

# MIMRA

“The people of our islands depend on coconuts, fish and other plants to be harvested. I want to preserve and protect my islands. To the younger generations, please take care of our islands.”

Boklōñ Zackious,  
Iroojlaplap for the  
northern Ratak Chain



**Marshall Islands Marine Resources Authority**



**Annual Report FY2020**



**Marshall Islands**  
**Marine**  
**Resources**  
**Authority**



**ANNUAL REPORT 2020**

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**Interior Photos:** Francisco Blaha, Eve Burns, Kalena deBrum, Karen Earnshaw, Alicia Edwards, Erin Feinblatt, Hilary Hosia, Dean Jacobson, Giff Johnson, Caleb Joseph, Emma Kabua-Tibon, Lyla Lemari, Marshall Islands Conservation Society, SPC and Melba White.

**Cover photos:** Front cover and back cover photos by Erin Feinblatt except for photo of MIMRA staff Lyla Lemari at the microscope by Candice Guavis.

**Cover quote:** The quotation of Iroojlaplap Boklon Zackious on the cover is taken from the Marshall Islands Marine Resources Authority's video, "Reimaanlok: Looking Toward The Future," that focused on a survey visit to uninhabited Bikar and Bokak Atolls in the northern Marshall Islands. The video can be viewed at [www.mimra.com](http://www.mimra.com) or on YouTube.

# Progress despite Covid

The Covid-19 pandemic disrupted the world in 2020. While it negatively impacted certain segments of the commercial tuna fishery and hindered MIMRA's utilization of a variety of consultants and technical advisors needed for conducting studies, surveys and training, I am happy to say that MIMRA was able to adjust its operations and maintain progress in all areas of its work.

Particularly noteworthy is the progress made in these areas:

- Development of the Competent Authority, which included, in July 2020, the approval by the MIMRA Board of Directors of the CA structure and establishment of the CA as a Division within MIMRA, joining the four other Divisions: Coastal and Community Affairs, Oceanic and Industrial Affairs, Legal and Finance. Important groundwork was also laid for development of a new private sector venture to increase the Marshall Islands participation in the tuna value chain, and for a European Union-UN Food and Agriculture Organization partnership effort to identify ways to expand benefits from the tuna transshipment operation in Majuro.

- Following Nitijela (parliament) adoption of the Protected Areas Network (PAN) Act in 2019, MIMRA moved forward with developing and approving PAN Regulations to enforce the newly enacted legislation. Collaboration with the Micronesian Conservation Trust has been an essential element in the process. The PAN Regulations are an important step ahead in our program to work with local communities to ensure sustainable resource use practices are implemented and enforced.

- Ongoing training and capacity development for and implementation of the work of Port State Control continues to pay off in both improvements in monitoring, control and surveillance of fishing vessels and enforcement against illegal fishing activities. This represents partnership with the New Zealand Ministry of Foreign Affairs and Trade, which has assisted MIMRA by supporting our Oce-

Message from Sandy Alfred, Chairman of the MIMRA Board of Directors and Minister of Natural Resources and Commerce.



## BOARD MEMBERS

Chairman Minister of Natural Resources and Commerce Sandy Alfred, Vice-Chairman Minister Jemi Nashion, Members Nitijela Member Atbi Riklon, Stevenson Kotton, William Reiher, Anjanette Kattil, and Moriana Phillip.

anic Division with an Offshore Fisheries Advisor.

- Another important partnership that was initiated was the commissioning of the University of Hawaii to undertake a comprehensive marine pollution study with support of the World Bank's Pacific Regional Oceanscape Program (PROP). Although the conduct of the comprehensive study was delayed by Covid, the partnership with UH was established and the work will proceed in the future.

- MIMRA continued to greatly benefit from its partnerships with the Parties to the Nauru Agreement, the Forum Fisheries Agency, the Pacific Community (SPC), the World Bank's PROP program, the New Zealand Ministry of Foreign Af-

fairs and Trade, The Nature Conservancy, and others in all areas of operation.

The heaviest impact of Covid was felt by our MCS program for the commercial tuna fishery, with fisheries observer work halted from March 2020 due to health hazards and multiple border lockdowns in the region, making travel impossible.

MIMRA also coordinated with the Marshall Islands National Disaster Committee and fisheries industry representatives to manage quarantine and related needs for local fishermen returning from fishing trips. Fisheries observers, as well as other sectors of the country's domestic economy, benefited substantially from the inclusion of the Marshall Islands in the United States government's Covid-19 aid legislation. Observers, who were laid off during 2020 due to Covid-19, received thousands of dollars in un-

employment assistance payments that the US government channeled to them and other eligible Marshall Islanders through the Marshall Islands Labor Division.

While transshipment revenue suffered dramatically as a result of the 60 percent decline in purse seiners visits to Majuro in 2020, overall, MIMRA revenue generation continued to be challenged by the Covid-19 impact, declining US Treaty vessels, changes in ocean conditions, and international market demands that are also impacted by Covid-19. MIMRA was able to employ other arrangements, such as pooling and trading of VDS days, to make up the revenue shortfall. MIMRA continued to be an important contributor to the Marshall Islands national budget, with a contribution of about \$31.3 million, which is over 10 percent of the national government's annual budget.

Although the Covid-19 pandemic continued, MIMRA adapted its work to make progress for the nation. This showed a high-degree of resilience and capacity within our MIMRA team and the wider government and community. It bodes well for 2021 and beyond.

**Sandy Alfred**

# Focus on long-term

There is no question that 2020 was a challenging year for MIMRA, just as it was for everyone. When it became apparent that the Covid-19 pandemic would curtail business as usual, MIMRA refocused its work and adapted to the new environment. This included the heavy use of online platforms for conducting regional and international meetings and training programs. Although these virtual meetings had limitations — particularly for the Western and Central Pacific Fisheries Commission annual meeting in December, where normally MIMRA (as well as other island fisheries departments) meets with tuna industry players to manage the sale of VDS fishing days around the edges of the week-long meeting — MIMRA has adjusted and maintained its participation in the important work of the PNA, FFA, SPC and WCPFC.

MIMRA's investment in capacity building, including its long-running internship program, has helped the Authority develop staff capacity to implement the wide-ranging fisheries program: From marine resource surveys of remote outer islands and engagement with local communities to development sustainable resource management plans through the Reimaanlok (Looking to the Future) Process to the ever-expanding work of Port State Control for fishing vessels and meeting the obligations of the Marshall Islands for regional and international agreements.

Similarly, MIMRA maintained its focus in 2020 on the long-term objectives for increasing participation — and therefore, benefits — in the global tuna “value chain” as well as addressing core sustainability needs in the domestic coastal fishery.

Three important tuna value chain initiatives were significantly advanced in 2020. The work done in 2020 prepared the foundation of the tuna initiatives for launch in 2021. These include:

- A collaboration between MIMRA and The Nature Conservancy (TNC) to establish a new corporate entity based in Majuro and called Pacific Island Tuna Provisions. This resulted from MIM-

Message from Glen Joseph, Director, Marshall Islands Marine Resources Authority.



RA's long-term partnership with TNC that has been focused on conservation, sustainable domestic development and value chain engagement. Pacific Island Tuna Provisions (PITP) seeks to transform the existing tuna supply chain in the Western and Central Pacific Ocean by increasing visibility and transparency into on-the-water operations, reducing bycatch of juvenile tunas and at-risk species like sharks and turtles, and creating a new, sustainable funding source for community-based projects in the region.

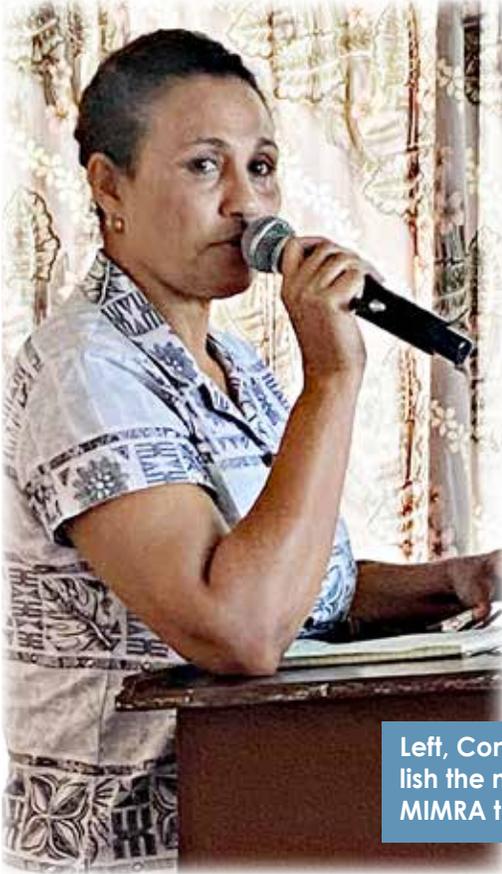
- A European Union-funded project in collaboration with the UN FAO focused on tuna transshipment in Majuro to identify how the Marshall Islands can expand its involvement in the “value chain” of the tuna fishery with specific focus on tuna transshipment.

- Development of the foundation for establishing a Competent Authority. The hiring of CA Advisor Aquina Pyanne in 2019 allowed MIMRA to build

momentum behind the long-discussed CA plan. Our CA Advisor was able to begin initial inspections of local tuna export processing facilities, draft a new fish processing regulation and other instruments of the CA, created a CA page for the MIMRA website, and developed new health certificates as part of the regulatory process for future implementation. In addition, the MIMRA Board of Directors took action to endorse establishing the CA as a separate division within MIMRA. All of these efforts in 2020 laid groundwork for advancing the CA plan in 2021, which will involve significant work with industry to improve standards necessary to meeting European Union requirements for exporting fish into that market.

On the domestic front, MIMRA made important headway in a number of areas. Of significance, after several years of effort to gain Nitijela endorsement of the Protected Areas Network Act, this was accomplished in 2019. During

# goals, local needs



Left, Competent Authority Advisor Aquina Pyanne, who is helping MIMRA to establish the nation's first CA to expand RMI's tuna value chain participation. Above, a MIMRA team builds a fish aggregating device (FAD) for deployment off Lib Island.

2020, draft regulations to implement the PAN legislation were completed after an extended consultation process that involved assistance from the Micronesian Conservation Trust, and input from the Coastal Management Advisory Committee, a group widely representative of local marine resource and environment experts. The MIMRA Board endorsed the regulations, which were put out for public comment late in 2020, and are ready for implementation in 2021.

Partnership agreements were concluded with the Marshall Islands EPA and the Marshalls Billfish Club aimed at facilitating investigations into marine pollution. Another important collaboration — delayed for a time by Covid-19 border entry restrictions — is the engagement of the University of Hawaii to undertake a comprehensive marine pollution study with the support of the World Bank's PROP program. The study will investigate micro-plastic pollution, pesticides, heavy metals, radionuclides

and other contaminants in fish, and to investigate water quality in Majuro lagoon. As part of the study, fish samples will be collected from six different atolls for comparison purposes.

MIMRA put great effort into promoting local fisher use of fish aggregating devices (FADs), engaging with local governments, government ministries and fishing organizations. In addition, a new FAD — appropriately named "CORONA" — was deployed in June off the south shore of Majuro Atoll. It joins a number of other FADs installed by MIMRA around Majuro, Kwajalein and a few other atolls.

As the Covid-19 pandemic picked up steam in early 2020, we expected fisheries revenue to decline. Sales of VDS days were slower than usual in the early part of the year, reflecting the then-new Covid-19 situation and a bit of wait-and-see on the part of industry. But later in the year, MIMRA was successful in selling all of its days.

Tuna transshipment and fisheries observer fees were down dramatically, of course, because of the halt in use of observers beginning in March 2020. The Covid-19 prevention port rules, including the 14-day quarantine requirement before vessels could enter Majuro lagoon, resulted in a 60 percent drop in transshipment activity. We anticipate a rebound in 2021 as port entry rules ease in the future.

Finally, a word about MIMRA staff and MIMRA's many partners, both locally and internationally. None of the work that the Authority does would be possible without the dedicated and capable group of people who work for MIMRA — and the many donors, technical advisors, and consultants who partner with MIMRA to enable us to expand and improve the work we do to sustainably manage and develop our fisheries resources.

**Glen Joseph**

# COASTAL

## AND COMMUNITY AFFAIRS

Members of MIMRA'S Coastal Division staff conducted outreach visits to over 10 atolls and islands in 2020.

# MIMRA teams put big

**T**he Coastal Division in 2020 made numerous visits to outer island communities, conducted over two dozen marine and socio-economic surveys, and helped advance many remote islands in the Reimaanlok (Looking to the Future) Process for sustainable management of local resources. Coastal Reimaanlok work was invigorated by the marine and terrestrial surveys of uninhabited Bikar and Bokak atolls. The Bikar and Bokak survey mission was followed by the busiest year ever of outer islands outreach for furthering the Reimaanlok Process to engage local communities to sustainably manage their marine resources.

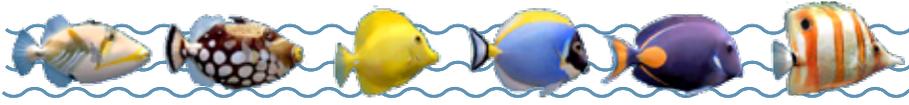
The division also refocused on implementing the Protected Areas Network, following recent Nitijela (parliament) approval of key amendments to the legislation that pave the way for effective implementation of the program. Fish markets at Majuro and Kwajalein provided fish and local foods to urban populations, while injecting income to outer island fishers. Coastal staff also advanced a variety of aquaculture programs and installed fish aggregating devices (FADs) in four atolls.

Among the highlights of 2020:

- Coastal staff conducted outreach visits to over 10 atolls and islands, the most ever in one year. These visits allowed staff to conduct follow up with local governments, local communities

and the Local Resource Committees that have been established to oversee resource management plan implementation as part of the Reimaanlok Process. As part of these visits, 21 marine surveys and 12 socio-economic surveys were conducted. All of the islands visited progressed along the eight-step Reimaanlok Process toward the final goal of implementation and active management, including monitoring and evaluation.

- A Protected Area Network (PAN) office was established at MIMRA and regulations for implementing the recently adopted PAN legislation were adopted by the MIMRA Board and went through the required public comment phase so they could be promulgated late in 2020, facilitating activity



A scene from the 20-minute documentary of the survey trip to Bikar and Bokak Atolls.

## effort into island trips

of this important conservation program.

- The Outer Islands Fish Market Center in Majuro purchased over 100,000 pounds of fish from five outer atolls during 2020, providing an income stream to numerous fishers. While the number of islands fish was purchased from was fewer with the Kwajalein Atoll Fish Market Center, it nevertheless purchased fish and local food products from outer islanders that similar generated income for the sellers. Both fish markets helped the urban centers with local food availability and supported the government's efforts for food security.

- The multiple marine and socio-economic surveys of outer island communities were part of the Coastal Divi-

sion's resource mapping work. These surveys add to an atoll database that the division has been expanding each year. During the year, Coastal staff worked with scientists from the Universities of Hawaii and Guam on both the actual surveys of Bikar and Bokak atolls and the large amount of follow up data analysis. In addition, Coastal staff participated in the sampling and processing of samples of soil and fish to be tested for radioactivity from Bikar and Bokak. As a result of the surveys, resource management plans were drafted during 2020 for the two northern atolls that are aimed to be the foundation for adopting legal mechanisms to establish these two atolls as protected areas.

- A 20-minute documentary video

of the survey trip to Bikar and Bokak atolls was completed and posted to the MIMRA website, [mimra.com](http://mimra.com), for the public to view. The video was the result of collaboration between MIMRA and its regional and international partners involved in this unprecedented survey mission to these two northern atolls.

- MIMRA installed four FADs for local fishers at Majuro, Aur, Mili and Maloelap. It also conducted community outreach about the FADs to engage the support of local leaders and each community to use and care for their FADs. In Majuro, Chairman of MIMRA Minister Sandy Alfred and Director Glen Joseph hosted an event with local land national government leaders that focused on the importance



Many communities are now managing their fisheries areas. Below, staff continue the outreach program.

## Partnerships move forward

of FADs and benefits to the community for food security, income generation, sea and boat safety, and sustainable fishing practices. Majuro Mayor Ladie Jack led a team of MALGov Executive Councilmen to the meeting, as did the Ministry of Transportation and Communication's Division of Maritime Safety. All of those attending were members of the Marshalls Billfish Club, another partner with MIMRA in various activities.

- MIMRA management and Coastal staff engaged with traditional leaders, Nitijela Members and Mayors from different outer island communities and received their endorsement of resource management plans that have been developed through the Reimaanlok Process. These are essential to smooth and effective implementation of the plans by Local Resource Committees that are charged with overseeing conservation activities on their islands.



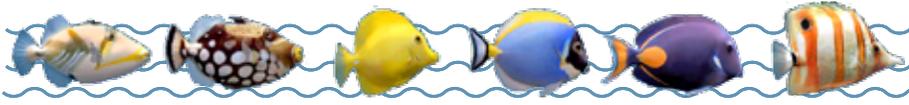
- Partnerships produced results for the Coastal Division in 2020. These partnerships are with traditional leaders, local governments and outer island communities, the Coastal Management Advisory Council, The Nature Conservancy, the Universities

of Guam and Hawaii, donors such as the Japan Overseas Fisheries Cooperation Foundation and the World Bank's Pacific Oceanscape Program (PROP), and through engagement with regional organizations such as the Micronesia Conservation Trust. These valued partners worked with and assisted Coastal staff to develop a range of programs for sustainably managing coastal resources.

### Progress in resource planning, action

Significant progress was made during 2020 for developing, expanding and implementing sustainable resource management measures in coastal fisheries.

Through Coastal staff visits, surveys, training programs and planning



## Surveys provide essential data

sessions, 11 coastal communities are now actively managing their targeted fisheries area by implementing coastal fisheries resource management plans developed as part of the Reimaanlok Process. As part of this evolution of local resource management through the Reimaanlok Process, seven management plans were completed in 2020 and formally endorsed by their local governments. In addition, four more were undergoing final review and a further 10 were in draft awaiting endorsement of the Local Resource Committees, local and traditional leadership.

