

MIMRA



Marshall Islands Marine Resources Authority

Annual Report FY2018

Marshall Islands
Marine
Resources
Authority



ANNUAL REPORT 2018

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Inside and back cover photos: Francisco Blaha, Lyla Lemari, Emma Kabua-Tibon, Karen Earnshaw, Melba White, Rebecca Lathrop, Kelly Lorennij, Benedict Yamamura, and Jessie Capelle.

Marshall Islands promotes IUU-free region by 2023

Several important initiatives for regional and domestic fisheries conservation and management were launched in and by the Marshall Islands in 2018. The essential message is that although our small islands lack the resources of distant water fishing nations, we must actively engage in all aspects of managing commercial tuna fisheries in the Western and Central Pacific Ocean and our own domestic marine resources. If we don't properly manage our fisheries resources, we will lose out on benefits from these fisheries and maintaining fishing at sustainable levels will become a major concern.

Among the important actions during 2018:

- President Hilda Heine challenged the region to end illegal, unreported and unregulated (IUU) fishing by 2023. President Heine issued the call to action at the end of the 14th Technical and Compliance Committee meeting in Majuro in early October. "IUU has devastating consequences," the President said. "It is organized crime that affects socio-economic growth and future generations." The Marshall Islands is working with the Forum Fisheries Agency, the Parties to the Nauru Agreement, the Western and Central Pacific Fisheries Commission, individual countries and others for action to end IUU fishing in our region.

- The Marshall Islands hosted the second Parties to the Nauru Agreement (PNA) Leaders Summit in Majuro in early March. This meeting sharpened PNA's goals and focus on management issues such as management of fish aggregating devices (FADs), ending high-seas bunkering (refuelling), and expanding the successfully implemented vessel day scheme for purse seiners to the longline fishing industry. Each of these policy decisions have important conservation and management impact on tuna fisheries, and also reduce opportunities for illicit activity such as trafficking in persons and smuggling.

- PNA's decision to buy the Fisheries Information Management System (FIMS) from the company that developed it is

Message from Dennis Momotaro, Chairman of the MIMRA Board of Directors and Minister of Natural Resources and Commerce.



BOARD MEMBERS

Chairman Minister of Natural Resources and Commerce Dennis P. Momotaro, Vice-Chairman Bobby Muller, Tommy Kijiner, Jr., Danny Wase, Moriana Philip, Sa'ane Aho', and Rina Keju. *Outgoing board members in 2018:* Attorney General Filimon Manoni and late Foreign Secretary Bruce Kijiner.

another essential step in the evolution of PNA's rights-based management of tuna fisheries. If we do not own our own fisheries data, we cannot hope to properly manage the fishery.

- Collaboration between PNA and FFA is increasing, which benefits conservation and management in the region. In addition, the Marshall Islands sees a greater level of cooperation with FFA members by a number of fishing nations engaged in the WCPFC process over the past year. In this regard, Japan stands out for its willingness to consult FFA nations on fisheries management initiatives and proposals.

- MIMRA has begun taking steps to

more fully engage in the commercial tuna industry "value chain." PNA's "vessel day scheme" (VDS) revolutionized island management of and engagement in the purse seine fishery since it went into play in 2010. The VDS is a platform that allows greater participation by individual PNA members or groups of islands. At the moment, the Marshall Islands, through MIMRA, sells several thousand fishing days annually to fishing companies, sales that generate around \$25 million annually. MIMRA is looking to move beyond simply selling fishing days to engaging in the entire tuna value chain from catch to processing — all of which contribute a piece of the multi-billion dollar value of the tuna industry in the Pacific.

- On the domestic front, we are continuing to promote our National Oceans Policy and Implementation Plan for sustainable management of coastal fisheries. The Reimaanlok (Looking to the Future) program involves outer island leaders and communities in developing marine resource management plans for their islands. It continued to reach out to remote island communities in 2018. We are happy to see the giant clam hatcheries in Arno and Likiep atolls back in action and helping to generate a portion of Marshall Islands exports to overseas aquarium markets.

- MIMRA's Coastal Division is involved in addressing ongoing an emerging coastal resource management issues ranging from coral bleaching and ciguatera fish poisoning to radiological monitoring of ocean water and the toxic contamination of reef fish at the US Army Garrison, Kwajalein Atoll base headquarters.

In 2018, MIMRA contributed \$29.4 million to the national budget of the Marshall Islands from its VDS fishing revenue. This amounted to 13 percent of national government revenue, underlining the critical importance of effective conservation and management measures to ensure the fishery is sustainably managed for long-term benefits.

Dennis Momotaro

Sustainable policies

MIMRA continued to make progress on both coastal and oceanic fisheries management in 2018. MIMRA's marine resources management work continued to expand as resource sustainability — for food security and revenue generation — became increasingly important in light of pressure on tuna and coastal resources from over-exploitation, climate change and pollution.

As MIMRA's revenue base continued its multi-year expansion, our financial management and accountability continued to improve: In FY2018, Deloitte auditors reported that they “did not identify any deficiencies in internal control that we consider to be material weaknesses.” The audit also confirmed there were no instances of non-compliance with laws, regulations, contracts and grant agreements. Finally, there were no unresolved audit findings from the previous year. All of this testifies to MIMRA maintaining high standards of accountability.

