midnight! But also for SBMA’s efficiency and thoroughness. The process was actually quite brutal! I wonder if any exploration companies elsewhere ever had to face such scrutiny? The licensing was well run by SBMA, and I enjoyed participating in the Panel of varied experts, all scrutinising from different angles. The applicant companies seemed very committed, and open to share information. I look forward to hearing about the results of their scientific surveys over the coming years.

Seabed mining attracts different viewpoints, which is legitimate and healthy. But Cook Islands nationals can all feel proud of the expertise and professionalism of the SBMA team and Commissioner, and the commitment they show to good governance of the nation’s resources.



Andy Lipman, Licensing Panel member (September 2021 - current)

To my friends and colleagues of the Cook Islands SBMA, and the SBMA Licensing Panel - It is an honour and a pleasure to serve with all of you. When I was offered the opportunity to serve, and read the mandate of the SBMA Licensing Panel, it was immediately clear that the Cook Island Governmental Authorities had decided to go about this new endeavour in the most ethical and scientific way possible. The more I interacted with the members of the SBMA and the Licensing Panel, the more I realised my initial observation was correct; this was a most professional and forward looking group of experts whose concerns aligned with what is best for the country they serve.

In fact, the mission of my ABS Society “promoting the security of life and property and preserving the natural environment” aligned perfectly with the goals of SBMA and the Licensing Panel. Our deliberations were focused on the competence of the licence

applicants to conduct their activities with respect to safety and preservation of the environment. It was because of this focus, that I am fully confident that the decisions taken by the SBMA with due regard for the Licensing Panel’s recommendations, will result in only the world’s most highly qualified applicants being licensed to explore the seabed areas.

My sincere best wishes go to the SBMA and my fellow panel members and to all the citizens of the Cook Islands. I can only hope to remain as a friend and trusted advisor into the future.

Sincerely

Richard Johnson Technical Advisor (February 2020 - current), Licensing Panel Member (September 2021 - current)



It was a privilege to be a member of the first Cook Islands Licensing Panel. The Panel collectively covered a necessary broad reach in relevant expertise and backgrounds. That was a specific strength that enabled robust discussion and robust decision-making. It worked collegially to find a decision-making pathway, working remotely for many, to cover the wide range of issues to be assessed.

We were well supported by the expertise of SBMA staff as advisors.

The sheer volume of paperwork and the detail within all that was daunting. That said, I was most comfortable with panel members leading discussions on areas within their expertise and the acceptance of collective responsibility for the decisions made.

The next five years will contain huge challenges for licence holders to establish relevant and targeted baseline information to help inform all future decisions in the EEZ. The exploration programmes will only take the sector so far in understanding this deep sea world even building on previous research voyages.. It will inevitably throw up more unknowns than many will be comfortable with.

So for me a key focus for the sector in the next five years is equipping regulatory agencies with the knowledge and skills, and regulatory confidence, to work with incomplete information, where management of risks and uncertainties is a key element of decision making. This, for public agencies managing activities and their likely effects on behalf of all Cook Islanders, is a pre-eminent and an urgent task.



TE ORAMA NO APOPO LOOKING AHEAD: THE NEXT 5 YEARS

The next five years will be dynamic and ambitious as the Government leads the sector development towards a sustainable minerals future for Cook Islanders. The SBM sector development will continue to thrive on four pillars:

- visionary leadership
- economic security and social prosperity
- a healthy marine environment
- people-centred development.

Visionary leadership speaks to the foresight and navigational talent our forefathers used to explore new waters to broaden their horizons and conquer new land. For the SBM sector, setting legal, resource inventory and wealth management parameters for growth and expansion are essential foundations for effective sector governance and prosperity.

Economic security and social prosperity provide for better understanding of our mineral deposit baselines and the value chain to ensure economic viability, along with translated social benefits to the people of the Cook Islands.

A healthy marine environment ensures we do our best to protect our environment with assessments and management plans to preserve deep sea ecosystems for future generations. It recognises the importance of ongoing research and investment to grow our knowledge base and management to develop the sector.

Last but not least is our focus on people centred development, ensuring Cook Islanders are front and centre of all we do in the development of the sector.

We will thrive as a sector with guiding stars to chart our journey. They include: governance, inclusion, equity and wellbeing, education, research and technology, and partnerships and cooperation.

As independent regulators, we must demonstrate visionary leadership, even as different developments and perceptions come to the fore. Our mandate is to grow economic security and social prosperity, while maintaining a healthy marine environment. Very importantly, our development needs to be people-centred, therefore we need to help our people develop and come along on the journey, through transparent and inclusive sharing of information and knowledge, capacity building, discussion and decisions.