As part of Coastal's active outer islands Reimaanlok Process outreach, 21 marine surveys and 12 socio-economic surveys were completed to inform preparation of the resource management plans.

These are essential to the Reimaanlok Process because the surveys provide for baseline information about the health of reefs and marine life, as well as providing important information about the structure of each community.

The Covid-19 pandemic has produced challenges for the Coastal Division in its work with outer islands due in part to the inability of key regional partners, who collaborate on marine and terrestrial survey work, to enter the Marshall Islands since the border



**MIMRA focuses included hatcheries and reef health in 2020.**



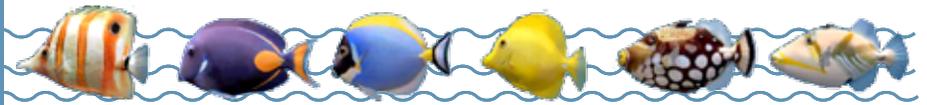
was closed in March 2020. For part of the year, the uncertainty surrounding the Covid situation delayed or disrupted normal ship and plane service. One improvement of note for outer islands is that the National Telecommunications Authority increased its rollout out

of cell phone service in remote islands, making it easier to communicate with people on these distant islands.

The World Bank's PROP program provided a wide range of support that facilitated Coastal work in 2020. It has also committed to funding a short-term consultant to provide technical assistance with Reimaanlok and Protected Area Network activities to complete various requirements of these programs.

The construction of the Woja Hatchery raceway tanks and pipe installation were completed. Coastal staff also managed the Ajeltake Moi Hatchery and provided support to the Arno and Likiep giant clam hatcheries. *Tridacna maxima* giant clams were the primary export by two Majuro-based marine ornamental export companies.

The number of exports dropped from 8,000 giant clams in 2018 to 2,500 in 2019. Despite the Covid pan-



## FADs deployed in four atolls

demic, exports rebounded modestly in 2020 to 4,000.

The Outer Islands Fish Market Center in Majuro made 41 trips to outer islands to purchase fish for sale in Majuro. During the year, over 109,000 pounds of fish was purchased, providing \$124,182 to local fishers. The Kwajalein Atoll Fish Market Center continued to be challenged by vessel and fuel price issues, so concentrated its fish and local produce purchases from local fishers and residents within Kwajalein Atoll for sale to the urban community on Ebeye Island. It also purchased fish from fishers in Ailuk, Ailinglaplap, Namu, and Likiep.

FADs were procured and deployed to three outer atolls as well as one in Majuro.

The Majuro FAD was appropriately named “Corona.” Coastal and MIMRA management held meetings with local and community leaders as part of the placement of FADs for these communities.

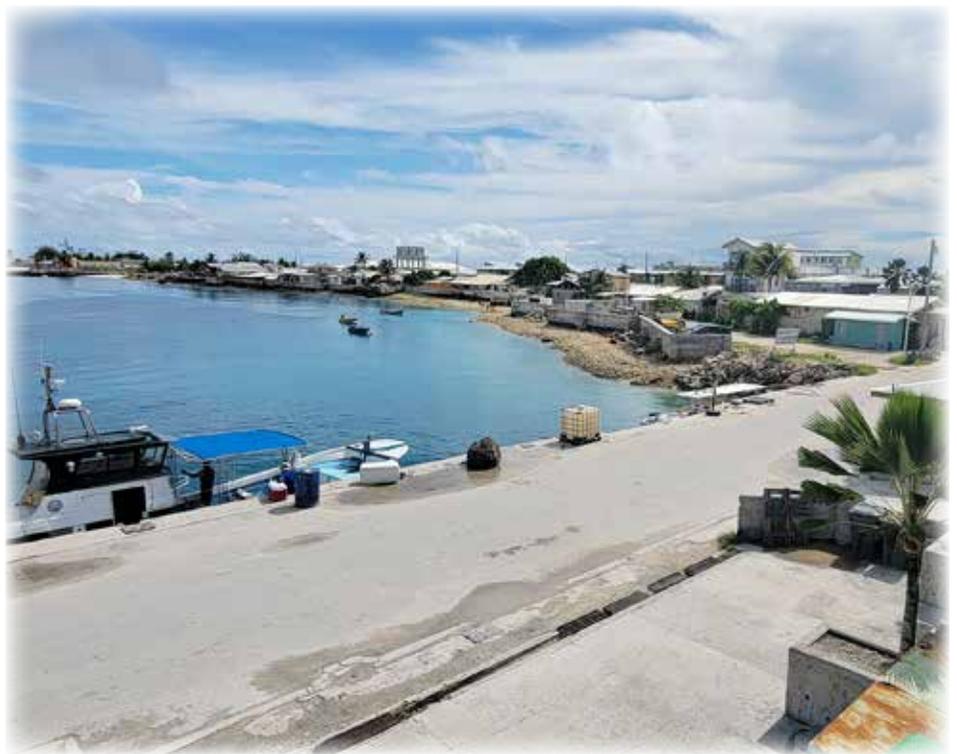
The Reimaanlok documentary video on Bikar and Bokak was completed and uploaded to the MIMRA website along with the baseline data methodology that was utilized on the survey missions. Data analysis from the Reimaanlok surveys remained a challenge due to staff capacity.

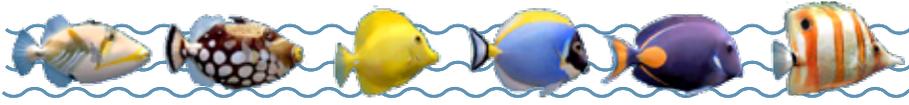
The Resource Management Plan for Bikar and Bokak was drafted along with an Ecological Assessment Report that will undergo peer review.

Once these documents are complete, MIMRA is planning to develop legal mechanisms to identify Bikar and Bokak as a special Protected Management Area (National Monument).



Coastal Division staff prepare to deploy a FAD off Majuro, that was appropriately named Corona. Below, the view from the second floor of the Kwajalein Atoll Fish Market Center.





## REIMAANLOK PROCESS

# Expansion of outer islands resource management

**T**he Coastal Division's work with remote communities expanded significantly in 2020, with many atolls making progress in the 8-step Reimaanlok Process that assists local communities to develop resource management plans tailored to their needs. In addition to the 27 island and atoll sites that are between Step 4 and Step 7 in the Reimaanlok Process, another 13 were pending, with requests from leaders and communities for inclusion in the conservation program.

The Reimaanlok work and the Coastal Division's atoll survey activity gained valuable experience from an unprecedented survey of the uninhabited atolls of Bikar and Bokak in the northern Marshall Islands that took place in late 2019. This survey, which involved international partners working with the Coastal Division team, was many months in the planning stages and took nearly one month to complete, given the remoteness of the atolls. The survey marked the first time for these atolls to be surveyed by MIMRA, providing essential baseline data on the reefs, and marine and terrestrial environments for ongoing conservation. It also provided helpful experience that will inform and facilitate surveys of other uninhabited atolls in the RMI by the Coastal Division.

The Reimaanlok documentary video for Bikar and Bokak was completed in 2020 and uploaded to the MIMRA website along with the baseline data methodology that was utilized on the survey missions. Data analysis from the Re-



**From left: Director Glen Joseph, Minister Sandy Alfred, Utrok Mayor Tobin Kaiko, and Iroojlaplap Boklon Zackious at the signing ceremony endorsing Utrok's resource management plan.**

imaanlok surveys conducted at these two atolls was challenging due to capacity limitations to perform the review. The World Bank's Pacific Regional Ocean-scape Program was to fund a short-term consultant to provide technical assistance with Reimaanlok and Protected Areas Network (PAN) work. A resource management plan for Bikar and Bokak was being drafted in 2020 along with the ecological assessment report that will undergo peer review. When the resource management plan and the eco-

logical assessment are complete, MIM-RA plans to develop legal mechanisms to identify Bikar and Bokak as a special Protected Management Area (National Monument).

The Bikar and Bokak survey was followed by planning and preparation for what turned into the Reimaanlok Team's busiest year of engagement with outer island communities. The program met with Nitijela (parliament) Members, Mayors and traditional leaders from multiple atolls and conducted



## Islanders happy with new plans

outreach visits to 11 atolls to perform a range of marine and socioeconomic surveys, work on developing resource management plans, and next steps in the existing plans through monitoring, evaluation and adaptive management activities.

The Reimaanlok work in 2020 not only increased conservation awareness and action throughout the country it is also achieving the RMI's commitments to the Micronesia Challenge. With the passing of the Protected Areas Network (PAN) regulations and establishment of the PAN office at MIMRA, these communities will have an even better opportunity for funding and continued technical support to meet their local conservation and management goals.

### Outer island surveys, plans

After the big trip to Bikar and Bokak, the Reimaanlok team prepared for their busiest summer. After meeting with the mayors and a few local council members for the atolls of Ailinglaplap, Arno, Ebon, Jabot, Lae, Maloelap, Mili, Namu, Ujae, Utrok and Wotje, the team planned back-to-back trips to each atoll.

The team returned to Ebon Atoll with a finalized draft for final review by the local resources committee (LRC) and newly elected Mayor Marie Milne. There were still a few more revisions to be made to the draft but overall,



**During a visit to Jabat Island, Coastal staff worked with the Local Resource Committee to develop the island's resource management plan.**

## REIMAAANLOK PROCESS

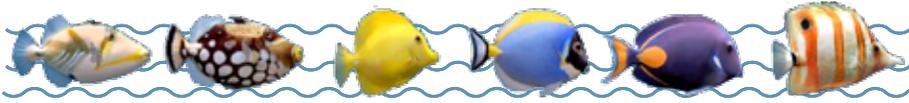


**The Local Resource Committee on Woja, Ailinglaplap Atoll.**

the community was happy about it. Back in Majuro, the Reimaanlok Team worked closely with Mayor Milne and her advisors to further develop the management plan to ensure it captured the conservational and societal goals of the people of Ebon. Finally, the Reimaanlok team met with mayor Milne, her advisors, and Iroojlaplap Kotak Loek and Irooj Jimata Kabua to sign-off on Ebon's management plan. The next steps are for MIMRA to continue

providing technical support throughout the implementation process.

The situation was similar for the atolls of Lae and Ujae, as the team neared the end of their consultancy work with these communities. The last steps included revisiting the two communities to finalize their draft resource management plans and then signing off on them. After spending three days each on both atolls to review the contents of the management plans, the Reimaanlok



## Success shown in sign-off sessions

Team scheduled and completed a sign-off session with Mayor Anderson Kattil of Lae and Mayor Edison Batlok of Ujae, along with Iroojlaplap Michael Kabua, and Senators Thomas Heine and Atbi Riklon, who represent Lae and Ujae, respectively.

The team returned to Utrok in 2020 after collecting data and information back in 2019.

This visit to Utrok involved the drafting of the management plan with the local resources committee. After drafting the plan, the team returned to Majuro to continue developing it. After reviewing the plan with Mayor Tobin Kaiko, a sign-off session was soon scheduled and in attendance was the MIMRA staff, Mayor Kaiko and Iroojlaplap Boklon Zackious who, along with the mayor, endorsed the plan.

For visits to the atolls of Ailinglaplap, Jabot, Namo, Maloelap and Wotje, the team was returning to work with their the LRC's in each site to start developing the different resource management plans.

Although Arno had earlier had a resource management plan, it has been many years since it was first developed. The Reimaanlok Team went to Arno Atoll as well as Mili Atoll to collect both marine survey data and socioeconomic data in order to support updating the management plans.

This survey work on Arno and Mili



Iroojlaplap Mike Kabua signs the Lae Atoll resource management plan as leaders look on, from left: Senator Thomas Heine, Wotjo Mayor Kudo Kabua, Clerk of Council of Irooj Melvin Majmeto, Ujae Mayor Edison Batlok, and the late Lae Mayor Anderson Kattil.

## REIMAAANLOK PROCESS



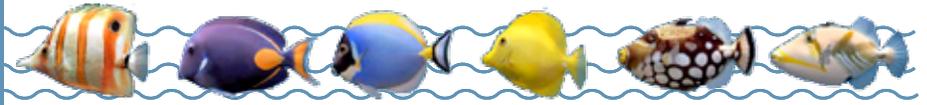
Irooj Jimata Kabua, right, and the late Iroojlaplap Kotak Loek sign Ebon's resource management plan.

will serve as the basis for returning to both atolls in early 2021 to draft their management plans, with the goal of finalizing their drafts and signing off on them by the end of the summer 2021.

By the end of 2020, 21 marine surveys and 12 socio-economic surveys were complete. Of 21 resource management plans, seven were fully endorsed by leadership, four were in final review and 10 were in draft.

## Protected Areas Network

Laying the groundwork for advancing the Protected Areas Network (PAN) effort in RMI, the Micronesia Conservation Trust provided financial assistance to hire a local attorney to work closely with the Office of the Attorney General on both the PAN legislation for Niti-jela (PAN Amendment Act 2018) and regulations to implement the legisla-



# PAN Regulations '20 endorsed

tion. The PAN (Amendment) Act 2018 was enacted modify the existing law to allow PAN oversight by the MIMRA Board; to insert “Type IV – Traditional Mo” (no take or taboo areas declared by traditional leaders) for traditionally protected areas; and to formalize the Coastal Management Advisory Council’s position as the advisory and technical arm for the PAN. This work set the stage for MIMRA’s Board of Directors to endorse the PAN Regulations 2020.

The PAN Regulations 2020 supports the PAN implementation by authorizing the PAN Office to receive and disburse funding to protected areas, and provides the legal framework for nominating areas for protection.

During the review process of the PAN draft regulations from July through October 2018, MIMRA organized several workshops and meetings with CMAC members as technical advisors to the PAN. PAN Regulations were reviewed to ensure consistency with the PAN law and potential gaps associated with the implementation of the PAN were identified and assessed. As an important stakeholder group, CMAC was provided with a number of opportunities to provide input, particularly during its monthly meetings and through regular email communications, which are facilitated by MIMRA as the “secretariat” for the group.

The PAN Regulations underwent further review in 2020 by the MIMRA Coastal Division to finalize areas that needed further clarification or additions before the draft was presented to the MIMRA Board of Directors. A formal consultation period was also conducted with the general public, when the draft regulations were released for public comment on October 16, 2020. Stakeholders had 30 days from the publication of the draft regulations to provide comment.

As required, all stakeholders’ com-



**MIMRA staff member Lyla Lemari checks dive gear prior to an underwater survey in Arno Atoll.**

## REIMAANLOK PROCESS

ments are to be considered when making revisions. However, no comment from the public was received to be incorporated into the final regulations.

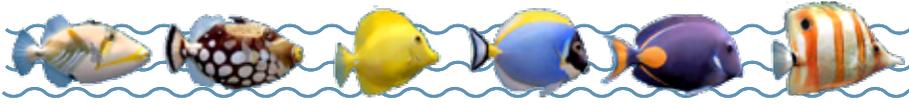
The PAN Regulations 2020 will have important direct and indirect impacts on conservation outcomes in terms of enhancing protection of natural ecosystems and the services they provide through a network of protected areas. The PAN Regulations provide details on the assistance available via the PAN Office and underscores the Reimaanlok Process as the primary mechanism to attain PAN support. Another expected benefit from the PAN Regulations 2020 is the ease of funding access at the local level for communities engaged in Reimaanlok and PAN activities.

The eligibility requirements were adopted from MIMRA’s previous funding scheme under the Outer Islands Resource Management Fund that was made available to support community

projects and initiatives in previous years. The focal areas to be assessed for funding or technical support from the PAN Office:

- Protected areas.
- Associated sustainable livelihoods.
- Capacity building.
- Education and awareness.

Other key benefits expected include potential gains from the conservation efforts built around the Reimaanlok Process to maintain a healthy, productive and resilient environment for the well-being of the communities now and into the future. By law, MIMRA has statutory duty to help ensure RMI’s protected areas are supported and well maintained. Endorsement of the PAN Regulations 2020 by MIMRA’s Board of Directors was anticipated in the early part of 2021. Adoption by the Board will allow for the full implementation and enforcement of the PAN program by the national government.



## REIMAANLOK PROCESS

# The key 8-step process

**T**he 8-step Reimaanlok Conservation Area Management Planning Framework helps atoll communities in the Marshall Islands think globally and act locally. It employs community-based tools and approaches to articulate local objectives that translate to national, regional and international goals.

The Reimaanlok eight-step process, when triggered by a community's leadership (Step 1), includes a scoping and budgeting exercise (Step 2), site visits by Reimaanlok facilitators to build awareness on the need for resource planning by the target atoll community (Step 3), followed by the gathering and analysis of various natural and social resource data parameters (Step 4) in order to design (Step 5) and ultimately legislate (Step 6) an integrated atoll resource management plan inclusive of programs to ensure ongoing monitoring and adaptive management (Step 7) and local commitment retention (Step 8).

Given the specific needs and unique circumstances of atoll municipalities, the Reimaanlok facilitation consortium known as the Coastal Management Advisory Council (CMAC) may follow these eight steps in a linear or iterative process. This helps foster a sense of trust and shared purpose within the community and of the Reimaanlok facilitators, so that the process itself is an empowering experience for atoll communities and a vehicle for national cohesion and shared purpose among members of CMAC.



**Members of the Namo Local Resources Committee enjoy lunch after a working session on their resource management plan.**

Among the many noteworthy atoll-appropriate features of the Reimaanlok process, in Step 3 a Local Resource Committee is established by the local government, which then oversees the development of the resource management plan in that atoll. Step 4 is also noteworthy in that it entails gathering rich datasets along socioeconomic, ecological, and physical parameters. These data inputs feed into the ConservationGIS database that has been developed and is constantly updated by CMAC.

Some communities using this approach are finding early success as they proceed in the step-by-step process of articulating threats and their needs and priorities, codifying these into a management plan with various short, medium, and long-term measures including in enhancing their ecosystem and socio-economic resilience to climate impacts. Moreover, these communities remain engaged in the process

of implementing and monitoring these measures as a unifying activity for their community.