Our enforcement and legal team instituted a number of fines on fishing vessels that violated fishing rules and regulations governing treatment of fisheries observers. Observers and enforcement officers managed and documented the heavy flow of tuna through Majuro, the world's busiest tuna transshipment port. In 2018, Majuro saw 402 transshipments moving 306,796 tons of tuna from purse seine vessels to carrier vessels for onward transport to processing plants.

An important development for strengthening the work of the Coastal Division was the hiring of the first Deputy Director, Coastal. Florence Edwards, our long-time Coastal Division Chief, was promoted to this Deputy Director position, joining Samuel Lanwi, Jr., Deputy Director, Oceanic, in these two key posts.

MIMRA and its partners in the Coastal Management Advisory Council, engaged with outer island communities to develop resource management plans for effective management of their marine

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



‘Among a variety of projects, our Coastal Division is working to produce atoll profiles that will allow marine resource managers to appreciate unique aspects of different islands throughout the country.’

resources. This is focused on ensuring food security, environmental protection, local livelihoods and getting communities engaged as resource owners and managers. We want communities to have a greater sense of ownership and responsibility over coastal resources.

During the year, the giant clam hatch-

eries at Arno and Likiep atolls were renovated and upgraded, with new stocks and renewed production efforts. MIMRA gained valuable support from Japan's Overseas Fishery Cooperation Foundation for maintaining services for outer island fishers through the operation of the fish markets at Majuro and Kwajalein, which operate transport vessels that bring reef fish and produce from the outer islands to the two fish markets for sale.

MIMRA worked in 2018 to develop a “survey protocol” to address ongoing and emerging issues needing collection of baseline data, research and action. With the capacity MIMRA is developing, we will be able to deploy a national monitoring system. Among a variety of projects, our Coastal Division is working to produce atoll profiles that will allow marine resource managers to appreciate unique aspects of different islands throughout the country. In addition, concerns such as radiological contamination of land and ocean areas, industrial contamination of reef fish at

the key to success



New Deputy Director, Coastal, Florence Edwards with continuing Deputy Director, Oceanic, Samuel Lanwi, Jr.

Kwajalein Island and nearby small islands, coral bleaching events, and ciguatera fish poisoning are among a range of issues needing research and study that is driven by the Marshall Islands.

This Coastal Division work is in line with and implements the National Ocean Policy adopted by government during the year, following the First National Oceans Symposium in 2017.

In the Oceanic Division, MIMRA is utilizing PNA's Fisheries Information Management System (FIMS) to manage the purse seine tuna fishery. FIMS is instrumental for MIMRA's management of the vessel day scheme (VDS) and our resource sovereignty. FIMS allows us to track our assets. Right now it is heavily focused on purse seiners, but will be expanded to include longline vessels as PNA implements the VDS for the longline industry. From MIMRA's viewpoint, it is extremely important that PNA has agreed to purchase the FIMS system so that we will own this essential tool for managing our fishing zones.

MIMRA explored options in 2018 for

‘The Fisheries Information Management System is instrumental for MIMRA's management of the vessel day scheme (VDS) and our resource sovereignty.’

engaging in the entire value chain of the purse seine tuna fishery. Now, vessels are paying us to access a portion of the value chain (fishing days). We want to take an integrated approach to fisheries development. Instead of deriving revenue from only sale of fishing days, MIMRA sees the opportunity to gener-

ate value — revenue — from the tuna resource at every stage in the process from catch to processing. MIMRA's concept for fuller participation is in line with rights-based management, which is what the PNA group has brought to the purse seine fishery and is now developing for the longline industry. PNA's VDS is the tool that allows us to engage fully in the purse seine fishery.

The decision to implement a VDS for the longline industry was first endorsed in 2015 when a majority of the nine participating islands in the PNA agreed to the plan. Over the ensuing three years more joined and by the end of 2018, all nine islands in the PNA agreed to implement the longline VDS. The solidarity of the entire PNA for VDS management of the longline industry is a major development for improving management of tuna resources in the region. As with the VDS for purse seiners, it can be expected that implementation of the VDS for longline vessels will take several years to fully enforce.

In 2018, MIMRA took steps to initiate the establishment of the first “Competent Authority” in the Marshall Islands. Once in place, a Competent Authority can facilitate fish exports to the European Union, the world's largest seafood market. A Competent Authority is an entity that provides independent verification through inspections of vessels and processing plants, laboratory testing, and catch documentation to confirm that tuna catches for export meet EU requirements.

The EU requires seafood exports from the Marshall Islands or other third countries meet compliance requirements through a recognized Competent Authority. The key is to establish national standards that meet international standards. The process will take several years before everything is in place and is now moving forward.

All of our efforts at MIMRA are centered on sustainable management of marine resources for today and future benefits.

Glen Joseph

COASTAL



AND COMMUNITY AFFAIRS

Coastal Division staff with Ebon community members, including Mayor Lone deBrum (far right), during a Reimaanlok consultation.