Five years from now:

- our regulatory regime will be completed and largely tested;
- exploration licence holders will be completing their exploratory work programmes, including environmental impact assessments and pre-feasibility studies;
- trial minerals harvesting will have taken place with findings and recommendations;
- regional environmental management plans will be completed, widely consulted and be supported with spatial planning and site work
- we will have an expanded knowledge base of minerals resources and the deep sea
- we will have more Cook Islanders interested in developing the SBM sector
- we will have research and knowledge to advise decision makers on the sector's future.

The Cook Islands is not alone on this exploratory journey of mineral resources and the deep sea. SBM developments in other jurisdictions and the assistance of partners give us the confidence to exercise our sovereignty and take exploration and development steps.

AKAMA'ARA'ANGA 10 MATAITI KEY ACHIEVEMENTS

2013

- 8th March:
 - Commemoration of Seabed Minerals Act 2009 coming into force
 - Commencement of Seabed Minerals Activities
 - Establishment of first SBM Advisory Board
 - SBMA website launched
- March: Cook Islands participate in regional law and contract negotiations workshop in Tonga
- July: Mark Brown becomes the Minister for Natural Resources and Minerals, after Tom Marsters is appointed Queens Representative
- October: Cook Islands participate in Underwater Mining Institute Conference in Brazil
- November: GSR presentation to Cabinet regarding Cook Islands becoming a Sponsoring State
- December: Framework Agreement between GSR and CIIC
- December: CIIC submit application to ISA for Exploration Contract



Cooks partners with Belgium on seabed minerals

The Cook Islands has signed a framework agreement with Belgium for a joint venture to explore for seabed minerals in the Cook Islands' Exclusive Economic Zone (EEZ). The agreement, signed by Minister of Finance Mark Brown and Belgian Minister of Economic Affairs Koen Geens, sets out the terms of a partnership between the Cook Islands Investment Corporation (CIIC) and the Belgian company OTC. The agreement covers the exploration and potential development of seabed minerals in the Cook Islands' EEZ. It also provides for the sharing of information and expertise between the two countries. The agreement is a significant step towards the Cook Islands becoming a Sponsoring State to the International Seabed Authority (ISA).

2014

- Feb - Cook Islands presentation to the Legal and Technical Commission at ISA
- April: Mission visit to Wellington to meet with relevant Government agencies
- May: Cook Islands host Financial issues workshop as part of SPC-EU DSM Project
- July: Alex Herman participates in ISA internship
- November: Professor Cronan visits following his compilation and estimation work the year before
- September: Underwater Mining Institute Conference in Portugal

Raro hosting deep sea minerals workshop

DOZENS of overseas delegates are coming to Rarotonga next week for a deep sea minerals workshop focusing on the financial aspects of mining.

The training course, which runs from Tuesday to Friday, aims to help Pacific countries better understand the likely financial benefits of mining for deep sea minerals, and mechanisms for managing revenues sustainably.

Paul Lynch, Cook Islands Seabed Minerals Commissioner, said the fact that this Deep Sea Minerals (DSM) workshop is being run here is a major endorsement for development of the Cook Islands seabed minerals sector.

"We're very confident we will secure approval for the likely benefits of mining for deep sea minerals and work was unknown for many years to many people overseas."

He said it's also recognition that the Cook Islands is making good progress on developing a sound regulatory framework for these future activities.

"We're a small nation, but have been taking the right advice and the right steps."

The workshop is being hosted by the Cook Islands Seabed Minerals Authority, with funding from the Secretary of the Pacific Community and European Union's joint regional DSM Project.

There are 15 members of the DSM Project, which was set up in 2011 to help Pacific countries prepare for future seabed mineral activities.

There have been four training workshops so far, looking at environmental and social issues.

This fifth workshop will be the first to specifically focus on the financial aspects of seabed minerals activities, in addition to the associated legal and fiscal frameworks.

About 80 overseas and local delegates are expected to attend.

Lynch said there has been no licensing of seabed minerals exploration in Cook Islands waters yet but everything needs to be in place before exploration licensing begins in the next year.

"We're ahead of the game at the moment because we've already passed the world's first, dedicated Seabed Minerals Act in 2009, and recently tax and royalty regulations, and commenced the set up of our own National Sovereign Wealth Fund."

According to a recent geological assessment, the Cook Islands' exclusive economic zone contains 10 billion tonnes of manganese nodules, which contain minerals like manganese, nickel, copper, cobalt and rare earth elements.