At the national level, the Reimaanlok Framework is finding success as it becomes increasingly embedded within national government legislation, governance, and financing systems. The most important of these is its inclusion within the Marshall Islands Protected Area Network (PAN).

In addition to smaller grants from funding partners such as Seacology, GEF Small Grants Program, and the Micronesia Conservation Trust, there are a few large multi-million dollar initiatives that advance the Reimaanlok Framework including: World Bank/GEF-6 Pacific Regional Oceanscape Project, United Nations GEF-5 Ridge-to-Reef Project, German BMUB International Climate Initiative Project, and the US Department of Interior Coral Reef Initiative.



# The Reimaanlok steps

## 1 Initiation

A need to develop a community-based resource management plan is identified either at the local government level or at the national level.

## 2 Project Scoping and Setup

Establishment of a project work-plan, a team of facilitators, and identification of budget and resources.

## 3 Building Commitment

An initial visit is made by the national team to carry out education awareness about the benefits of conservation and resource management, and to build trust with the community.

## 4 Collecting and Managing Information

Further visits focus on collection and documentation of local knowledge and use of resources, socio-economic information, and baseline scientific information.

## 5 Developing the Management Plan

Several visits are made to the community to develop, draft, and revise a detailed management plan.

## 6 Sign-Off

Achieve commitment to the plan through sign-off of management plan.

## 7 Monitoring, Evaluation, and Adaptive Management

Monitor achievement of the objectives — both biological and socio-economic. Adapt the management plan accordingly.

## 8 Maintaining Commitment

Ensure community has adequate support for ongoing management.



**Christian Colo, a former manager of the Marshall Islands Mariculture Farm in Majuro, assists Coastal staff to survey a reef at Arno Atoll as part of the Reimaanlok Process.**

## REIMAAANLOK PROCESS

### Where are they now?

**Step 4** Lib (Ramsar Site), Likiep\*

**Step 5** Ailinglaplap-Bouj, Ailinglaplap-Jeh, Wotje, Jabat, Namu, Bikar, Bokak, Mili, Arno, Aur\*, Ajeltake (Majuro)

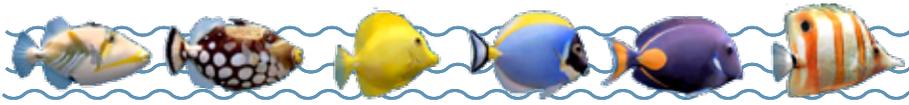
**Step 6** Wotho\*, Mejit\*, Maloelap, Arno

**Step 7** Ailuk, Namdrik, Ujae, Lae, Utrok, Ebon\*  
Bikirin, Drenmeo, Bokan Botin, Ene Kalamur, Woja (all Majuro)

**Atolls that are “pending” for launch of Reimaanlok steps:**

Kwajalein, Rongerik, Rongelap, Ailinginae, Bikini, Enewetak, Ujelang, Erikub, Jemo, Taka, Nadrikdik, Jaluit, Kili

\* Ridge-to-Reef site



# Ecological fortune found in Bikar and Bokak Atolls

**M**IMRA led a two-week survey expedition to remote and uninhabited Bikar and Bokak atolls in late 2019. This was the first time that these northern atolls were surveyed by MIMRA's Coastal Division, generating a wealth of ecological data that equips the Authority with baseline information for ongoing research and future comparison studies.

With the help of local, regional, and international partners, the large team of researchers was able to collect ecological data from the marine and terrestrial environments of the two atolls. Coastal staff was assisted by representatives from the RMI Environmental Protection Authority, the Secretariat of the Pacific Community, the University of Guam, The Nature Conservancy, and the International Atomic Energy Agency and Spiez Laboratory in Switzerland.

The diversity of expertise on the team allowed for assessments of the marine ecosystem and its resources; an investigation into the existence of ciguatoxins in macroalgae; an evaluation of residual radioactivity in marine and terrestrial samples; and a brief assessment of terrestrial resources and the use of a sensor drone for Orthomosaic mapping.

Due to their unique geographic isolation, the atolls of Bikar and Bokak are particularly interesting in an ecological context because they have escaped many of the localized stressors that populated Marshallese atolls face.

The objectives of the marine surveys in these remote atolls aimed to

- Quantify unique ecologic attributes of these atolls that warrant need for future protection.
- Assess current ecosystem state and potential threats.
- Include findings in the overall Re-

## REMOTE ATOLLS SURVEY



Stretches of healthy reefs at Bikar Atoll in the northern Marshalls.



maanlok (Looking to the Future) project to help create effective regional management plans.

The surveys revealed positive signs of a healthy and nearly pristine ecosystem across a suite of ecological indicators. This included many rare and large organisms including the Bumphead Parrotfish ("Mem," *Bolbometopon muricatum*), Napoleon Wrasse ("Lap-po," *Cheilinus undulatus*) and sharks ("Bako," *Carcharhinus* sp.).

Additionally, the high coral cover and persistence of many sensitive coral families warrant further protection. Atoll management evaluations including the ones done in Bikar and Bokak and other Marshallese atolls show a clear gradient of declining fish biomass with increases of humans per reef area, highlighting the need for local and regional management plans. In a similar evaluation, both human population densities and distance to market were identified



## Check for toxins, fallout levels

as major drivers in marine macro-invertebrate abundances. The valuable marine findings from this expedition again emphasize the need for conservation of this unique area.

*Gambierdiscus toxicus*, the dinoflagellate that produces a toxin causing health risks to people through “fish poisoning,” plagues many atolls, but was not found in either Bikar or Bokak. The team still discovered other species of dinoflagellates such as *Bysmatrum*, *Ceratocorys* and *Prorocentrum*, which are less potent in toxins in comparison to *G. toxicus*.

The team also surveyed the two atolls for residual radioactivity from the nuclear weapons testing and other sources. The survey discovered low levels of radioactivity on Bokak. On Bikar, however, radioactivity was significantly higher. Bikar’s environment contained radioactivity levels comparable to those previously reported for other nearby atolls such as Taka and Utrik. The levels, however, were lower than Rongerik, Rongelap, Bikini and Enewetak — four of the most affected atolls by the nuclear testing from 1946-1958. The radioactivity data from Bikar and Bokak is comparable to other northern islands in the RMI and to regions of the world affected by global and regional fallout from nuclear activity.

The terrestrial environment of the two atolls remains healthy with many unique characteristics. Bokak Atoll was flatter than most atolls with significant



## REMOTE ATOLLS SURVEY

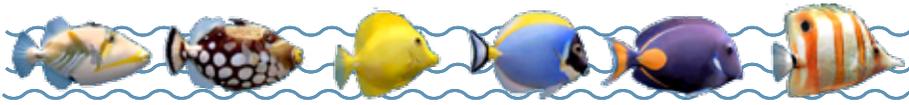
Underwater surveys at Bikar and Bokak atolls documented the status of coral and marine life.



bush and grass covering, but no trees. *Sida fallax* (“Ut’kio”), which is now rare in most of the RMI, was common on Bokak. Both atolls displayed themselves as important rookeries and hold large populations of sea and migratory shore birds.

Unlike Bokak, Bikar has coconut trees, which can be found on Bikar island. Including Bikar island, Almani and Jabwelo, the other two main islands

of Bikar Atoll, all displayed well-developed *Pisonia* (“Kañal”) forests with the addition of *Tournefortia* (“Kiden”) and *Scaevola* (“Kōñnat”) shrubs. Bikar showcased itself as a prime turtle nesting ground with multiple tracks identified along the coasts of its sandy beaches. Lastly, the most serious threat to bird and turtle populations on both atolls appear to be large communities of Polynesian rats (“Kijdrik”), *Rattus exulans*.



# COASTAL



Although Bikar and Bokak are uninhabited, they are still touched by the detritus of human activity.

## REMOTE ATOLLS SURVEY



Based on the 2019 Bikar and Bokak surveys, the Coastal team made several recommendations to improve future data collection and for the development of sound regional management actions. Monitoring, surveillance, and enforcement will remain a challenge for this remote region. However, baseline quantitative data collected during this expedition will allow for assessment of future disturbances such as illegal

poaching, effects of climate change, oil spills, or other activities. The significant distance from urban centers makes Bikar and Bokak prime areas for conservation. The isolated location has allowed for persistence of many large and rare species. Additionally, because Bokak and Bikar are uninhabited, a protected area will have little effect on local Marshallese communities and will not affect subsistence fishing or

other livelihoods. As a result of the visits to the two northern atolls, MIMRA produced a 20-minute documentary video about the survey trip and the pristine environment of these atolls. It can be accessed, along with other MIMRA videos, at: <http://www.rmimimra.com/index.php/updates/videos>. It can also be directly viewed on YouTube: <https://www.youtube.com/watch?v=N7TMjmsobcY&t=15s>



## MIMRA trips benefit the

**T**he number of fish pickup trips declined in FY2020 for a variety of reasons, including Covid-19-related support by the national government to outer island communities that required use of MIMRA vessels for delivery of supplies.

In FY2020, the Coastal Division added two new atolls to supply fish to the Majuro market through the Outer Islands Fish Market Center (OIFMC). This brought the number of atolls to eight that provided fish for sale through OIFMC, compared to six in FY2019. The two new atolls were Mili and Ailuk, which received one pickup visit each. For the seven atolls serviced aside from Arno Atoll, a total of 16 pickup visits were made. This compares to 23 the previous year. The drop in the number of trips was a direct result of the increased need for charter trips of MIMRA vessels by the national government to assist with the distribution of food items, fish-

### FISH MARKETS

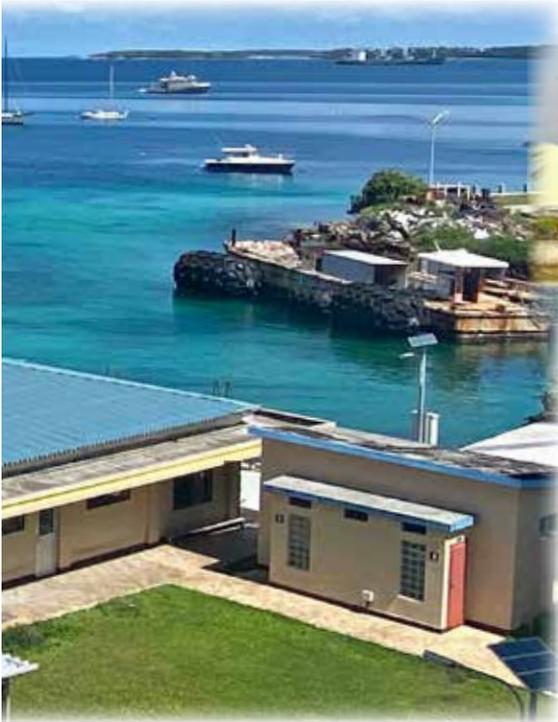
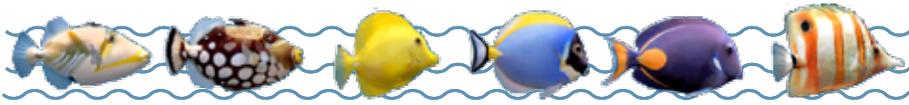
ing and farming tools that were procured for outer island communities as part of Covid-19 preparations. In addition, another factor in the reduction of trips was the over-saturation of fish in Majuro stores and markets that became evident from June 2020 onward.

Arno Atoll, because of its proximity to Majuro, does not need to rely exclusively on MIMRA vessels to pick up fish for delivery to Majuro. Small private boats frequently make the short ocean crossing between the two atolls to deliver fish and the OIFMC began purchasing directly from fishers in this manner during FY2020. MIMRA also made a few pickup visits to Arno, which

had the largest amount of fish purchased by OIFMC during the year.

In addition to Arno, OIFMC purchased fish from Aur (4 trips), Maloelap (4 trips), Likiep (2 trips), Wotje (2 trips), Jaluit (2 trips), Ailuk (1 trip) and Mili (1 trip). These pickup visits provide fishers with income by purchasing fish and fish products directly.

The financial benefit that fishers of the eight atolls received from the partnership with OIFMC totaled \$58,613 for the 51,310 pounds of fish purchased. Arno fishers received \$25,659 for 21,774 pounds of fish; Aur fishers received \$10,454 for 8,849 pounds of fish; Maloelap fishers received \$9,103 for 8,517 pounds of fish; Likiep fishers received \$3,113 for 3,085 pounds of fish; Wotje fishers received \$5,150 for 3,387 pounds of fish; Jaluit fishers received \$1,751 for 2,057 pounds of fish; Ailuk fishers received \$1,494 for 1,911 pounds of fish; and Mili fishers received



The Outer Island Fish Market Center, viewed from on high and from the lagoon, sits next to the busy domestic dock in Uliga. Right, the Kwajalein Market's logo.



# outer island fisherfolk

## Fuel an issue for Kwajalein Market

Fuel availability and cost continued to be the major impediment to the Kwajalein Atoll Fish Market Center (KAFMC) increasing the number of fish pickup trips to outer islands in FY2020. KAFMC now has a vessel to use for trips to its outer islands fish base partners and projects. Nevertheless, due to limited availability and high cost of fuel on Ebeye, trips have remained limited and inconsistent.

KAFMC continues to supply limited amounts fish to the Ebeye community through direct purchase of fish and local produce from Namu, Ailinglaplap, Ailuk, Likiep and Ebeye fish-

ers as well as providing assistance in fuel and ice provisions.

Due to mechanical issues with the boat, limited fishing trips were done as F/V Laintok waited for parts to arrive from off-island and focused only on trips to the western part of Kwajalein Atoll and trips made by F/V Jebro and F/V Timur from Majuro to supply the KAFMC. For FY2020, KAFMC was able to directly inject to the communities \$19,837 for 11,975 pounds of fish purchased from fishers. The 11,975 pounds of fish purchased is an increase over the 10,221 pounds purchased in FY2019.

\$1,889 from 1,730 pounds of fish.

The OIFMC continued to enforce quality and size limits on the fish that were brought in from the outer islands. This is a long-standing policy to discourage fishers from catching under-sized fish.

With fuel costs remaining high,

OIFMC also grouped atolls together in one trip to maximize the amount of fish per trip landed on Majuro. In addition, for fishers from Arno with boats, direct purchase on Majuro from them commenced in FY2020.

The OIFMC is a major supplier of reef fish and value-added fish products to the

Majuro community. While aiding outer island fishers with an income generating option, it also contributes substantially to food security for people living in the nation's urban capital. Many Majuro residents and local businesses and restaurants depend on OIFMC for their fish purchases.



The Outer Island Fish Market Center's dock makes the perfect haulout area to use for maintenance.

## Japan-MIMRA partnership supports the outer islands

**M**IMRA and Japan's Overseas Fisheries Cooperation Foundation (OFCF) have maintained a beneficial partnership for nearly 30 years. The collaboration on outer fish development projects, and the provision of fisheries equipment and maintenance support was launched in 1992 and has been a continuous partnership since that time, helping MIMRA to maintain an expanded program of support for many outer island fishers and communities.

In 1992, OFCF launched a Pacific Island Nations fisheries program for the region in collaboration with fisheries departments in different islands. OFCF holds annual consultations on fisheries cooperation, and receives requests from each country for partnership projects. After conducting field surveys and consultation with each government, the scope of the projects are developed and are followed by a drafting and signing of a memorandum of understanding and an implementation plan. This has been the practice for many years and continued for FY2020.

In 2020, MIMRA requests that were implemented with OFCF included:

### MAINTENANCE

- Maintenance and repair of community fishing boats outboard motors.
- Maintenance of Arno Giant Clam Hatchery.
- Maintenance and repair of MIMRA transport vessels that are used by both OIFMC in Majuro and KAFMC at Ebeye.
- Repair and maintenance of MIMRA ice plants.
- Advice for management and support for operation of MIMRA fish bases

#### Fix it, maintain it

The annual maintenance and repair program for 2020 included maintaining and fixing numerous MIMRA assets.

**Transport vessels:** Yearly dry-dock and maintenance service and repair of all MIMRA fish transport vessels (Jolok, Timur, Jebro, Lentanir and Laintok) was achieved.

**Community Boats:** Community fishing boats and their engines on the outer islands were repaired.

**Fish base repairs:** Maintenance and repair work on the fish bases at Wotje and Arno and sub-fish base at Ine, Arno was performed. These outer island fish bases also received a range of maintenance on ice machines, outboard engines, and building facilities.

**OIFMC and KAFMC:** Regular maintenance and repairs of freezers, ice makers and other equipment at the Majuro and Ebeye fish markets was performed.

**Hatchery maintenance:** Maintenance and repairs were performed on the Loto Giant Clam Hatchery at Likiep and the Arno Giant Clam Hatchery. This included repairs to the buildings at each hatchery site. Maintenance and repair work was also performed at the Woja Hatchery in Majuro. This included construction of new raceway tanks at the Woja Hatchery.