Sustainably managing

Sustainable management and development of coastal marine resources is the over-riding aim of MIMRA's Coastal and Community Affairs Division. The large Exclusive Economic Zone (EEZ) of the Marshall Islands is dotted with numerous inhabited atolls and individual islands represented by 24 local governments. It is these communities — traditional, elected and community leaders, churches, youth groups, fishers, copra makers, students, and all members of these communities — who are the essential component in developing sustainable practices for marine resource use on their islands.

In 2018, the Coastal Division continued to expand ties with outer islands communities to assist them in the process of developing resource management plans to ensure sustainable use of marine resources on the atolls. It also

worked with local governments and communities in the two urban atolls of Majuro and Kwajalein.

The 2017 National Oceans Symposium, held in Majuro, provided a renewed focus on the importance of sustainable management and use of marine

'The National Ocean Policy focuses on four areas: Sustainable fisheries; climate change impacts; marine pollution; and coral reefs and marine protected areas.'

resources and our ocean and lagoons. It also led to development of a new Marshall Islands National Ocean Policy to guide the country. The National Ocean Policy and a companion Implementation Plan were officially rolled out at the end of 2017 and began implementation in 2018. The National Ocean Policy focuses on four areas: Sustainable fisheries; climate change impacts; marine pollution; and coral reefs and marine protected areas.

The Coastal Division's work covers a range of domestic resource issues, including:

- Developing Local Resources Committees and Resource Management Plans with local communities through the Reimaanlok (Looking to the Future) Process. The Reimaanlok Process sets out a series of eight steps that guide development of Resource Management Plans, including everything from com-

COASTAL



Coastal staff conducted surveys of reef health on remote outer islands in 2018.

our islands resources

munity education and resource surveys to drafting plans and establishing marine protected areas (MPAs). In 2018, Coastal staff worked with the communities of Utrok, Maloelap, Wotje, Ebon, Ujae and Lae. All were in various stages of the Reimaanlok Process.

• The important, ongoing partnership with the Coastal Management Advisory Committee (CMAC). Through CMAC, MIMRA engages with numerous partner organizations, including the Marshall Islands Environmental Protection Authority, College of the Marshall Islands, Marshall Islands Conservation Society and others. This increases collaboration for sustainable marine resource management initiatives, including survey work. For over 10 years, CMAC has proved to be an effective partnership for furthering sustainable development work.

- Reef and marine life surveys to ad-

'MIMRA engaged with SPC to run a training and National Stakehold Consultation on Aquatic Biosecurity. This focused on improving MIMRA's and the Quarantine Division's capacity.'

dress ciguatera fish poisoning, coral bleaching and other concerns. Coupled with ongoing reef surveys in 2018 was an active laboratory to analyze samples, particularly in relation to the problem of ciguatera. These surveys also relate to the Nuclear Test Legacy in

the Marshall Islands. Coastal staff has been trained over the past two years as part of an International Atomic Energy Agency program aimed at developing national radiation monitoring capacity in the Marshall Islands with MIMRA and the Marshall Islands EPA.

• An important new effort launched in 2018 to address marine biosecurity. MIMRA engaged with the Pacific Community (SPC) to run a training and National Stakehold Consultation on Aquatic Biosecurity. This focused on improving MIMRA's and the Quarantine Division's capacity to address aquatic biosecurity standards, border control, and risk issues. It also included preparation for developing a protocol introduction and translocation of marine organisms in the Marshall Islands.

• Outreach education to schools and communities throughout the Marshall Islands. Outreach programs to local



Focus on clams, FADs and markets

schools aim to increase awareness of children and young adults about marine resources and the need for sustainable conservation and use.

- Installation and maintenance of fish aggregating devices (FADs) for the benefit of local fishers. In 2018, Coastal staff worked with the Kwajalein Atoll Local Government and Lib Island community to deploy two FADs in Kwajalein and one FAD at Lib Island. This follows the successful deployment of new FADs on Majuro Atoll in 2017.

- Preparation and production of a 28-page manual for giant clam farming in the Marshall Islands. The new manual is titled: Giant Clam Production in the Republic of the Marshall Islands: A Condensed Guideline.

- Management of two fish markets, the Outer Islands Fish Market Center in Majuro and the Kwajalein Atoll Fish Market Center on Ebeye. The two fish markets operate vessels that purchase fish and local produce from residents of remote islands for sale in Majuro and Ebeye.

- A maintenance and repair program providing essential services for the fleet of ocean transport vessels the two fish markets used for picking up fish from outer islands; the fish market facilities in Majuro and Ebeye, including ice-makers; giant clam hatcheries at Arno and Likiep atolls and a hatchery at Woja, in Majuro Atoll; fish bases in



MIMRA Coastal staff building one of three FADs for Kwajalein and Lib.

'The Coastal Division maintained important partnerships in 2018 that included the outer island local communities and the Coastal Management Advisory Committee (CMAC)...'

Wotje, Jaluit and Arno atolls; MIMRA's vehicles; and small fishing boats provided to support local commercial fishing on remote islands.