Members of the public are invited to attend a general seabed minerals update meeting on Wednesday May 14 from 6-7pm at the Rarotongan, organised by the SBMA Authority.

Queen's Representative Tom Marsters (seen here in 2011) holds manganese nodule samples from the Cook Islands exclusive economic zone.

2015

- April: Alex Herman begins UN-Nippon Foundation fellowship at UN in New York
- July: Cook Islands participate in ISA annual session, led by responsible Minister Mark Brown
- July: Seabed Minerals (Prospecting and Exploration) Regulations passed
- 10 August: Tender for exploration opened. No formal submission of applications received.
- November: Cook Islands participates in Underwater Minerals Conference in the United States



Mineral licence process begins

THE process for granting exploration licences for seabed minerals has begun in the Cook Islands.

The process is being managed by the Cook Islands Seabed Minerals Authority and is part of the SPC-EU DSM Project.

The article also notes that the process is expected to attract about 80 overseas and local delegates.



2016

- July: International Seabed Authority (ISA) and CIIC sign a contract and the Cook Islands becomes a Sponsoring State in the Area
- July: Joint venture between CIIC and GSR signed
- Cook Islands enter into seabed minerals agreements with OML
- November: Cook Islands participate in Underwater Minerals Conference in South Korea



Seabed Minerals deal signed

THE Honourable Mark Brown, the Minister responsible for the Cook Islands Investment Corporation (CIIC), announced today that he and the Belgian company OTC have signed a framework agreement for a joint venture to explore for seabed minerals in the Cook Islands' Exclusive Economic Zone.

The Minister said that the agreement will allow CIIC to explore for seabed minerals in the Cook Islands' EEZ. The agreement also provides for the sharing of information and expertise between the two countries.

The agreement is a significant step towards the Cook Islands becoming a Sponsoring State to the International Seabed Authority (ISA).

OVER THE YEARS . . .

2021

- January: Licensing Process - 4 applications received for exploration licences
- January-March: Consultations carried out in Palmerston, Nassau, Pukapuka, Manihiki, and Rakahanga
- February-March: Licensing Process – Pre-qualification checks carried out by SBMA
- March: Seabed Minerals Amendment Act 2020 passed by Parliament. Amendments intended to ensure that applicants are Cook Islands companies.
- April-June: Consultations in Mitiaro, Atiu, and Mauke
- July: Cook Islands host environmental workshop, along with ISA and UNDESA as part of Abyssal Initiative project
- July-November: Licensing Process – Due Diligence assessments
 - Australian due diligence firm contracted to assist.
 - SBMA determines three of the four applications meet the criteria, and can proceed to the next stage.
- September: SBM expert Licensing Panel established, with Garth Henderson as Chair
- September: Consultations in Mangaia and Penrhyn
- September: Licensing Process - Public Notification, details of 3 Applicants released for public comment
- December: Licensing Process - Licensing Panel evaluate applications and recommend to approve three applications
- December: Minister and Cabinet give approval to draft licences.



2022 - TODAY

2022

- February: Cabinet review draft licences and give approval
- 23 February: Licence Granting Ceremony.
 - Licences issued to: CIC, CSR, and Moana Minerals
- May: Inspector training
- June: CIC Seasurveyor Vessel Ceremony
- June: SBMA attends and present at UN Oceans Conference
- July: First CIC expeditions using Seasurveyor commence, SBMA inspectors attend
- July: SBMA participate in ISA Council session
- September: Interim Standards & Guidelines issued
- September-November: Tanga Morris undertakes ISA technical internship
- September: SBMA present at the Underwater Minerals Conference in the United States
- October: Minister and SBMA present on Cook Islands SBM at Geonova Conference



- October: Minister meets with Norwegian Ministerial counterpart
- October-November: SBMA participate in ISA Council session
- December: SBMA partners with DEEPEND Project (to help further our understanding of deep-sea biodiversity and the potential for natural products).
- December: NES-SBMA host an Ocean Biodiscovery Seminar Series.

2023

- February: Consultations in Aitutaki
- February: first Cook Islands Seabed Geomorphology Map published
- March: Blessing and Naming Ceremony of Anuanua Moana vessel
- March-April (Present): Moana Minerals first research expedition, SBMA inspector attends





MEITAKI MA'ATA

The Seabed Minerals Authority team wishes to extend our deepest gratitude to everyone who assisted us along our journey. We would not be here without the efforts of countless people and organisations who have advised us, encouraged us, assisted us, empowered us and helped us to bring forward our vision for the Cook Islands SBM sector. To you we say Meitaki Maata. God bless, e Kia Manuia



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