**Vehicle maintenance:** Maintenance service and repairs were performed on the Authority's eight vehicles.



# Tailoring the sector to suit local resources and needs

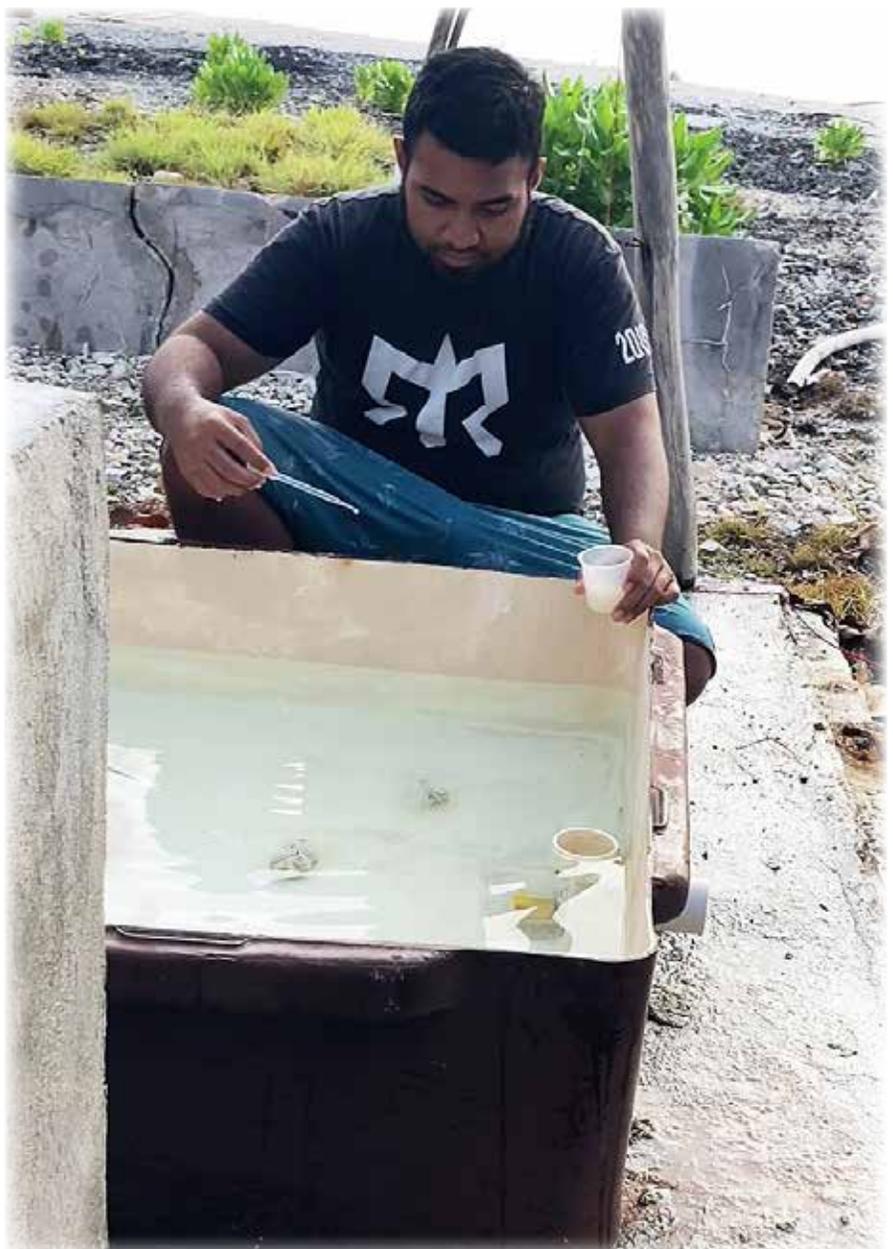
## AQUACULTURE

The Coastal Division supported two clam hatcheries on the outer islands, while operating two multi-species hatcheries in Majuro during 2020. The clam farms on Likiep and Arno atolls are a long-term investment for MIMRA, which dates to the 1990s. These two hatcheries have contributed to the overall export of giant clams from the Marshall Islands for many years, including in 2020. The ongoing exports of giant clams to the international aquarium market generates income for local aquaculture farmers on these two atolls.

One of the challenging areas has been the complexity of sustainable aquaculture and the various technical and financial barriers that must be overcome to minimize risks associated with growing and sustaining production.

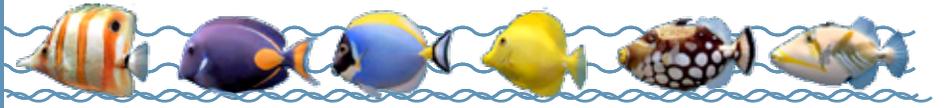
The Majuro hatcheries are newer in origin or focus: MIMRA purchased the Ajeltake Moi Hatchery from Aquaculture Technologies of the Marshall Islands in 2019 and began operating it in 2020. The other, located in the Woja area of Majuro, was formerly a black pearl farm that was renovated and converted in 2019 for giant clam spawning. These two Majuro-based hatcheries support the two outer islands hatchery operations, as well as supporting local aquaculture farmers in Majuro by providing fish and other marine life for the “grow out” phase in Majuro lagoon.

The focus for the Majuro hatcheries is to increase the supply of giant clam larva (babies) for grow out by local farmers in Majuro and the outer islands. In addition, the Ajeltake Moi Hatchery aims to reinvigorate the propagation of the moi (Pacific threadfin) for commercial development. The Covid-19 impact on supply chains and the resulting reduction in air service to the Marshall Islands caused long gaps in delivery of supplies needed for operation of the Moi Hatchery, disrupting to an extent some of the operations.



The spawning stage of aquaculture requires close attention to detail.

# COASTAL



## Giant clam project in Majauro

### Woja Hatchery

This giant clam farming project was fully implemented in Majauro Atoll during 2020, following construction and renovation work to improve and expand the facility the previous year.

With the 12 newly constructed race-way tanks at the Woja hatchery and spawning of larva, Majauro communities now have the opportunity to become giant clam farmers. During the year, 38 students from Marshalls Christian High School at Rongrong Island in Majauro were trained at the hatchery and



## AQUACULTURE

The inlet pipe at the Woja Hatchery is assessed by a MIMRA Coastal member.

provided farming materials including nursery cages, cleaning equipment and snorkeling gear. It is a great opportunity for these high school students to be able to generate income for themselves and also to gain hands-on experience in aquaculture production for when they return back to their home atolls.

Consultations with Majauro Atoll Lo-

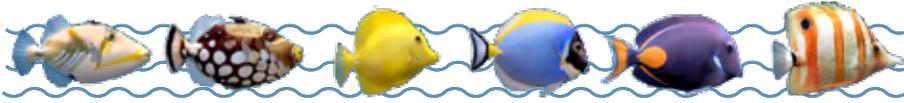
cal Government were held, leading to development of a training schedule and implementation plan for Majauro communities to begin engaging in giant clam farming. A training plan was developed and was to be set in motion once the newly produced juvenile clams reached the suitable size for distribution.

## Review of Arno plant planned



### Arno Hatchery

The number of shipments of giant clams from the Arno Hatchery decreased at the end of the year. There is a need for further consultation and engagement with Arno giant clam farmers to resolve any issues that may have caused the shipments of clams and the number of active farmers to decline.



## Ajeltake Hatchery

The Ajeltake Moi Hatchery successfully spawned over 26,000 Moi juveniles for lagoon growout.

# Successful production of eggs

## AQUACULTURE

After many weeks of unsuccessful efforts to produce Moi eggs for grow out in lagoon cages, fresh Moi broodstock, caught by the hatchery team and brought to the hatchery, successfully produced more than 100,000 viable eggs.

This spurred hatchery activities. Things were developing smoothly until the Covid-19 pandemic hit internation-

al trade, airline frequency and postal service. This affected nursery operations as the hatchery relies on feed and other supplies from overseas, the delivery of which was disrupted from mid-year onward.

Still, despite experiencing high mortality throughout the hatchery and nursery runs as a result of some of these issues affecting operations, more than 26,000 juveniles were produced and provided for grow out in lagoon cages.



Monitoring the giant clams on Likiep.

## Likiep Hatchery

# Ensuring tanks are restocked

Shipments of juvenile giant clams from Likiep farmers for export markets have been continuous for many years and continued during 2020, despite difficulties in transportation due to Covid-19. Coastal staff ensured that the hatchery was able to accommodate the growing number of local farmers by making sure clam seeds were provided so that the Likiep

raceway tanks were regularly re-stocked after babies were distributed for lagoon grow out. This was accomplished by conducting giant clam spawning right after clam seed distribution is carried out. An inventory of the facility and equipment was conducted to evaluate the current state of the hatchery to ensure it was able to remain operational in 2020.



# Despite Covid, clams and corals are being exported

## AQUACULTURE

The global trade of ornamental marine species has proved to be a huge opportunity for the livelihoods of local communities, particularly in the remote outer islands. Thousands of farmed giant clams and live corals are being exported every year. Although Covid-19 curtailed air service to the Marshall Islands that is essential for exporting live marine products, the two firms active in the export trade in 2020 managed to maintain the ongoing export trade, though at a reduced level reflecting both curtailed international market demand and air shipment opportunities.

Over the years, the increased demand from the international market has motivated greater interest and involvement in giant clam farming in remote islands. There has been a significant and steady export of farmed giant clams and live corals from the Marshall Islands.

For 2020, the number of exported giant clams and live corals declined due to Covid-19 border lockdowns that restricted in- and out-bound flights for the Marshall Islands. The outlook is for an increased number of flights in 2021 when exports are expected to pick up.

Data on giant clam and coral exports and re-exported giant clams and corals from 2018-2020 show a notable reduction in quantities overall, though exports of some of the farmed live corals and giant clams remain strong and in similar number to 2019. Although the global Covid pandemic has affected the volume of marine ornamental exports, the trade between the international market and the local exporters continues albeit at a slower rate.

For example, total re-exported tridacna maxima clams amounted to over 1,500 in 2020. While that was down from the

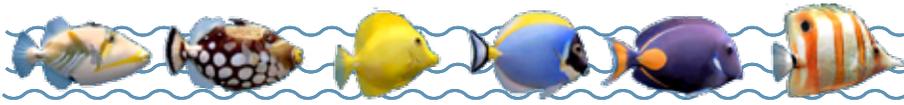


**MIMRA Coastal staff conduct a spawning training at Likiep Atoll.**

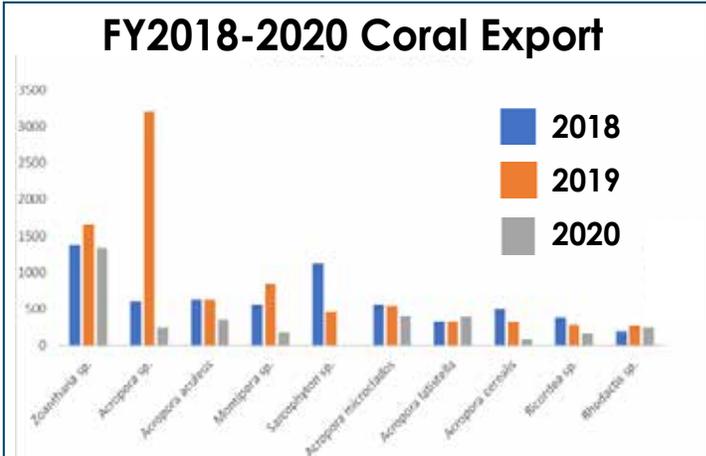
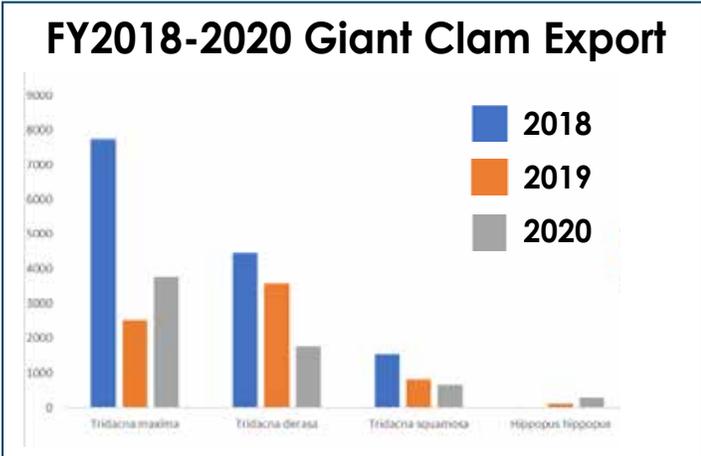
nearly 3,000 re-exported *Tridacna maxima* in 2019, it was an increase over 2018, when under 1,500 were re-exported. For directly exported giant clams, *Tridacna maxima* were less than half of the 2018 number of nearly 8,000. But 2020 exports outpaced 2019 by a wide margin at nearly 4,000. Other *Tridacna* family giant clams were also exported in 2020, as were some *Hippopus hippopus*.

The maxima variety is the most popular giant clam export for the aquarium trade. Marshall Islands companies exported and re-exported several other varieties. Re-exported and exported

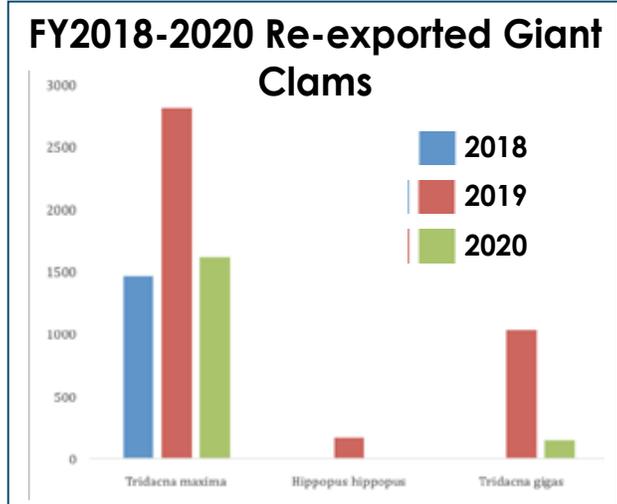
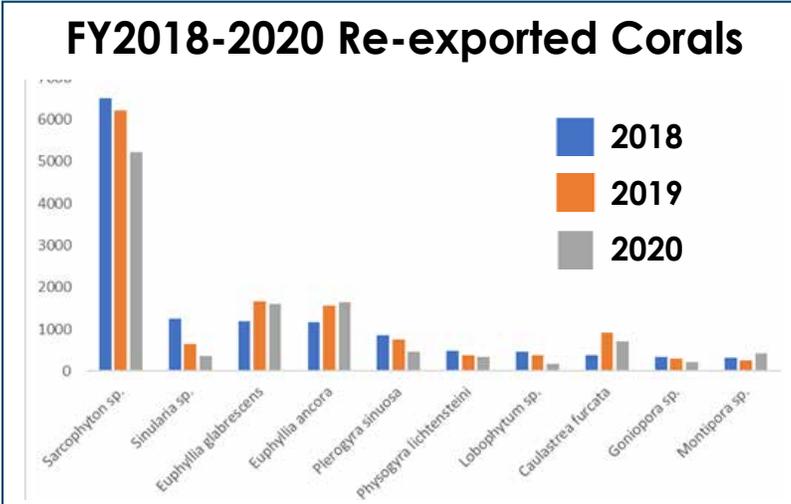
farmed live corals declined in number from 2019 to 2020. But exports continued, ensuring Marshall Islands farmed aquaculture products were being sold on the international market. Despite the disruption in trade/exports, the two local exporting companies, Marshall Islands Mariculture Farm and Atoll Marine Aquaculture, remained engaged and did not halt purchases of local farmers' cultured giant clams in 2020. Additionally, the Coastal Division remains committed in its efforts to promote aquaculture and provide technical support to interested farmers and communities.



# COASTAL



## AQUACULTURE By the numbers



Aquaculture Officer BJ Zebedy presents an overview of the giant clam farming project to high school students at Rongrong Island.

# OCEANIC



A crew member works with a batch of frozen tuna on the deck of a purse seiner.

## Vessel Day Scheme offers foundation for growth

The Covid-19 pandemic prevented some fisheries work in 2020 — notably the presence of fisheries observers on fishing vessels — and reduced or delayed other activities such as transshipments, which declined by over 60 percent. But on the plus side of the ledger, despite numerous challenges to MIMRA’s revenue generation, the Vessel Day Scheme proved its resilience. Despite the Covid-19 impact, no uptake of fishing days by US Treaty vessels, changes in ocean conditions, and world markets that are also affected by Covid-19, the VDS provided options such as pooling and trading of days that helped MIMRA make up revenue shortfalls. It confirms the VDS as a dynamic and flexible platform for managing the purse seine industry.

The year of downtime from travel saw the Oceanic Division move comfortably

into the Zoom world of regional and international meetings and communications, thanks in no small measure to MIMRA’s expanded IT team and its new headquarters building, which opened in 2019, and is set up for a variety of high-tech monitoring and communications activities.

In 2020 the Division made substantive progress in several important areas of the tuna fishery that laid groundwork for ongoing initiatives to move to next steps of implementation in 2021. This work was focused around developing implementation plans for several initiatives to position the Marshall Islands to expand involvement in the tuna fishery, with the goal of increasing benefits achieved for the country. At the heart of these initiatives is the Parties to the Nauru Agreement’s VDS, which is the foundation for management of the multi-billion dollar

purse seine industry in the region.

The VDS has been the foundation for the expansion of the Marshall Islands engagement in the tuna fishery value chain since 2008. But the country’s participation remains limited. MIMRA’s aim for several years has been to begin piloting participation in the entire value chain of tuna from the sale of fishing days to vessels and tuna transshipment to the delivery of tuna tonnage to processing plants and sale of the end products. Over a dozen years since the VDS rollout, MIMRA is ready for next steps and made solid progress in 2020 for advancing these plans.