- Oversight of harvests and exports of sea cucumbers, aquarium fish, giant clams, and other marine ornamental

products. In 2018, there were two registered exporters of these marine products.

Partnerships

MIMRA's Coastal Division maintained important partnerships in 2018 with the outer island local communities, the Coastal Management Advisory Committee (CMAC), Japan Overseas Fisheries Cooperation Foundation (OFCF), the World Bank through its Pacific Islands Regional Oceanscape Program (PROP), and the Marshall Islands Mayors Association. The collaborative work with these entities made it possible in 2018 to advance sustainable marine resource management.

CMAC and the World Bank's PROP program provided essential advice, expertise and resources to support the outer islands work of the Reimaanlok Process, including resource and com-



Bringing fish in from the islands

munity survey work. The Coastal Division developed effective partnerships with outer island local governments and communities through the Reimaanlok Process' step-by-step exercise of engagement to develop resource management plans.

These outer islands partnerships were a core part of the Coastal Division's work in 2018.

The partnership empowers the local community to identify needs, problems and solutions for sustainable resource management.

The OFCF provided technical advice and financial support to maintain Coastal Division facilities on the outer islands, including giant clam hatcheries at Arno and Likiep atolls, and ice machines at the Outer Islands Fish Market Center in Majuro and at fish bases on the outer islands that are essential to supporting development of local commercial fishing.

Collaboration with the Mayors Association continued to be an important way to engage effectively with outer islands leaders and communities in follow up to the National Ocean Symposium in 2017 and the Mayors Association adoption, by resolution, of the "Guiding Principles to Sustain and be Sustained by our Ocean and Coral Reefs" — the document that is the foundation for the National Ocean Policy.

Marine ornamentals — largely



MIMRA Fish Market marketing officer assistant and cutter Allu Anmontha.

'The Outer Islands Fish Market in Majuro (OIFMC) made 49 visits to five outer atolls in 2018 to purchase fish for sale in Majuro ... a 20 percent increase over 2017.'

aquarium fish as well as giant clams and farmed coral — were exported by two companies to Asia, Europe and the United States. Coastal Division staff monitored and approved exports for the two registered companies. The Flame Angel fish continued its multi-year po-

sition in 2018 as the top export among marine ornamentals.

The Outer Islands Fish Market in Majuro (OIFMC) made 49 visits to five outer atolls in 2018 to purchase fish for sale in Majuro. This represented a 20 percent increase over 2017, although the number of islands serviced for fish collection declined from seven to five. The Kwajalein Atoll Fish Market Center (KAFMC) at Ebeye Island experienced an extended period of mechanical challenges with its one ocean transport vessel, preventing it from buying fish from atolls and islands neighboring Kwajalein Atoll. The KAFMC did, however, make multiple visits to islands within Kwajalein Atoll to purchase fish that was sold at Ebeye. It also received two shipments of fresh fish from the OIFMC in Majuro.

Maintenance and renovation, supported by Japan's OFCF, helped to keep the two outer island clam hatcheries in operation in 2018.



Center a huge bonus for



The Outer Islands Fish Market Center opposite Uliga Dock in Majuro.

Outer Islands Fish Market Center, Majuro Fish Purchased/Sold FY2018

Atoll	Lbs. Purchased	Price	Lbs. Sol	Sales
Arno	55,873	\$63,563	40,543	\$90,806
Aur	29,703	\$32,126	12,658	\$29,995
Maloelap	12,914	\$15,158	8,976	\$20,211
Likiep	2,939	\$3,160	1,940	\$4,776
Wotje	8,487	\$10,177	6,284	\$14,171
Total	109,918	\$124,183	70,401	\$159,959

Kwajalein Atoll Fish Market Center

Atoll	Lbs. Purchased	Price	Local Produce Purchased
Kwajalein	11,330	\$18,190	\$3,393

Outer Islands Fish Bought and Sold by OIFMC* Majuro 2015-2018

Year	Lbs. Purchased	Price	Lbs. Sold	Sales
2015	109,874	\$129,306	81,914	\$157,924
2016	102,992	\$130,349	68,088	\$140,130
2017	139,866	\$130,902	78,138	\$166,904
2018	109,918	\$124,183	70,401	\$159,959

*Outer Islands Fish Market Center, Majuro.

FISH MARKETS

The Coastal Division's Outer Islands Fish Market Center (OIFMC) conducted 49 trips to outer islands to purchase fish in 2018, an increase of eight compared to 2017. In 2018, the OIFMC fish collection vessels concentrated on five atolls.

The amount of fish purchased from these five outer atolls declined compared to 2017, but the price paid to local fishers remained relatively consistent in 2018 compared to previous years. Local fishers received \$124,183 from purchases during 2018. The amount paid to local fishers the previous three years ranged from \$129,306 to \$130,902.

The OIFMC purchased fish from Arno (26 trips), Aur (eight trips), Maloelap (eight trips), Wotje (five trips), and Likiep (two trips). The OIFMC purchases provide an important income stream for fishers on remote outer islands where the main source of income is copra, with smaller amounts of revenue generated by handicraft sales.