MIMRA’s two-pronged focus as it moves into the 2020s is finalizing the establishment of a Competent Authority to facilitate access to the European Union, the world’s largest seafood market, and establishing a corporate entity to pursue

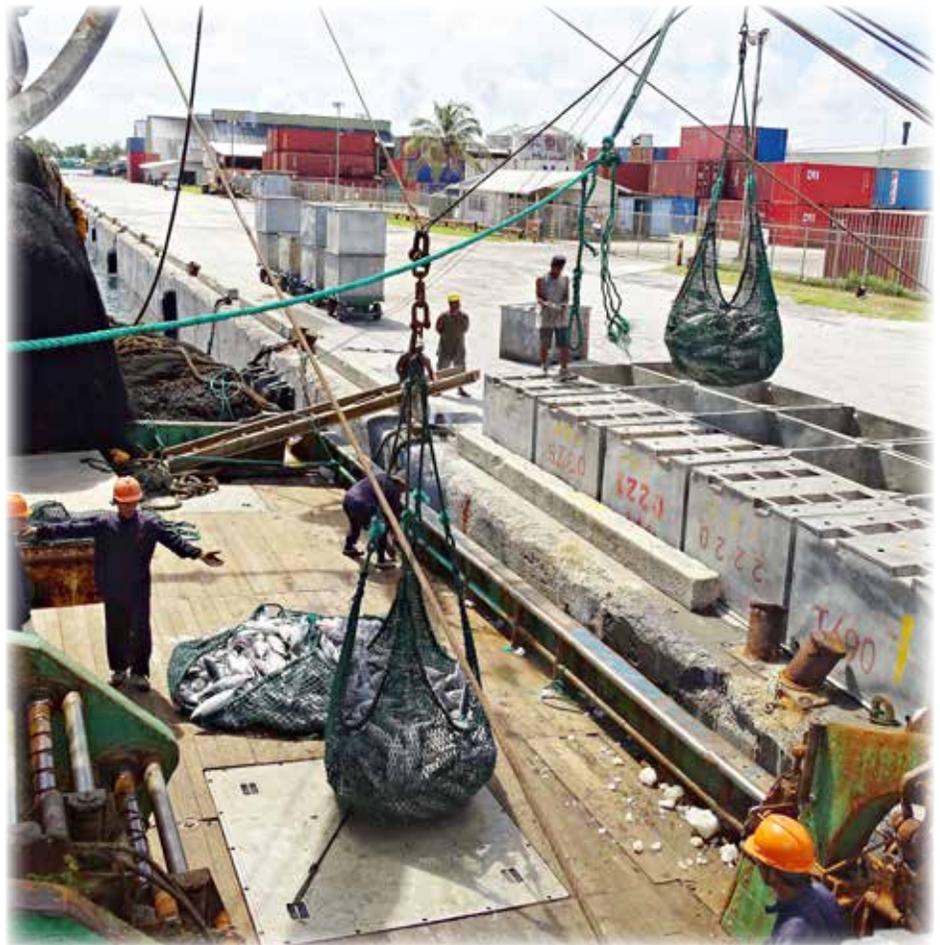


# Draft regs and policies created

opportunities in the tuna value chain that complement the Competent Authority while extending the reach of the Marshall Islands into other areas of the tuna value chain. This includes the launch of the FISH4ACP project with support of the European Union and UN Food and Agriculture Organization — a multi-year effort aimed at increasing value chain opportunities through Majuro’s substantial transshipment operations.

To advance these plans, the Oceanic Division in 2020 was involved in a multitude of behind-the-scenes work. This included developing draft regulations and other foundational documents and policies for establishment of the first Competent Authority for the Marshall Islands (see page 46-47 for more detail); advancement of plans to establish the Pacific Islands Tuna Provisions limited liability company that aims to pursue tuna value chain opportunities and conservation programs; and preparation for the planned early 2021 launch of the EU and FAO-supported FISH4ACP project, which is focused on increasing opportunities and benefits from Majuro port’s tuna transshipment operations.

“These are opportunities we can harness and cater for,” said MIMRA Director Glen Joseph. “We can use them as leverage to catch more benefits. The VDS itself gives us the confidence and leverage to participate throughout the value chain. Do we stay where we are and not move forward? If the Marshall



**Fish being offloaded for delivery to the PPF loining plant.**

Islands doesn’t establish a Competent Authority, we may miss an opportunity that presents itself to the Marshall Islands. We know what we want. Now we have to figure out how we get there.”

## Tuna value chain projects

The Oceanic Division’s work in 2020 on the Competent Authority, which has now been elevated to a separate division within MIMRA, addresses an important value chain element that has potential spinoffs for other export markets beyond the European Union.

In addition, two other MIMRA value chain initiatives moved ahead in 2020 for rollout in early 2021: An EU-funded project focused on tuna transshipment

in Majuro and the launch of a new corporate entity to pursue wider opportunities in the value chain.

During 2020, MIMRA applied for and was accepted as one of 12 locations around the world to be part of the FISH4ACP project that is involving Africa, Caribbean and Pacific (ACP) members in a partnership with the EU and the FAO. This initiative is focused on identifying how the Marshall Islands can expand its involvement in the “value chain” of the tuna fishery with specific focus on tuna transshipment. MIMRA is the only Pacific Islands fisheries authority engaged in this EU-FAO program.

From 2015 to 2019, purse seiners used Majuro for 2,331 transshipments — an average of 466 per year. Each transshipment averaged over 740 tons of tuna moving from fishing vessel to carrier



# Pacific tuna group created

ship for transport to off-shore canneries. The 1.7 million tons of tuna moving through Majuro in that five-year period put the Marshall Islands capital on the map as the world's busiest tuna transshipment port. The numbers dropped to 175 in 2020 due to Covid-imposed port entry restrictions, but that was viewed as a temporary condition that would improve once port entry restrictions were eased in 2021.

During 2020, the proposal, funding and implementation plans with the EU and FAO were developed and finalized in anticipation of a January 2021 launch. The first year of work will focus on a “rapid assessment” of opportunities related to tuna transshipment, which will inform next steps. MIMRA’s aim with the FISH4ACP project is to take a “deep dive” into the transshipment operation — everything from gaining a better understanding of the supply chain logistics to environmental issues of hundreds of fishing vessels using Majuro port annually.

The other initiative was the establishment of a new corporate entity called Pacific Island Tuna Provisions, LLC, a collaboration between MIMRA and The Nature Conservancy (TNC). This resulted from MIMRA’s long-term partnership with TNC that has been focused on conservation, sustainable domestic development and value chain engagement.

“Pacific Island Tuna Provisions



The Pharostar receives tuna from a purse seiner.

(PITP) seeks to transform the existing tuna supply chain in the Western and Central Pacific Ocean by increasing visibility and transparency into on-the-water operations, reducing bycatch of juvenile tunas and at-risk species like sharks and turtles, and creating a new, sustainable funding source for community-based projects in the region,” reads the new company’s mission statement, which was developed by this partnership. PITP is positioning itself to focus on value adding to the PNA VDS; increasing supply chain visibility and long-term focus on tuna; promoting national and domestic fisheries development; and partnering on economic opportunities in a complimentary manner

with the Competent Authority. The new corporation, which is registered in the Marshall Islands, has a dual focus on value chain benefits and conservation. The goal is to leverage tuna value chain participation to eliminate IUU fishing, recover endangered species, support community-based conservation, and promote empowerment for and ownership of sustainable management of resources.

The MIMRA-TNC partnership sets out the challenges it intends to tackle in a project overview issued in late 2020. The key issues it identified for engagement and action:

- **Economic:** A lack of transparency in the complex operation of the tuna



## Leaders see need to be creative

supply chain; conflicting incentives among stakeholders limit the ability of any single player to impact change; and lack of long-term contracts in the industry limit investments in sustainability.

- **Social:** An under-developed workforce and unsafe working conditions are prevalent in the tuna supply chain; Pacific Islanders are minimally involved in the supply chain beyond the sale of fishing licenses; and Pacific Island communities are among those at the highest risk of impacts of climate change.

- **Environment:** Illegal, unregulated, and unreported fishing is common, undermining fishery management; current fishing methods lead to bycatch of baby tuna and endangered, threatened and protected species such as sharks and turtles; and many Pacific Island nations lack the resources to invest meaningfully in conservation.

With this as the backdrop, PITP aims to define higher standards for environmental and social sustainability that can be implemented and enforced across the tuna supply chain. The business structure of the new limited liability corporation is designed to support rapid response to issues and needs, profit sharing with islands in support of climate-resilient projects, and partnerships to strengthen existing PNA mechanisms — the VDS, Competent Authority, Marine Stewardship Council certification — for further commercial benefits to participating islands. The work on PITP



**Fisheries Enforcement officers prepare to check tuna vessels.**

by the Oceanic and Legal Divisions in 2020 set the stage for the hiring of staff and the launch of this new corporate entity in 2021.

These new structures and opportunities have emerged for two reasons. The first is MIMRA is firmly established with a strong governance structure that is supported by layers of fisheries governance mechanisms that now exist in the region through PNA, the FFA and the WCPFC. As a statutory authority of the government, MIMRA has the ability to be innovative and respond to developments and needs in the commercial tuna fishery. Most importantly, it has a governance framework, particularly through its membership in the PNA,

which supports innovation. The second is Marshall Islands leaders, dating to the 1980s and the nation's founding father President Amata Kabua, recognized that the country's EEZ was located on the fringe of the major regional fishing grounds and as a result they needed to be creative to successfully participate in the tuna fishery. Although government-initiated efforts to engage in the commercial tuna industry in the 1990s did not pan out, MIMRA's established governance structure today makes it possible to mitigate risks through planning and engagement with partner organizations, and to identify opportunities and partnerships that can lead to successful outcomes.



## Total Catch Purse Seine Fleets\* in the Marshall Islands EEZ 2012-2020

Year	SKJ	YFT	BET	OTH	Total
2012	22,977	835	416	14	24,242
2013	40,113	1,514	538	6	42,171
2014	66,196	3,477	668	18	70,359
2015	21,293	4,295	126	0	26,344
2016	72,329	5,790	648	0	78,767
2017	22,765	2,901	788	65	26,519
2018	26,424	2,168	253	58	28,903
2019	4,806	65	410	11	5,394
2020	28,915	7,000	871	55	36,841++

## Total Catch Longline Fleets\*\* in the Marshall Islands EEZ 2012-2020

Year	ALB	BET	YFT	OTH	Total
2012	254	4,027	1,372	737	6,390
2013	237	2,972	2,014	738	5,961
2014	172	4,680	2,346	680	7,878
2015	122	2,286	1,380	359	4,147
2016	67	1,522	1,127	420	3,136
2017	71	1,698	1,389	445	3,604
2018	52	2,210	1,262	316	3,838
2019	134	1,974	1,699	410	4,216
2020	21	1,640	1,282	256	3,197++

## Total Catch Pole-and-Line Fleets\*\*\* in the Marshall Islands EEZ 2012-2020

Year	BET	SKJ	YFT	Total
2012	3	3,578	15	3,596
2013	3	1,719	4	1,726
2014	3	3,317	21	3,341
2015	0	615	2	617
2016	0	429	1	430
2017	0	72	0	72
2018	0	1,017	1	1,018
2019	0	1,022	2	1,024
2020	0	2,223	9	2,232++

Figures are metric tons.

\***Purse seine fleets:** Marshall Islands, FSM Arrangement, S. Korea, Nauru, Kiribati, Taiwan USA, Solomon Islands and Japan (listed in order of catch tonnage). \*\***Longline:** Marshall Islands chartered, FSM, Japan and China (listed in order of catch tonnage).

\*\*\***Pole-and-Line** is exclusively Japan.

++2020 tonnage is provisional.

**Key:** ALB=Albacore, SKJ=Skipjack Tuna, BET=Bigeye Tuna, YFT=Yellowfin Tuna, OTH=Other.

# Covid slows down the sale of fishing days

## The VDS and zone-based management

The Oceanic Division managed the purse seine fishery through implementation of the Vessel Day Scheme. Multiple arrangements within the VDS are possible because of the flexibility of the management platform. This allows, for example, the sale of fishing days to domestically-based vessels in the Marshall Islands and those vessels operating domestically in PNA member islands; pooling days with other PNA members to create multi-zone access for vessels that buy pool days; sales of days to bilateral partners such as Taiwan, Japan, China and Philippines; providing days for the US Pacific Treaty, which is a regional commitment managed by the Forum Fisheries Agency; and trading days among PNA members if fishing is heavy in one zone but lighter elsewhere. PNA members adhere to an \$8,000 minimum benchmark price for sale of fishing days to distant water fishing nations. In practice, however, most fishing days sell for well above the benchmark price. Fishing day prices for distant water fishing nations in 2020 started at \$11,000. The highest prices were for the pooled days and US Treaty days because these are multi-zone access fishing days.

The year 2020 was different for a number of reasons: The Covid-19 pandemic slowed the sale of fishing days early in the year, as did a coordinated slowdown in the purchase of fishing





## Ability to trade days a benefit

days by the World Purse Seine Organization. As a result, MIMRA still had 700 unsold fishing days in July — days that it would normally sell early in most years. PNA faced pushback on the VDS from some segments of the purse seine industry during the early days of its implementation. But the coordinated slow-down in purchase of fishing days early this year appeared to be a renewed effort to undermine the system. When tuna world market prices rebounded later in the year, the World Purse Seine Organization eased its hold on buying fishing days in PNA waters. Despite the early difficulties in selling days, by December MIMRA had sold or traded all of its VDS. Because fishing was heavier in Kiribati, Federated States of Micronesia and Nauru waters, fishing days for those PNA parties were in demand. MIMRA traded the fishing days it had left toward the end of the year with these other parties, selling all its days. The trading among PNA parties generated a lower rate of return than sales to distant water fishing nations. Nevertheless, the trading feature is one of the most important aspects of the VDS because it ensures that all PNA members will receive benefit for their allotment of days, no matter where the tuna schools are located within PNA waters.

Because of the challenge in 2020, it began selling fishing days for 2021 earlier than usual. In years past, MIMRA



Prior to export, fish are graded by MIFV workers.

started selling days in December for the upcoming year. In 2020, it began selling days earlier and by the end of 2020 had allocated 70 percent of its fishing days, leaving only 600 left to sell for 2021. The downside of selling days earlier is that MIMRA may not be able to command the premium price often paid for days bought during a year as the overall Total Allowable Effort supply dwindles.

### World Bank PROP program

The World Bank's Pacific Regional Oceanscape Program (PROP) contributed invaluable progress with the Competent Authority, fisheries enforcement, and legal support for Oceanic Division work, as well as supporting engagement with regional organizations and improvements for fisheries observers.

With Covid-19 travel restrictions in place from March onward, all planned

workshops were postponed. MIMRA's Legal Counsel, however, continued in-house training on fisheries legislation and enforcement mechanisms for MIMRA staff and officials of the Ministry of Justice, Immigration and Labor. For increased surveillance and enforcement of fisheries management, individual consultancy Terms of Reference for Monitoring, Control and Surveillance (MCS) strategy and a Legal Advisor were both approved by the World Bank. Later, MIMRA decided that the MCS strategy advisor was not a priority and the World Bank agreed to MIMRA's request to drop it from the program in 2020.

The Oceanic Division successfully engaged in virtual meetings of all the key regional organizations, including PNA, WCPFC, SPC, FFA, as well as participating virtually in trainings and negotiations throughout the year.

PROP funding supported procurement of uniforms and related gear for fisheries observers. PROP's Project



Crew work on off-loading tuna onto a transshipment vessel in Majuro lagoon.

## Transshipments down 62pc

Management Unit worked with the Oceanic Division late in the year to finalize technical specifications for port monitoring equipment for the observers that will be purchased in 2021.

### Tuna transshipments and exports

The 2020 level of transshipment in Majuro port was a 13-year low. This was the result of Covid-19 port entry restrictions that went into force in March. The Covid-19 prevention protocols started out with a 30-day quarantine requirement that had to be met for any vessel intending to come into Majuro. It was later reduced to a 14-day quarantine restriction once more became known at the coronavirus. The extended quarantine at sea requirement resulted in many of the vessels that normally use Majuro to use other ports in the region that had less restrictive entry requirements.

A total of 175 transshipments took

place in 2020, a 62 percent decline over the annual average of the previous five years. The transshipments in 2020 accounted for a provisional total of 118,743 metric tons of tuna moving from purse seiners to carrier vessels or into dockside freezer containers for later export to tuna canneries. Not only was the number of transshipments the lowest since the late 2000s, but the average tonnage transhipped was also low. In 2019, a new record was established with an average of 807mt per transshipment. In 2020, this declined to an average of 679mt per transshipment.

From the late 2000s, Majuro began its development as a major transshipment hub for the purse seine industry fishing largely in PNA waters. From 2015 through 2019, Majuro has been acknowledged as the world's busiest tuna transshipment port. During this five-year period, 2,331 transshipments took place. This is an average of 466 per year. During this five-year period, the average transshipment was 745mt.

This contrasts with the 679mt average in 2020 during an off-year due to Covid-19 port restrictions.

The majority of the tonnage transhipped in 2020 was skipjack tuna, amounting to a provisional total of 102,190mt, or 86 percent of the total volume of tuna transhipped. In addition, provisional totals of 13,252mt of yellowfin tuna and 3,301mt of bigeye tuna were recorded during the 175 transshipment operations.

The impact of Covid-19 port entry restrictions shows in areas other than the total number. In 2019, two-thirds of all transshipments by Marshall Islands-flagged purse seiners were carried out in Majuro. This percentage dropped significantly in 2020 when only 51 percent of the 93 transshipments by Marshall Islands-flagged vessels were carried out in Majuro port. A nearly even number were conducted in Majuro and in other ports. Majuro port saw 47 transshipments by Marshall Islands-flagged purse seiners, while



# Longline vessels unload 2,756mt

46 were conducted in ports outside the Marshall Islands. The port with the most transshipments by these vessels outside of Majuro — 41 — was Tarawa, Kiribati, which is also an important transshipment hub. The domestically flagged fleet of 11 purse seiners transshipped a provisional total of 80,343mt in these 93 transshipments.

In 2020, Taiwan-flagged vessels again led all purse seiners in the number of transshipments conducted in Majuro port, although the numbers were far smaller than previous years. A total of 48 transshipments were conducted by Taiwan vessels. Taiwan purse seiners accounted for a provisional total of 29,153mt tons of tuna transshipped, or about 25 percent of the total.

Second to Taiwan in the number of transshipments in Majuro were Marshall Islands-flagged vessels, which performed 47 transshipments with a provisional total of 35,201mt moving through Majuro port. FSM Arrangement vessels accounted for the third highest number of 42 for a provisional total of 29,077mt. Other vessels that used Majuro to transship in 2020 included Nauru, Papua New Guinea, United States, China and Papua New Guinea.

As a result of the smaller number of transshipments in 2020, revenue generated from transshipment fees declined to \$319,000 compared to \$538,000 the previous year. Because of Covid pre-



**Marshall Islands Fishing Venture longline vessels.**

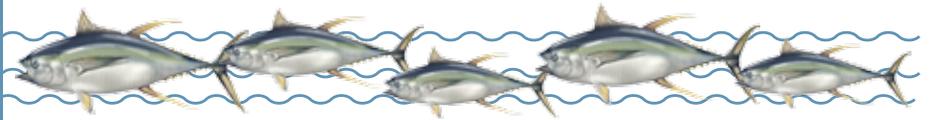
vention restrictions that went into effect in March, Oceanic fisheries enforcement and observers were only able to monitor transshipment operations early in the year.

Despite the smaller number of purse seiners transshipping tuna in 2020, the 175 vessels that used Majuro port contributed to the local economy in a variety of ways, including through purchases of fuel, food and supplies.

In addition to the purse seiner transshipments, 30 longline vessels associated with the Marshall Islands Fishing Venture regularly unloaded tuna tonnage during the year. MIFV is a Majuro-based tuna processing and export company that is a subsidiary of Luen Thai. MIMRA employed a dedicated port sampler who recorded weights and measurements of almost 100 percent of the fish unloaded at the MIFV fish base during 2020. The port sampler and Oceanic Division fisheries officers monitored these longline unloadings at MIFV throughout the year.

The 30 longline vessels unloaded a provisional total of 2,756mt of fish, most of it bound for export markets. The majority of the provisional catch was bigeye tuna (1,348mt) and yellowfin tuna (1,109mt). Blue marlin accounted for 212mt. A variety of other species made up the balance: wahoo, swordfish, albacore, sailfish, mahi mahi and moon fish.

The Pan Pacific Foods (PPF) loining plant has six associated purse seiners that supply tuna for processing. PPF exports both processed and whole tuna. In addition, both MIFV and Pacific International Inc. (PII) have steadily increased their numbers of containerized whole tuna exports in recent years. PII exported the highest volume of whole tuna at 7,908 metric tons in 2020. All told, 17,232mt of whole tuna in freezer containers was exported from the Marshall Islands in 2020. The majority of the exports were whole skipjack and yellowfin tuna (16,759mt), with 372mt of processed tuna loins exported



Pan Pacific Foods loining plant continued operations throughout 2020.

# Keeping the economy alive

by PPF to Thailand. In addition, 101 tons of fishmeal was exported to Japan. Countries on the receiving end of Marshall Islands whole tuna exports in 2020 included China, Taiwan, Thailand, Vietnam, Indonesia, Japan, Philippines and Fiji.

## Private sector growth

MIMRA, on behalf of the government, maintains a joint venture partnership with Koo's Fishing Company, Ltd. (KFC) that is carried out through the Marshall Islands Fishing Company. This has placed two purse seiners in joint venture with the Koo's-MIMRA partnership. Since the launch of this joint venture arrangement with one vessel in 2006, over the ensuing 15 years, the initial vessel and the more recently added second vessel contribute an ad-

ditional revenue stream for MIMRA as well as being a catalyst for further on-shore developments.

The Pan Pacific Foods (PPF) loining plant continued operations in 2020 with viable production of processed tuna loins supported by ongoing hiring and recruitment of local Marshallese employees. The company also operates six Marshall Islands-flagged purse seine vessels (three of which were added to the PPF fleet in 2019), which supply the plant with raw materials.

Total volume of exports was 17,232 metric tons with whole containerized tuna exports making up the majority. MIFV and Pacific International Inc. (PII) have steadily increased their numbers of containerized whole tuna exports in recent years.

PII exported the highest volume of whole tuna at 7,908mt in 2020. This represented a significant expansion of its purse seine transshipment and un-

loading operation. In 2020, the company unloaded tuna tonnage from 16 vessels into 359 freezer containers. This was nearly triple PII's 2019 tuna tonnage unloaded at dockside into freezer containers for export. PII managed to handle the 16 vessels and unloadings despite Covid border controls that forced closure of the PII wharf early in 2020. Tuna was instead unloaded from purse seiners by PII at the main commercial dock in Delap. The closure of PII's wharf due to Covid caused the company's servicing of the purse seine fleet to plummet. It provided services of only four vessels at the PII net yard for net repair and other services — compared to 45 the previous year.

The national fleet of 11 Marshall Islands-flagged purse seine vessels operated in 2020. The total catch estimate for the national purse seine fleet in 2020 was 81,913mt. This was lower than the all-time record catch for the national



# Increase in FSMA boats licensed

fleet set in 2019 of 95,533mt, but that aside, it was the highest total catch since 2015. This tonnage figure reflects tuna caught by the 11 purse seiners throughout the WCPFC area in 2020.

## Tuna caught in RMI EEZ

A total of 243 foreign vessels were licensed in 2020. However, not all were actively fishing in the Marshall Islands EEZ during the year. This included purse seine, longline and pole-and-line vessels. Domestically-based foreign longline vessels affiliated with MIFV have been operating under charter with the Marshall Islands since 2016 and are included in the total. The number of licensed vessels in 2020 is slightly higher than 2019. The makeup of the distant water fishing fleet licensed to fish in Marshall Islands waters differed each year: In 2020, the number of purse seiners rose from 162 the previous year to 190, while pole-and-line vessel numbers increased by one to 21. A total of 41 longline vessels were licensed in 2019, while 35 were licensed in 2020.

Eight countries licensed their vessels to fish in the Marshall Islands EEZ in 2020, while many different purse seine vessels operating under the FSM Arrangement were also licensed to fish. FSM Arrangement purse seiners increased significant-



## Pole-and-line fishing in RMI's EEZ has been exclusively conducted by Japan.

ly, from 54 licensed in 2019 to 70 this year, accounting for nearly 30 percent of all vessels licensed in 2020.

S. Korea maintained the same number of purse seiners licensed in 2019 and 2020 at 25. China maintained nine purse seiners for fishing in RMI waters both years. The number of Chinese-flagged longliners declined by two, from 22 to 20. Japan increased its purse seine fleet from 26 to 28 in 2020, but decreased its longline fleet from nine to five. The United States purse seine fleet was nearly identical to 2019, with 25 in 2020. Taiwan's purse seine fleet dropped below 20 for the first time in many years, with 18 licensed in 2020 compared to 24 the previous year. FSM-flagged longline vessels remained steady, with 10 in 2020 and nine the previous year. Philippines-flagged purse seine vessels also increased, from 10 to 15 over the two years. Kiribati's purse seine fleet

dropped from seven in 2019 to three in 2020, while Tuvalu, which had one purse seiner licensed in 2019, had none licensed in 2020.

The commercial catches within the RMI EEZ are taken predominantly by the purse seine fishery but longline and pole-and-line operations also occur. In 2020, estimated total catch for all gears combined was 42,270 metric tons with purse seine vessels accounting for 87 percent of the total catch, followed by longline vessels with eight percent, and pole-and-line vessels with five percent. Purse seine catch in the RMI EEZ increased from 5,394mt in 2019 to 36,841mt in 2020. The longline catch declined from 4,268mt in 2019 to 3,197mt in 2020. Pole-and-line catches, however, more than doubled from 1,024mt in 2019 to 2,232mt in 2020. Pole-and-line is exclusively Japan.

The 42,270mt caught in the RMI EEZ by foreign fleets in 2020 was al-



With a purse seiner on each side, a transshipment vessel uploads tons of tuna.

## RMI fleet catches most tons

most four-fold more than in 2019, when 10,686mt of tuna were caught. The year-to-year catch fluctuations are influenced by prevailing environmental conditions, with higher catches recorded during or immediately following strong El Niño periods. Climate change is influencing these environmental conditions affecting tuna schools in the region.

The breakdown of catch tonnage for the three types of fishing gears active in Marshall Islands waters in 2020:

- **Purse seine catches:** Available logsheet data indicate that total catch by purse seine fleets operating in the RMI EEZ increased from 5,394mt in 2019 to 36,841mt in 2020 with 26 percent of the tonnage accounted for by the Marshall Islands fleet. Skipjack tuna continued to be the dominant catch, accounting for 87 percent of the total in 2020. The 36,841mt was the highest total for the Marshall Islands EEZ since 2016, when 78,767mt were hauled in by purse seiners. Confirming the impact of environmental conditions and the El Niño weather phenomenon

on fishing trends, the strong 2016 catch followed an El Niño event in 2015.

The breakdown of the purse seine catch shows that Marshall Islands-flagged vessels caught the largest share of the tonnage, with a provisional total of 9,670mt, or about a quarter of the total catch for 2020. FSM Arrangement vessels were next with 6,380mt., followed by the S. Korean fleet with 5,949mt. Fleets from Nauru (4,569mt), Kiribati (4,284mt), Taiwan (3,772mt), USA (1,741mt), Solomon Islands (406mt), and Japan (70mt) round out the balance of the catch. Skipjack tuna accounted for 78 percent of the total purse seine catch, with yellowfin tuna making up 19 percent. Bigeye tuna and others made up the other three percent.

- **Pole-and-line catches:** Japan is the only nation to use this method of fishing. Japan licensed 21 vessels, one more than in 2019, and more than doubled the 2019 catch, going from 1,024mt to 2,232mt. The 2020 tonnage represents the highest pole-and-line catch since 2014, when these vessels

reeled in 3,341mt. Skipjack tuna accounted for almost 100 percent of the pole-and-line catch, with only nine metric tons of yellowfin out of the total.

- **Longline catches:** The provisional longline catch of 3,197mt in 2020 was lower compared to 2019's 4,268mt, which represented a five-year high. Most of the longline catch was reeled in by Marshall Islands-chartered longliners, with 1,514mt, and the fleet from the FSM, which accounted for 1,340mt. Vessels from Japan and China caught the balance, 223mt and 120mt, respectively. Bigeye tuna was the largest share of the 2020 longline total, with 1,640mt caught, followed by yellowfin tuna, 1,282mt. Albacore and other species made up the balance of the tonnage.

In the purse seine fishery, most fishing in Marshall Islands waters is in the southern portion of the EEZ. While Longline fishing also occurs in the southern part of the EEZ, it is more widely distributed throughout Marshall Islands waters.



# Watchdogs hit by Covid-19

## OBSERVER PROGRAM

**F**isheries observers were among the hardest hit of all MIMRA programs due to the impact of Covid-19, which halted normal observer work onboard fishing vessels. The number of active observers decreased to 43 in 2020 as several left to pursue other job opportunities during the suspension. The requirement for 100 percent observer coverage on purse seine vessels fishing in PNA waters was temporarily suspended in March 2020 by the PNA in response to the Covid-19 conditions. The suspension was later agreed by the wider FFA and WCPFC membership and applied to all other fishing vessel types as well.

As a consequence of the observer suspension, Marshall Islands fisheries observers performed only 32 trips in 2020. This is an 80 percent decline compared to the 173 observer trips the previous year.

In 2020, observers performed 20 trips on purse seiners and 12 on longliners.

In the 2016-2019 period, Marshall Islands fisheries observers averaged coverage of 187 fishing trips a year. Observers also performed port monitoring for 64 purse seine vessels.

Despite the Covid-19 complications of 2020, MIMRA's observer program continued to develop the capacity of both its observers and the observer management team. Although there were no trainings for new fisheries observers during the year, the program held two refresher courses mid-year for current observers. A total of 37 observers participated in the one-week long refresher courses funded by the World Bank's PROP program.

For the 32 observer trips undertaken at the beginning of 2020 (pre-suspension), all data for both national and regional trips was submitted and the observer debriefings were completed. During the suspension, observers per-



**Above, some of the fisheries observers who received Covid-19 relief checks. Below, fisheries observers on a field trip to a purse seiner.**



formed casual work with MIMRA in different areas such as the Coastal Division, carpentry and maintenance. Later in the year, they became eligible for the US government-funded Covid-19 unemployment aid.

Of the 43 active observers in 2020, 42 were male and one female; nearly all are Marine Stewardship Council

(MSC)-certified.

MIMRA has six Pacific Islands Regional Fisheries Observer (PIRFO)-certified debriefers and eight PIRFO debriefer trainees. In addition, the program has an observer data specialist and longline port sampler who collects size and species composition data for scientific analysis.



Above, observers on a field trip to a longliner. Below, observer training sessions.



## Key safety systems overhauled, OBSERVER PROGRAM

A number of actions were ongoing in 2020 to improve the safety of fisheries observers. These included:

- Development and updating of Standard Operating Procedures (SOP) for observers. This now includes insurance that covers observers provided by fishing companies. Pending are formal contracts to replace casual contracts for all observers.
- An Emergency Action Plan (EAP) was introduced together with the SOP. It continued to be updated in 2020 with the goal of completion for review by

MIMRA's Director, Legal Counsel, Oceanic Deputy Director and Oceanic Division Chief. The EAP will involve the Marshall Islands Police Department's Sea Patrol, Marshall Islands Red Cross Society, MIMRA and the US Coast Guard.

- With funding provided by the Forum Fisheries Agency and the World Bank's PROP program, 60 lifejackets

and 60 personal life beacons (PLBs) were purchased. A total of 25 of the PLBs were registered with the US Coast Guard with the aid of the Ministry of Transportation and Communication. Other observer gear purchased with the support of the PROP program included uniforms, work boots, and rain gear.

- The program experienced chal-



Above, observers check out the bridge of a longliner. Below, the fire fighting team reviews their skills.

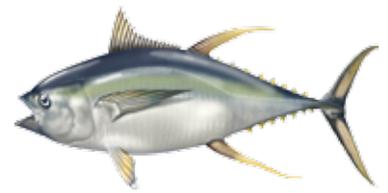


## improved

allenges with the FIMS Observer app, resulting in e-reporting being inactive for most of 2020. App updates are needed as is more training to address issues relating to some aspects of the app. A total of 60 Rugged tablets are still under consideration since first introduced in 2016. A two-way transmission device known as Rock Star was purchased but was phased out due to technical issues. Similar equipment from the Garmins brand was ordered, received and registered to replace the earlier equipment.

### Fisheries observer trips by flag and gear 2020

Flag	Purse Seine Number of trips	Longline
China	0	6
FSM	11	6
Kiribati	1	0
Nauru	1	0
Taiwan	2	0
US	5	0
<b>Total</b>	<b>20</b>	<b>12</b>



Source: MIMRA  
Oceanic Division.

### Fisheries Observer trips 2015-2020

Year	PS	LL	Total	*Observer coverage halted in March 2020 due to Covid-19 restrictions.
2015	182	0	182	
2016	175	28	203	
2017	153	39	192	
2018	145	34	179	
2019	141	33	174	
2020	20	12	32*	Source: MIMRA Oceanic Division.



## Provisional purse seine transshipments in Majuro port in 2020

	Number of PS Transshipments	SKJ	YFT	BET	TOTAL
China	2	988	22	0	1,010
FSM	42	24,469	3,609	999	29,077
Marshall Islands	47	32,569	2,167	465	35,201
Nauru	17	10,775	1,388	522	12,685
Papua New Guinea	9	4,423	1,134	145	5,702
Solomon Islands	2	782	436	92	1,310
Taiwan	48	24,434	3,910	809	29,153
United States of America	8	3,750	586	269	4,605
<b>TOTAL</b>	<b>175</b>	<b>102,190</b>	<b>13,252</b>	<b>3,301</b>	<b>118,743</b>

**Note:** The numbers listed under different tuna species are metric tons.

**Key:**  
SKJ: Skipjack;  
YFT: Yellowfin;  
BET: Bigeye.



A longliner catch.

Number of foreign longline, pole-and-line and purse seine vessels licensed to fish in RMI EEZ by year and flag from 2016 to 2020.

FLAG	GEAR	2016	2017	2018	2019	2020
CHINA	LL	27	30	0	22	20
	PS	0	6	8	9	9
FSM	LL	12	13	9	9	10
FSMA	PS	76	76	49	54	70
JAPAN	LL	2	6	6	9	2
	PL	11	16	11	20	21
	PS	30	25	25	26	28
KIRIBATI	PS	0	0	5	7	3
KOREA	PS	25	26	24	25	25
NZ	PS	0	0	0	0	0
PHILIPPINES	PS	0	0	13	10	15
CH-TAIPEI	LL	0	0	0	1	0
	PS	26	27	23	24	18
TUVALU	PS	0	1	1	1	0
USA	PS	33	31	31	6	25
<b>TOTAL</b>	LL	41	49	15	41	32
	PL	11	16	11	20	21
	PS	190	192	179	162	190



## Oceanic deals with Covid and multiple tuna issues



Top: PPF General Manager Wanjun “Young” Yang donates face masks to the Ministry of Health and Human Services. From left: Dr. Robert Maddison, Yang, Deputy Chief Secretary Abacca Anjain-Maddison, and Health Secretary Jack Niedenthal. Above: WCPFC preparation meeting via Zoom. Clockwise from right: Deputy Director, Oceanic Berry Muller, Director Glen Joseph, Legal Counsel Laurence Edwards, II, and Chief Fisheries Officer Beau Bigler. Below: Director Joseph explains MIMRA’s state-of-the-art fisheries monitoring systems at the MIMRA headquarters.





# Oceanic highlights

## Vessels tonnage

A total of 175 transshipments took place in Majuro in 2020 accounting for 118,743 metric tons of tuna. This was over a 60 percent decline compared to 2019 due to Covid-19 port entry restrictions that went into effect in March 2020.

## VDS success

Revenue generated by the Vessel Day Scheme (VDS) and fishing rights topped \$30 million for the second year in the row. VDS revenue was almost exactly the same in 2020 as the previous year at \$28.1 million. Total operating revenues set a record at \$35.2 million.

## Vessel licenses

A total of 243 pole-and-line, longline and purse seine vessels were licensed to fish in Marshall Islands waters in 2020. This was a modest increase from the previous year's total of 229. As in previous years, not all licensed vessels actually fished in the Marshall Islands EEZ during the year.

## Funding to RMI

MIMRA transferred \$31,300,000 to support the national government's budget in 2020, a seven percent increase over 2019.

## National fleet

The national purse seine fleet of 11 vessels caught an estimated 81,913 metric tons of tuna in 2020.



Koo's 102, right, offloads fish to the Kenta Maru.

## Tuna transshipments Majuro Port 2014-2020

Year	Number	Metric Tons	*Average	*Average metric tonnage per transshipment.
2014	382	158,065	414	
2015	504	368,323	731	
2016	551	403,809	733	**Provisional total mt.
2017	424	292,754	690	
2018	403	307,164	762	Source: MIMRA Oceanic Division.
2019	449	362,454	807	
2020	175	118,743**	679	

Additionally, the provisional catch of the 30 chartered longline vessels associated with the Majuro-based Marshall Islands Fishing Venture-operated fish base totaled 2,756 metric tons.