Arno fishers received \$63,563 for 55,873 pounds of fish; Aur fishers re-

island fisherfolk KAFMC focus on Kwaj



The Kwajalein Atoll Fish Market Center.

ceived \$32,126 for 29,704 pounds of fish; Maloelap fishers received \$15,158 for 12,915 lbs of fish; Wotje fishers received \$10,177 for 8,488 pounds of fish; and Likiep fishers received \$3,160 for 2,939 lbs of fish.

The monetary benefits that the fishermen of these five atolls received totaled \$124,183 for the 109,918 pounds of fish purchased.

An important aspect of the work of OIFMC is to enforce quality and size limits on the fish that are brought in from the outer islands. This policy continued in 2018 with the aim of discouraging fishers from catching under-sized fish.

With fuel costs remaining high,

OIFMC also initiated grouping atolls in one trip to maximize the amount of fish per trip landed on Majuro. Although the number of atolls serviced decreased in 2018 (Jaluit received no trips this year due to repairs needed for the community fishing boats, as well as the fish base facility on Jaluit), the total number of trips made by OIFMC vessels increased from 41 in 2017 to 49 trips in 2018.

During 2018, the OIFMC worked on improvements to promote efficiency in fish collection and distribution activities during trips to the outer islands, transportation to the market, sorting and reweighing, value adding of the products, facility security and safety, and accounting procedures and sales to customers.

KAFMC focus on Kwaj

Due to ongoing maintenance issues with the one fish-collection vessel at the Kwajalein Atoll Fish Market Center (KAFMC), the KAFMC concentrated on collecting fish and local produce from islands within Kwajalein Atoll for resale at the Ebeye Island fish market. Logistical challenges of obtaining parts to fix the F/V Laintok and the need to bring the vessel to Majuro to perform the required maintenance prevented the vessel from servicing outer islands to collect fish as it did in 2017.

The KAFMC was able to make fish and produce collection trips to small islands in the western part of Kwajalein Atoll to supply the KAFMC on Ebeye. During 2018, KAFMC directly injected \$18,190 for 11,330 pounds of fish and \$3,393 for local produce totaling \$21,583 that went directly to local fishers and farmers.

The amount paid to Kwajalein Atoll residents for fish and local produce increased in 2018 compared to the \$15,009 injected to the local community in 2017.

The combination of fish and produce from Kwajalein Atoll and the delivery of fish from the OIFMC in Majuro on the F/V Jebro and the F/V Timur meant that the KAFMC was able to maintain a limited supply of fish and local produce for Ebeye Island residents.

The aim for 2019 is to return the F/V Laintok to servicing atolls such as Ailinglaplap and Namu to increase the volume of fish available on Ebeye, while expanding an income generating opportunity for local fishers on these atolls nearby Kwajalein. Consistent fuel availability and the significantly higher price per gallon charged on Ebeye compared to Majuro remain challenges to be solved.



Japan links an essential element

Domestic fisheries and aquaculture development is supported by a variety of infrastructure managed by MIMRA's Coastal Division. Ongoing, regular maintenance is a crucial part of the Coastal Division work in support of outer islands and coastal program management and support.

The partnership between MIMRA and Japan's Overseas Fisheries Cooperation Foundation (OFCF) continued to be an essential element of fisheries management in the Marshall Islands in 2018. OFCF first began a Fisheries Development Assistance for Pacific Island Nations (FDAPIN) program in 1992. It has continued annually to provide much-needed support for MIMRA's Coastal Division.

In 2018, during the annual OFCF Japan/Pacific Island Nations Fisheries Directors Meeting on Fisheries Cooperation, OFCF receives requests from each country for FDAPIN projects. MIMRA submitted a series of requests for assistance with coastal fisheries infrastructure.

After conducting field surveys and consultations, the scope of the projects are developed and are followed by a drafting and signing of an agreement and implementation plan.

OFCF provided a range of essential support for the Coastal Division. This included: Maintenance and repair of MIMRA transport vessels, ice plants that support local commercial fishing, MIMRA's crane truck, and the Arno Atoll gi-



Japanese experts work with MIMRA mechanics to overhaul engines for the outer islands vessel Jebro.

OFCF PARTNERSHIP

ant clam hatchery. The Coastal Division is also working with OFCF on the maintenance and repair of community fishing boat outboard engines, which are part of the Coastal Division's Community Fishing Boats program. OFCF also provides advice and support for management of MIMRA fish bases.

In addition, the Coastal Division performed numerous other maintenance work in support of local fishing activities, including:

Transport Vessels

Yearly dry-dock and maintenance service and repairs of all MIMRA fish transport vessels (Jolok, Timur, Jebro, Lentanir and Laintok).

Community Boats

Repairs to two community boats on the outer islands.

Wotje Fish Base

Maintenance and repairs on the Wotje Fish Base ice machine repairs and outboard engine.

Arno Fish Bases

Maintenance on Arno Island fish base and Ine Island sub-Fish base, including building repairs and ice machine maintenance.

Ice Machines

Maintenance and repairs at the OIFMC ice machines and other equipment.