## Observer action

Forty-three fisheries observers carried out 32 trips: 20 on purse seiners and 12 on longliners in the first two months of 2020. Due to Covid-19 health and safety rules, a

moratorium on observers went into effect for 10 months of the year and continued into 2021. As a result, observer trips were well below the four-year (2016-2019) average of 187 observer trips annually.

## PII vessel service

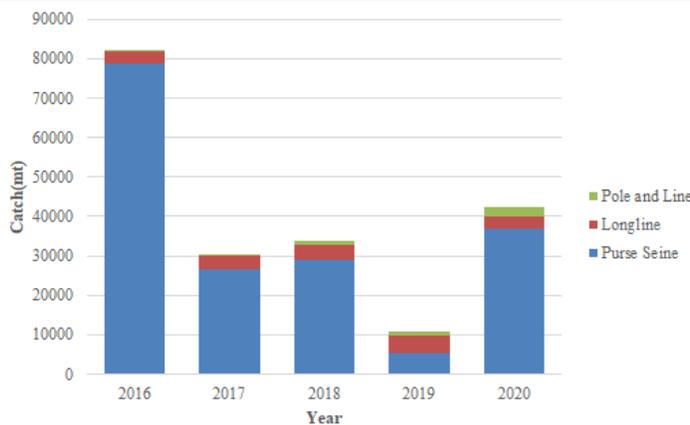
Pacific International Inc. saw a significant expansion of its purse seine transshipment operation. In 2020, the company offloaded 7,908mt of tuna from 16 vessels



# for MIMRA in 2020



## Total catch by the different gears operating in the RMI EEZ from 2016-2020



Above left, a purse seiner takes advantage of the services provided by Pacific International Inc. at its net repair yard in Majuro.

Above right, a Koo's purse seiner transships its tuna catch in Majuro lagoon.

into 359 freezer containers. This was nearly triple the 2019 offloaded tuna tonnage. Covid border controls forced closure of the PII wharf early in 2020, resulting in the servicing of only four vessels at the PII net yard for net and other repairs — compared to 45 the previous year.

## Bycatch interactions

Available fisheries observer data for the Marshall Islands purse seine

fleet recorded interactions with two whale sharks, one turtle and 12 marine mammals at the beginning of 2020. No seabird interactions were recorded. Because observer operations were halted after February, there is no observer data for most of the year.

## RMI EEZ tonnage

An estimated 42,270mt of tuna was caught in the Marshall Islands EEZ in 2020, four times the tonnage caught

in 2019, indicating the year-to-year variability of fishing in Marshall Islands waters. Japan's pole-and-line provisional catch was 2,232mt, double that of 2019. Longline vessels associated with MIFV, and vessels from the FSM, Japan, China and Taiwan caught 3,197mt of tuna, down from the previous year's 4,216mt. The nine nations — including the Marshall Islands — with purse seine vessels fishing in the Marshall Islands EEZ had a provisional catch of 36,841mt, a six-fold increase on 2019's 5,394mt.

# COMPETENT



## What is a CA and

As part of MIMRA's objective of increasing the benefits to the Marshall Islands from the tuna fishery, MIMRA is focusing on establishing a "Competent Authority" to facilitate export access to the European Union, the world's largest seafood market. A Competent Author-

ity (CA) is an entity that provides independent verification through inspections of vessels and processing plants, health sanitary authorization and certification ensuring that fish is safe for consumption as well as obtained from legal sources. This is implemented through a



Competent Authority staff initiated initial inspections and infrastructure assessments of Majuro-based tuna processing facilities in 2020.

## Milestones: Web presence

The year 2020 impinged on the work and progress of the Competent Authority (CA) due to the Covid-19, where travel restrictions hampered practical onsite training with other CAs in the region, and with the departure of the only CA officer to join his family in the US. Nevertheless, work pushed ahead with the drafting and development of the RMI Industry Standards, the CA National Control Plan, and the

Fish Processing and Export Regulation. Under the World Bank's PROP Project, three CA packages for food safety training, lab scoping, and review of the CA instruments related to the developed regulation, standards and the CA control plan were prepared, advertised and suitable candidates screened, interviewed and selected to deliver the projects in 2021.

In addition, an important administrative action

was taken in 2020 by the MIMRA Board of Directors to approve establishment of the Competent Authority as a new Division. The CA has joined the Coastal, Oceanic, Legal and Finance Divisions on equal footing. Following the MIMRA Board's approval of the CA structure, towards the end of 2020, new CA positions were advertised. This led to recruitment of two new CA officers who were expected to be a part of the team in 2021

Other developments in 2020 involved;

- A CA web presence as part of MIMRA's

# AUTHORITY

## how does it help?

robust food safety and catch traceability processes. Under trade rules, exported fish must meet relevant country trade rules through certificate of origin mechanisms.

The CA regulatory framework sets the tone for all the CA undertakings,

including inspection and verification activities, and testing, to ensure food safety standards and requirements are being met by Marshall Islands companies intending to export fish products to international markets, including the EU market.



Momentum for establishing the CA picked up in 2020 with site visits and industry outreach, as well drafting and MIMRA Board approval of essential documents governing CA operations.

## and industry inspections

website, [mimra.com](http://mimra.com), was created. CA information, reports, and photos were uploaded and available for industry, government and stakeholders to view.

- A new Health Certificate template and online certification for both industry and CA was developed and will be rolled out when all related elements are completed.

- Preliminary visits/inspections of fish processing establishments in Majuro were conducted. These initial visits were made to Pacific

International Inc. (PII), Pan Pacific Foods (PPF), Kendall Micronesia Inc. (KMI), Marshall Islands Fishing Venture (MIFV), and MIMRA's Coastal Fish Market facility. The inspections noted many infrastructure deficiencies that will require a substantial commitment from management to improve the current state of the processing plants, including the need for development of food safety programs and training for new operators. The preliminary visits and infrastructure assessments provide baseline information on each of these

processing facilities that will enable follow-up inspections by the CA to review and evaluate progress in meeting the requirements of the new RMI Industry Standards. These assessments provide an opportunity for the operators to start prioritizing their plant upgrades should they decide to participate in the EU market. The assessment of each facility provides MIMRA management with the current status of domestic fish processing companies as well as providing the mechanism to assist the industry to meet its new Industry Standards.

# LEGAL



MIMRA Legal staff brief Marshall Islands Cabinet on fisheries issues in 2020.

## Constant review of the

On a daily basis, the Legal Division provides legal advice to the Board of Directors and Management of MIMRA regarding fisheries legal issues at the national, sub-regional, regional and international levels. All legal work carried out by the Legal Division is based on the principles of upholding the rule of law and conserving the nation's marine resources for the benefit of our local people.

The Legal Division proffers legal services to both the Coastal and Oceanic Divisions. For the Oceanic and Industrial Affairs Division, the legal division is tasked to review national fisheries laws that may require review against regional and

sub-regional measures that are binding on the RMI as a member of the Western and Central Pacific Fisheries Commission, Pacific Islands Forum Fisheries Agency, Secretariat of the Pacific Community, Parties to the Nauru Agreement, and the United Nations Convention on the Law of the Sea.

In addition to these duties, the Legal Division assisted MIMRA in legal representation in court for prosecution against fishing vessels or companies alleged to have engaged in unlawful acts in violation of national fisheries laws and regulations of the RMI (e.g., illegal, unreported and unregulated fishing, contravention of conditions of fishing licenses, obstruction of fisheries observers, misreporting, and other

infractions). For the past five years, most cases have been settled out of court by way of summary proceedings, which is allowed under the Fisheries Enforcement Act. The Legal Division filed one case in the High Court early in 2020 against a S. Korean longline vessel. The case was ultimately settled at the end of the year.

The Legal Division provided in-house training for compliance and enforcement officers within MIMRA on an 'as needed' basis for capacity building and understanding of the laws of the Republic.

The Legal Division also handled legal drafting of bills, resolutions, regulations, bilateral access agreements, and local government ordinances in support of safeguarding marine re-

## THE TEAM



**Laurence E. Edwards, II**



**Jasmine Henry**

In 2020, the Legal Division was comprised of two attorneys: Legal Counsel Laurence E. Edwards, II, and Coastal Fisheries Legal Officer Jasmine Henry. However, in June, the Coastal Fisheries Legal Officer resigned to take up a post at the Attorney General's Office. The Legal Division greatly appreciated the work performed and contribution made by Ms. Henry during her tenure.

At the end of 2020, the Legal Division contracted Dr. Transform Aqorau, the former CEO of the Parties to the Nauru Agreement Office, to be its new Legal Advisor. The contract was approved in December and was to take effect in January 2021.



**Dr. Transform Aqorau**

# laws related to MIMRA

sources in the RMI. The Legal Division also assists management in the negotiation of fishing day sales under PNA's Vessel Day Scheme. Fishing days are sold to bilateral fishing partners and to domestic partners (in line with the FSM Arrangement which provides for preferential treatment to purse seine vessels flagged in island nations, including the RMI). Before fishing vessels are issued licenses to fish in the RMI EEZ, they are required to have an access agreement with MIMRA. This is required before commencement of fishing prior to January 1 of each New Year. These license conditions are outlined in access agreements required under the Fishing Access and Licensing Act.

Coastal Fisheries Law is still a

fairly new landscape, especially for the Marshall Islands. As such, a lot of the work that the Legal Division undertakes focuses on drafting legislation and reviewing policies so that the framework for the Coastal Division is clear in terms of law, enforcement, monitoring, and ensuring compliance of individuals and businesses that interact with RMI's coastal waters. Current coastal legislation focuses on regulating the licensing process; regulating and conserving certain species that are used for commercial purposes; and regulating the import and export process for sea cucumbers and aquarium fish.

The legislation that was updated or developed in 2020 included the Protected Areas Network Regulations,

Tuna Game Fish Conservation Zone (Amendment) Act, Tuna Game Fish Conservation Zone Regulations; Fish Harvest Regulations; and finalization of Aquaculture Regulations.

In October 2020, the Fish Harvest Regulations 2020, Protected Areas Network Regulations 2020, and the Fish Processing and Export Regulations 2020 all were in the promulgation process, which included a 30-day notice to the public for comments and review. They were to be certified once the public comment period was completed and any final changes were made to complete the promulgation process. The Aquaculture Regulations required further revisions before the promulgation process, which is anticipated during 2021.

## TCC16's virtual meeting

For the first time, the 16th Regular Session of the Technical and Compliance Committee (TCC16) was convened virtually due to the Covid-19 pandemic preventing travel. A Zoom platform was initiated and the Marshall Islands participated in the TCC16 meeting. The TCC Chair, Laurence E. Edwards, II, tendered his resignation from the Chairmanship due to personal reasons. The TCC Vice Chair from Canada, Dr. Robert Day, took up the Acting Chairmanship of TCC.

## IUU List

At TCC16, RMI nominated a South Korean longline fishing vessel for inclusion on the WCPFC's IUU List because it was alleged to have fished in the RMI EEZ without a valid fishing license. RMI presented its position as a coastal state, stating it took action against the longline vessel Oryong No. 721 specifically for fishing on five occasions in the RMI EEZ without a valid license. RMI notified the WCPFC Secretariat of the alleged violation on February 27, 2020. Marshall Islands action included filing a criminal complaint against the vessel in the High Court in Majuro. RMI noted the response by S. Korea, and stated it was not satisfied in accordance with the WCPFC's Conservation Management Measure (CMM) 2019-07. RMI stated it had been in close contact with S. Korea since the issue was identified, and that the case remained pending before the High Court.

Based on the exchanges between Member States, TCC16 noted that consensus was not reached for including the Oryong No.721 on the IUU List. The majority of TCC members sup-

## CMS Intersessional Working Group

In order to advance the work of the Compliance Monitoring Scheme into 2021, TCC16 nominated two individuals to take up key areas of the CMS Intersessional Working Group. TCC16 recommended Heather Ward of New Zealand to lead the risk-based assessment framework task and Rhea Moss-Christian of the Marshall Islands to lead development of audit points in support of the CMS IWG Chair.



Rhea Moss-Christian

## Virtual talks are

ported its inclusion, but consensus was not reached. TCC16 agreed to place the vessel on the Provisional IUU Vessel List with a note to the December annual meeting, WCPFC17, that consensus was not reached on this vessel.

## WCPFC's 17th Regular Session

The annual meeting of the Western and Central Pacific Fisheries Commission (WCPFC17) was convened virtually through the Zoom platform for the first time in December. It proved to be an efficient and effective means of participation for the member countries. Although some members had initial technical difficulties and the multiple time zones were a challenge, WCPFC17 produced useful outcomes to the benefit of the Marshall Islands. These included:

- Adoption of the 2020 IUU List: The Marshall Islands stated its appreciation to Korea and all CCMs for their valuable contributions since TCC16 in terms of placing a vessel on

the IUU list. RMI referenced a joint letter from RMI and Korea agreeing to remove the Oryong No. 721 from the provisional IUU list. Regarding Korea's flag state responsibility, as outlined to TCC, RMI stated it was pleased to report that Korea had demonstrated its cooperation, willingness and due diligence and that RMI was satisfied. It stated it had no further issues, and requested that the provisional listing of the Oryong No. 721 be withdrawn. Confirming this recommendation, the WCPFC agreed not to place Oryong No.721 on the 2021 WCPFC IUU Vessel List.

- Election of Officers: Rhea Moss-Christian of the Marshall Islands was elected to lead the development of audit points in support of the CMS IWG Chair. Commission members also thanked Samuel K. Lanwi, Jr. of the Marshall Islands for his effort and contribution to fisheries management in the region during his tenure as Co-Chair of the Intersessional Working Group (Transshipment). The former MIMRA Oceanic Division Deputy Director left the Authority in 2020 to take up a diplomatic post with the Ministry of Foreign Affairs and Trade.



Tuna Taskforce members Moriana Phillip and Carlos Domnick.

## the new norm

### New MIMRA policies

The Legal Division assisted MIMRA management and the other divisions in drafting, reviewing and finalizing a series of new MIMRA policies during 2020. These include: MIMRA Leasing Policy and Procedures, 2020; MIMRA Strategic Plan 2019-2023; and MIMRA Tuna Management Plan 2020-2025.

### TNC partnership

The signing of a Joint Conservancy Grantee Workplan agreement in early 2019 by The Nature Conservancy (TNC) and MIMRA gave momentum and focus to the shared objective of increasing the RMI's participation in the commercial tuna value chain and addressing a range of sustainable fishery management concerns. A major step in moving the partnership project forward was establishment of the Pacific Island Tuna Provisions, LLC in late 2019.

Registering PITP as a limited liability

company in RMI established a platform to explore options to diversify and increase the RMI's earnings from its tuna resources; focus on eliminating IUU fishing; support sustainable resource management; and increase the food and socio-economic security of coastal communities in RMI. Both the Oceanic and Coastal Divisions are involved in the work of this partnership project. Among the conservation outcomes that PITP is focused on, in addition to addressing IUU fishing, is to reduce bycatch of all at-risk species and support community-based conservation and climate resilience.

The MIMRA Board endorsed the following actions related to the MIMRA-TNC partnership:

- A memorandum of understanding between MIMRA and TNC in support of MIMRA's sustainable fisheries ambitions.
- The 2019 Workplan with TNC for sustainable management of fisheries.
- Establishment of a Tuna Taskforce comprising MIMRA Director Glen Joseph, Marshall Islands EPA General Manager and MIMRA Board Member Moriana Phillip, Office of Commerce,

Investment and Tourism CEO Carlos Domnick, and Parties to the Nauru Agreement Office CEO Ludwig Kumoru. The Board approved the Tuna Taskforce to commence its review of the terms of reference and memorandum of understanding to be signed as part of MIMRA's commitment to the TNC-supported project for Coastal Fisheries and participation by Bain, a US-based company that was engaged by TNC to provide strategic advice to MIMRA on fisheries investment and sustainability initiatives. The MIMRA Board endorsed the proposal for the Tuna Taskforce to meet with representatives of Bain and TNC to review and finalize a Letter of Interest for key development steps.

In late 2020, a CEO for PITP was hired and the company's Foreign Investment Business License was issued. This led to the business license from Majuro Atoll Local Government being issued in early 2021.

### Enforcement

MIMRA continued active enforcement of RMI's fisheries laws and regulations. This resulted in court filings and out of court settlements against a number of fishing vessels which led to a total of \$1,945,000 for the five year period October 1, 2015 to September 30, 2020.

There is zero tolerance for fisheries violations in the RMI. MIMRA, with the support of the Marshall Islands Police Department/Sea Patrol and the RMI Attorney General's Office, actively monitors commercial tuna fishing operations in the RMI waters. In 2020, there was only one case that was investigated for an alleged violation. One fishing vessel/company paid a fine for obstructing a fisheries observer in the performance of his duties, which amounted to \$100,000 during 2020.

# FINANCE

## AND CORPORATE AFFAIRS

# MIMRA contributes \$31.3m

In spite of the challenges surrounding the Covid-19 pandemic, MIMRA's Finance Division maintained its long-established accountability standards. The Division was ready for Deloitte auditors to conduct their annual review of MIMRA's financial records for Fiscal Year 2020 and completed the audit in a timely manner.

During 2020 MIMRA continued to maintain its financial records and accounts in good standing as it has in past years.

The Deloitte audit confirmed that the Finance Division implemented required accountability standards for managing MIMRA's revenue and expenditures. This was confirmed by the Deloitte auditors who said in their FY2020 financial audit: "In our opinion, the financial statements ... (of MIMRA) present fairly, in all material respects, the financial position of MIMRA as of September 30, 2020 and 2019, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America."

MIMRA management considers financial accountability to be of critical importance for ensuring that MIMRA operations are implemented effectively, efficiently and according to the law. This is essential for the Authority to carry out its mandate for managing coastal and oceanic fisheries activities for the Marshall Islands. In this regard, the MIMRA had no unresolved or outstanding audit



**In 2020, Covid-19 port entry requirements led to a big drop in transshipment activity.**

findings from the previous year, demonstrating its commitment to accountability.