Hatchery Maintenance

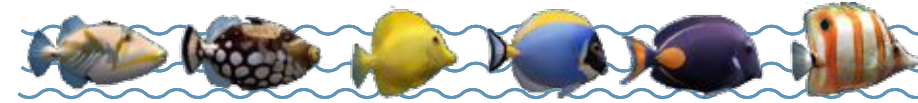
Maintenance on Likiep Atoll's Loto Giant Clam Hatchery's raceway tank. Maintenance and repairs on Woja, Majuro Hatchery building and construction of new tanks.

Arno Hatchery

Maintenance and repairs on Arno Atoll's Giant Clam Hatchery.

Vehicle Maintenance

In addition, Coastal Division mechanics provide vehicle maintenance and repairs for MIMRA's eight vehicles.



A community meeting on Kaben, Maloelap to advance the Reimaanlok Process.

Coastal Division works with six outer islands

REIMAANLOK PROCESS

The Reimaanlok (Looking to the Future) Team undertook key actions related to engaging outer island community in 2018. This work included socio-economic surveys, community consultations, establishing Local Resources Communities (LRCs) and performing aerial mapping. The Reimaanlok Team comprised MIMRA Coastal staff and representatives of partner organizations active in the Coastal Management Advisory Council (CMAC). This partnership brings together a wide-range of expertise for the benefit of local communities.

With MIMRA's new eBee drone, Utrok and Maloelap were the first two atolls to undergo aerial mapping. The drone mapping acquired high resolution data for resource mapping for these two atolls that will be used in developing resource management plans by the local communities. Wotje is the next atoll

'Maloelap confirmed its LRC members in 2018 ... while draft management plans for Wotje, Utrok and Maloelap are expected toward the end of 2019.'

slated for aerial mapping in 2019. Socioeconomic data collected from these three atolls in 2018 was analyzed by MIMRA staff. The Reimaanlok Team will return to these the communities for

Development of the Management Plan, which is Step 5 of the Reimaanlok Process. Prior to Step 5, however, Wotje and Utrok needed to finalize the membership on their LRCs. Maloelap confirmed its LRC members in 2018 and was ready to move on to the next step of the Reimaanlok Process. Draft management plans for Wotje, Utrok and Maloelap are expected toward the end of 2019.

The Ebon Atoll LRC is nearing completion of its resource management plan. During 2018, the Ebon LRC agreed to and selected zones for marine conservation areas during the Reimaanlok Team's visit in 2018. With the draft management plan in place, the Reimaanlok Team was scheduled to visit the atoll during the first half of 2019 to present



Community consultations on the outer islands, such as this one on Wotje Atoll, are an essential part of the Reimaanlok Process.

Lae, Ujae make draft plans

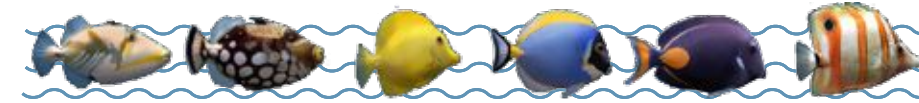
REIMAANLOK PROCESS

the final draft management plan to the LRC and obtain feedback from the local community before completion of the plan. Another important task will be translating the draft management plan into Marshallese language. A local government ordinance in support of Ebon's resource management plan and establishing protected areas to be designated by the LRC is anticipated prior to the sign-off ceremony in the future.

Reimaanlok activities for Lae and Ujae atolls in February 2018 included a site visit by MIMRA and the International Organization for Migration (IOM). MIMRA's Coastal team was able to facilitate the development of the first drafts of resource management plans for both atolls. This was done using data that was collected in 2016 by MIMRA's team. The data collected included both marine and socioeconomic information. By the end of the sessions, the communities were able to develop a draft with proposed marine protected areas with the help of MIMRA facilitators. The next step will involve the Coastal team going back to the atolls to finalize the management plans for sign-off by their respective leaders.



Reimaanlok teams visited isolated outer islands in 2018, including Ebon Atoll (pictured).



CMAC focuses on Reimaanlok's next phase

Workshop an eight-step process

A three-day workshop in October brought the Coastal Management Advisory Council (CMAC) together for a review of the eight steps in the Reimaanlok (Looking to the Future) process for conservation management by local governments and communities. The Reimaanlok workshop focused on what has worked well through the ongoing process started in 2007, existing gaps and obstacles, and recommendations for improvement. CMAC members shared roles as co-facilitators based on mandates and projects. The workshop was divided into three main components including marine, terrestrial, and socio-economics, where detailed updates on protocols and activities under Step 4 (Data Collection and Management) were assessed.

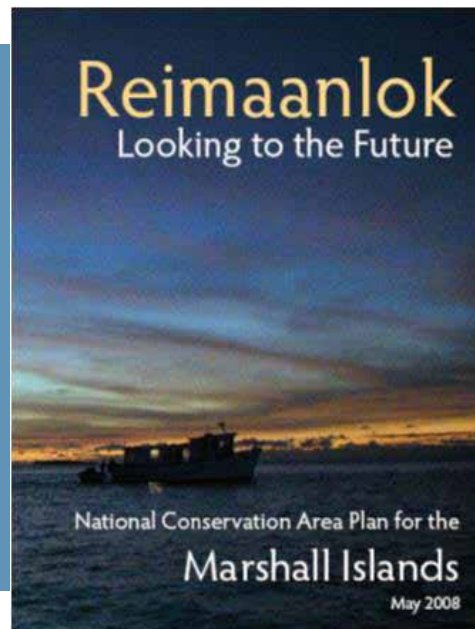
The Reimaanlok National Conservation Area Plan was developed in 2007. The aim is to fulfill the Micronesia Challenge by effectively conserving 30 percent



CMAC representatives joined in a productive workshop in October 2018 to advance the Reimaanlok Process.



The three-day workshop included a review of the eight steps in the Reimaanlok process.



REIMAANLOK PROCESS

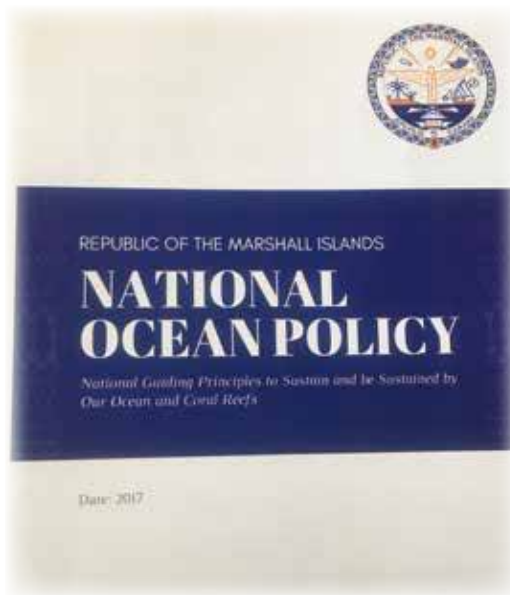
Implementing the Ocean Policy

MIMRA along with CMAC partners developed an Implementation Plan in response to RMI's Ocean Policy. The Ocean Policy resulted from the National Ocean Symposium convened in 2017. The Implementation Plan sets out a series of actions under the four themes from the Symposium (Sustainable Fisheries, Climate Change, Marine Pollution, and Coral Reefs and Marine Protected Areas) and identifies lead agencies and relevant partners responsible for implementing action. The Implementation Plan is expected to

be built into relevant agency and department work plans, which is essential for turning all of the Guiding Principles in the Ocean Policy into reality. The National Ocean Policy and Implementation Plan not only focus attention on priorities and key areas of concern at the local level, but also link to regional and international targets such as the Sustainable Development Goals (SDGs) as part of the global 2030 Agenda. This includes SDG 14 "Life Below Water," SDG 16 "Climate Action," SDG 2 "Zero Hunger," and SDG 3 "Good Health and Well-Being."

CMAC elections

The Marshall Islands Environmental Protection Authority was nominated by Marshall Islands Conservation Society (MICS) to continue as CMAC Chair. MICS was nominated by MIMRA as Vice-Chair. Both accepted the nominations, which became official with approval by consensus from members present during a CMAC monthly meeting. The CMAC terms of reference provide that the Chair and Vice-Chair representing two different organizations have two-year terms while the Secretariat is permanently based at MIMRA.



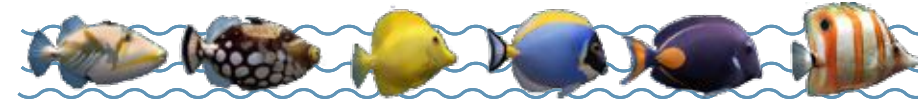
The cover of the National Ocean Policy document.

Next step an updated draft

of near-shore marine resources and 20 percent of terrestrial resources by 2020. To meet this goal, CMAC members work together to conduct resource assessment surveys, implement conservation projects, and advise communities in the establishment of protected areas.

Micronesia Challenge regional leads for the three topic areas (Dr. Peter Houk, Dr. Supin Wongbusarakum, and Roseo Marquez) were invited to either join or collaborate on a presentation with Marshall Islands representatives for the respective group sessions in terms of progress, key highlights/issues, and recommendations. Roseo provided a presentation on terrestrial and socio-economic monitoring with regards to the Micronesia Challenge in the region; the other two experts joined the discussions via Skype. The workshop also helped clear up issues regarding roles of each CMAC member, especially when facilitating Reimaanlok with local communities.

While CMAC will focus on the Reimaanlok Steps, the International Union for the Conservation of Nature (IUCN) was tasked to assist with the overall Reimaanlok Plan. The results from the eight-step review are to be incorporated into an updated draft in the next CMAC Reimaanlok Review Workshop.