FY2020 will go down as the most challenging year ever for MIMRA as a consequence of the Covid-19 pandemic. As noted in MIMRA's FY2020 audit: "... MIMRA determined that restrictions caused by the Covid-19 pandemic, coupled by existing economic factors, are negatively impacting its business, results of operations and net position that would ultimately affect future contributions available to RepMar."

Deloitte auditors pointed out: "... While MIMRA expects this matter

(Covid-19) to continuously impact its business, results of operations, and financial position, the related financial impact cannot be reasonably estimated at this time."

Net operating revenue increased in FY2020 to \$35,199,282, an all-time high and 1.7 percent above the FY2019 level of \$34,597,266. However, both the annual contribution to the Marshall Islands government's national budget increased as did expenses of the Authority. The \$31,300,000 contributed to the national government in FY2020, up from \$29,141,128 in FY2019, coupled with operating expenses of \$5,707,367 would have seen MIMRA operating in deficit in the absence of \$3,200,759 in grant funding, a 334 percent increase on the previous year. This represented grant funding from the World Bank, Taiwan Trust Fund, and The Nature Conservancy.

The year was challenging financially not only because of Covid-19. In addition to Covid-19 hurting MIMRA revenue streams, MIMRA revenue generation was challenged by declining US Treaty vessels, the climate impact of the El Niño weather phenomenon, and international market demands that are also impacted by Covid-19. MIMRA was able to adapt to these new economic realities by employing other arrangements, including pooling and trading of VDS days, to make up the revenue shortfall.

Since FY2015, MIMRA operating revenue has remained above \$31 mil-

2020 saw a significant decrease in the number of fisheries vessels anchoring in Majuro lagoon.

# FINANCE

## to RMI government in 2020

lion, ranging from a low in FY2015 of \$31,569,468 to the FY2020 level. The strength of MIMRA's revenue generation is primarily based on the success of the Vessel Day Scheme that is implemented by all members of the Parties to the Nauru Agreement for the purse seine industry in the region. Virtually all of MIMRA's operating revenue is directly or indirectly from the VDS. The VDS revenue in FY2020 was almost identical to FY2019, \$28,112,074 and \$28,143,896, respectively. Continuing demand for VDS fishing days drives the price well above the \$8,000 benchmark price, with the exception of the domestically based vessels that receive a lower rate. MIMRA has successfully engaged with other PNA members to sell what are known as "pool days" that grant the buyers multi-zone fishing access for a higher per-day price.

Fishing rights revenue increased from \$2,314,896 in FY2019 to \$3,579,787 in FY2020 as a result of a 152 percent increase in FSM Arrangement vessels, a 36 percent increase in Japan vessels, and a modest 12 percent increase in FFA US treaty vessels.

Licensing and registration of pole-and-line, longline and purse seine fishing vessels as well as carrier and bunker vessels generated \$2,300,800. This was down by \$272,200 from the previous year because the number of vessels buying licenses for the Marshall Islands declined slightly from 283 to 276. The slight decline was simply reflective of

### MIMRA Contributions to RMI FY2013-FY2020

Fiscal Year	Contribution
2013	\$6,348,374
2014	\$11,549,000
2015	\$15,773,000
2016	\$26,285,938
2017	\$40,129,700
2018	\$29,440,214
2019	\$29,141,128
2020	\$31,300,000

Source: MIMRA Financial Statements and Independent Auditors' Report, FY2013-FY2020.

year-to-year fluctuations in vessel registration. In FY2020, the number of purse seine licenses dropped by 20 compared to 2019, to 99, while Japan's pole-and-line and longline fleets increased by nine vessels, and the domestically-based longline fleet rose by 11 vessels. Carrier vessels registered declined by seven vessels, reflecting the significant decline in transshipment activity due to stringent Covid-19 port entry requirements.

Transshipment fees dropped from \$538,000 in FY2019 to \$319,000 reflecting the significant reduction in transshipment operations in Majuro due to Cov-

id-19 port entry restrictions that went into effect in March 2020. Likewise, with the moratorium on fisheries observers working on purse seine and longline vessels that started in March 2020 and continued well into 2021, observer fees were another revenue stream that declined in FY2020, dropping to \$600,594 from \$766,760 the previous year.

Enforcement of fishing violations generated \$100,000 from one vessel that was successfully penalized for violating Marshall Islands fishing rules. This compares to the \$200,000 received from fisheries enforcement the previous year.

"Non-operating" revenue received amounted to \$3,200,759. This was based largely on funding from World Bank grants that were focused on capacity development and institutional strengthening. In addition, smaller grants from the Taiwan Trust Fund supported improvements in MIMRA's fisheries observer program, while The Nature Conservancy funded the costs to establish a new legal entity, Pacific Island Tuna Provisions, that will serve as an alternative end-to-end supply chain model.

MIMRA's operating expenditures rose from \$4,882,750 in FY2019 to \$5,707,367, a 17 percent increase. This reflected an increase in the amounts allocated for salaries, depreciation, training, professional fees, and a court-directed settlement of a claim. Travel costs as well as fisheries observer and boarding fees declined due to Covid-19 restrictions.

# FINANCE

## MIMRA: Management's Financial Condition and Operations for fiscal years 2020, 2019 and 2018

This table summarizes the financial condition and operations of MIMRA for fiscal years 2020, 2019, and 2018. This appeared in the FY2020 audit by Deloitte.

**Operating revenues** \$ 33,199,282 \$ 34,597,266 \$ 602,016 \$ 33,938,061

Net operating revenue increased by 2%. Please see below details of the increase/(decrease) in revenue categories:

	2020	2019	\$ Change 2020-2019	% Change 2020-2019	2018
<b>Revenues:</b>					
Vessel Day Scheme	\$ 28,112,074	\$ 28,143,896	\$ (31,822)	(0.1)%	\$ 25,842,384
Fishing rights	3,579,787	2,314,357	1,265,430	54.7%	3,302,312
Licensing/registration	2,300,800	2,573,000	(272,200)	(10.6)%	2,320,700
Observer fees	660,594	766,760	(106,166)	(13.8)%	826,797
Transshipment fees	319,000	538,000	(219,000)	(40.7)%	475,500
Fishing violation	100,000	200,000	(100,000)	(50.0)%	550,000
Boat charter fees	-	-	-		700,000
Other	127,584	73,253	54,331	74.2%	176,904
	<u>35,199,839</u>	<u>34,609,266</u>	<u>590,573</u>	<u>1.7%</u>	<u>34,194,597</u>
Bad debts	(557)	(12,000)	11,443	(95.4)%	(256,536)
	<u>\$ 35,199,282</u>	<u>\$ 34,597,266</u>	<u>\$ 602,016</u>	<u>1.7%</u>	<u>\$ 33,938,061</u>

A graphical comparison of MIMRA's operating revenues for 2020, 2019 and 2018 follows:

A summary of MIMRA's Statements of Net Position is presented below:

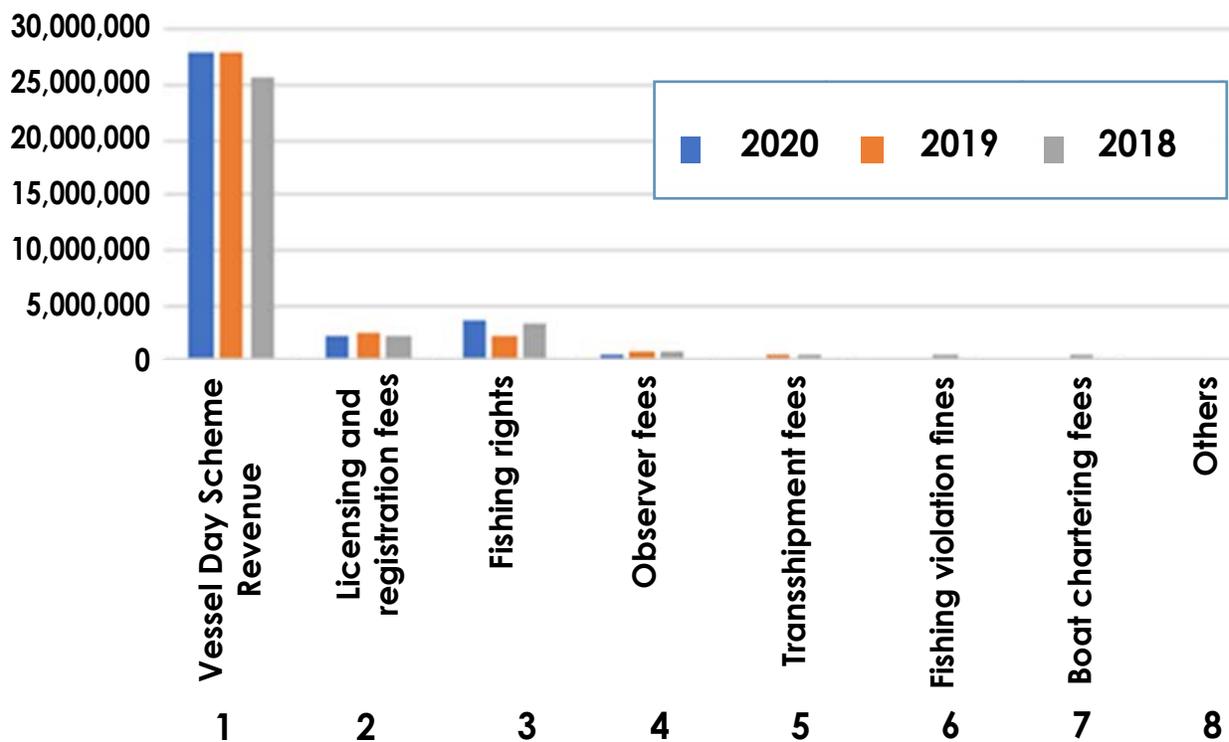
### Summary Statements of Net Position As of September 30

	2020	2019	\$ Change 2020-2019	% Change 2020-2019	2018
<b>Assets:</b>					
Current and other assets	\$ 27,776,659	\$ 27,103,182	\$ 673,477	2.5%	\$ 25,963,219
Investment in JV	4,696,089	5,222,356	(526,267)	(10.1)%	4,917,702
Capital assets	<u>5,413,423</u>	<u>4,201,373</u>	<u>1,212,050</u>	<u>28.8%</u>	<u>3,842,778</u>
Total assets	<u>37,886,171</u>	<u>36,526,911</u>	<u>1,359,260</u>	<u>3.7%</u>	<u>34,723,699</u>
<b>Liabilities:</b>					
Current and other liabilities	<u>1,207,613</u>	<u>846,420</u>	<u>361,193</u>	<u>42.7%</u>	<u>903,041</u>
<b>Net position:</b>					
Net investment in capital assets	5,413,423	4,201,373	1,212,050	28.8%	3,842,778
Restricted	991,623	430,995	560,628	130.1%	742,780
Unrestricted	<u>30,273,512</u>	<u>31,048,123</u>	<u>(774,611)</u>	<u>(2.5)%</u>	<u>29,235,100</u>
Total net position	<u>\$ 36,678,558</u>	<u>\$ 35,680,491</u>	<u>\$ 998,067</u>	<u>2.8%</u>	<u>\$ 33,820,658</u>

# FINANCE

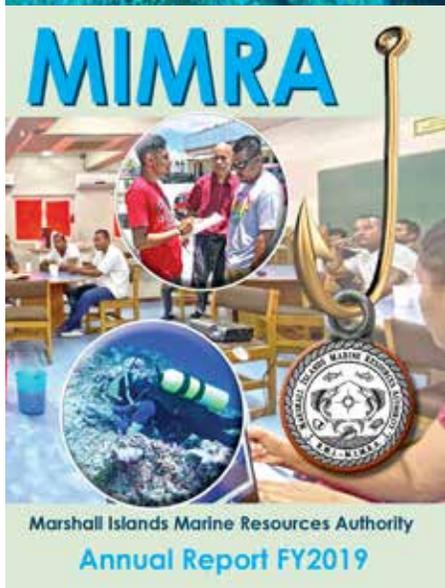
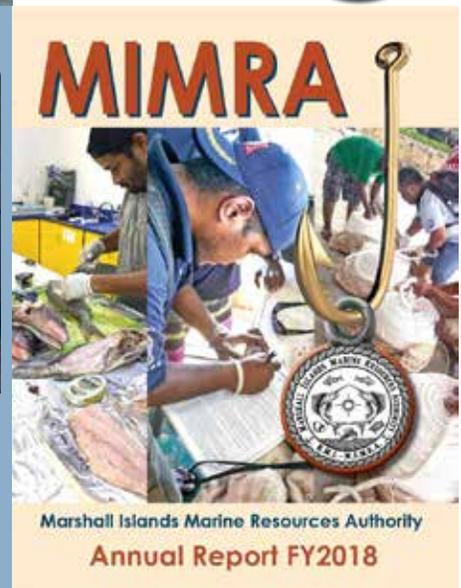
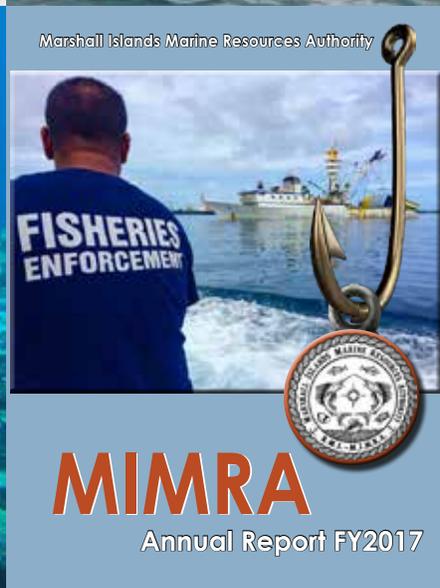
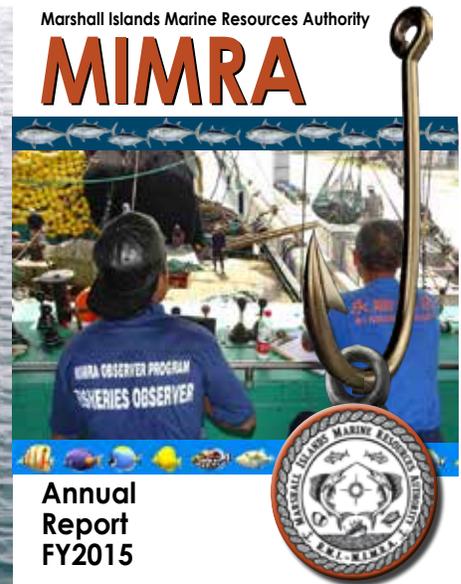
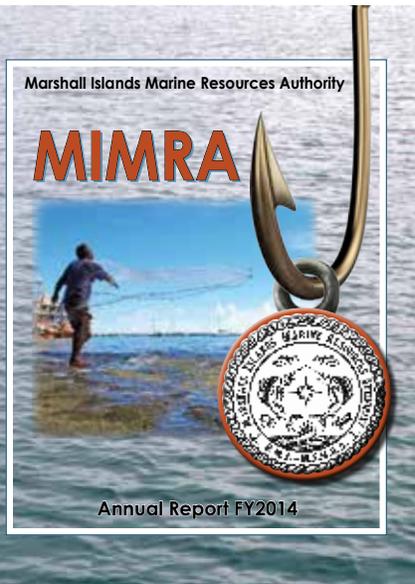
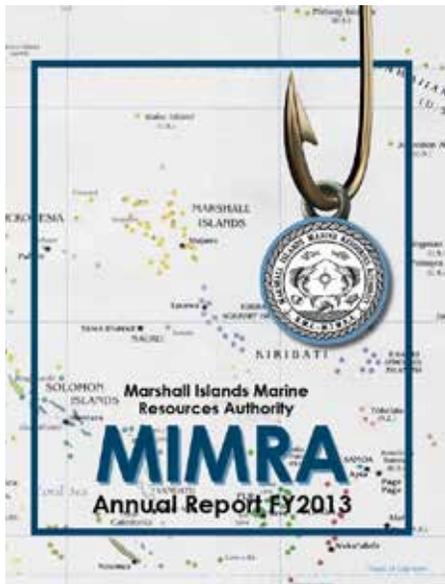
## MIMRA: Management's Discussion and Analysis for fiscal years 2020, 2019 and 2018

### Comparative Revenue: FY20 vs FY19 vs FY18



	2020	2019	2018
1 Vessel Day Scheme	\$28,112,074	\$28,143,896	\$25,842,384
2 Fishing rights	\$3,579,787	\$2,314,357	\$3,302,312
3 Licensing/Registration	\$2,300,800	\$2,573,000	\$2,320,700
4 Observer fees	\$660,594	\$766,760	\$826,797
5 Transshipment fees	\$319,000	\$538,000	\$475,500
6 Fishing violation fines	\$100,000	\$200,000	\$550,000
7 Boat charter fees	\$0	\$0	\$700,000
8 Other	\$127,584	\$73,253	\$176,904
<b>TOTAL REVENUES</b>	<b>\$35,199,839</b>	<b>\$34,609,266</b>	<b>\$34,194,597</b>
Bad debts	(557)	(12,000)	(256,536)
Net Revenues	\$35,199,282	\$34,597,266	\$33,938,061

**Overall Change FY2020 vs FY2019 (\$602,016) 1.7%**



# MIMRA does it by the book

**B**eing accountable and transparent has long been a MIMRA promise to the people of the Marshall Islands, with a key element of this being the publishing of annual reports with detailed information on the activities of the Authority. Reports from 2001 forward can be read online or downloaded at MIMRA's website: <http://www.rmimimra.com/index.php/resources>.

MIMRA is delighted that the reports are of benefit both domestically and internationally. Fisheries expert Robert Gillett in his 2017 book, *Fisheries in the Economies of Pacific Island Countries and Territories*, commented: "The annual report of the Marshall Islands Marine Resources Authority is exemplary."





[www.mimra.com](http://www.mimra.com)