Actively strengthening RMI biosecurity measures

While activities are underway to improve and expand aquaculture programs across the Marshall Islands, MIMRA undertook initiatives in 2018 to ensure preventive measures are in place to reduce risks associated with aquaculture activities and movement of aquatic animals into and within the country. In one effort to accomplish this in 2018, MIMRA requested the Pacific Community (SPC) to conduct a training followed by a National Stakeholder Consultation on Aquatic Biosecurity. The training, consisting of MIMRA's coastal staff and Ministry of Natural Resources and Commerce Quarantine Division staff, focused on:

- Improving MIMRA's capacity on aquatic animal health and management through diagnosis, prevention, control, treatment, surveillance and reporting.
- Improving MIMRA and Quarantine Division capacities on aquatic biosecurity strategies and standards, including import/export standards, quarantine, border-control, import risk analysis, and environmental impact assessments.

• Developing and standardizing a protocol for introduction and translocation of marine organisms within the Marshall Islands.

The Aquatic Biosecurity Training was followed by a National Stakeholder Consultation. The one-day consultation, consisting of staff from NRC Quarantine, College of the Marshall Islands Land Grant program, MIMRA and representatives of the local aquaculture industry was held to assess the status of aquatic biosecurity and aquatic animal health management, assess the country's aquaculture sectors, and identify gaps to consider for further action. Stakeholders agreed that specific guidelines for introduction and translocation of marine organisms were needed.

To follow up this recommendation, SPC is assisting MIMRA in developing aquatic biosecurity guidelines for review and consideration at the national level.



Ruth Garcia Gomez, Aquatic Biosecurity Specialist from SPC (above), leads workshop session; MIMRA staff Alicia Edwards and Lyla Lemari work on a sample during the workshop.

AQUACULTURE



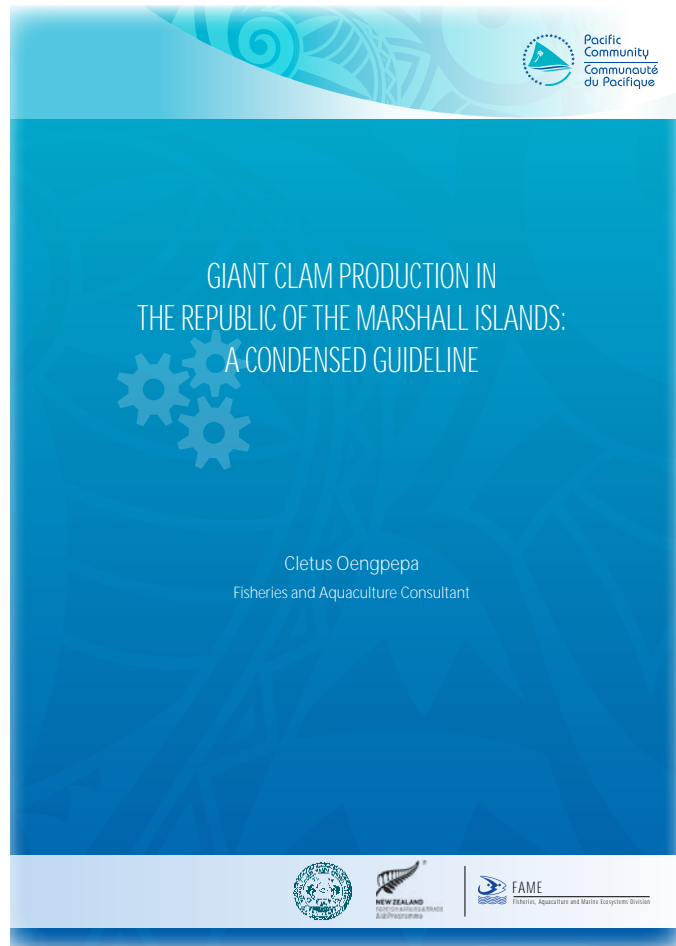


Giant clam training and development

Giant clam farming has proven to be successful in the Marshall Islands mainly due to its low-tech and low-maintenance requirements. MIMRA, with SPC financial and technical assistance, conducted training on semi-intensive techniques for giant clam farming for interested private businesses and local governments.

MIMRA-supported giant clam farms on Likiep and Arno atolls also expanded operations during 2018 after renovation and maintenance improved the facilities.

A guideline for giant clam farming techniques was developed for the Marshall Islands and is now available for interested local farmers. It is a 28-page manual for giant clam farming. The new manual is titled: Giant Clam Production in the Republic of the Marshall Islands: A Condensed Guideline. The Guideline will be published in 2019 by the Pacific Community (SPC) in collaboration with MIMRA, New Zealand Foreign Affairs and Trade Aid Program, and the United Nations Fisheries, Aquaculture and Marine Ecosystems (FAME) Division.



AQUACULTURE

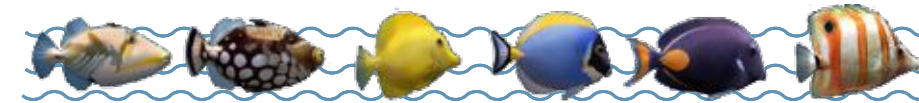
Arno, Likiep hatcheries

Since the installation of new pumps at the Arno Atoll hatchery in 2015, the Arno giant clam farmer's group was re-established from various communities in the atoll. Giant clams were distributed to local farmers. Since then, over 50 farmers from Arno Island and other communities have been active. Two rounds of clam seed distribution were carried out in late 2017. This led to local farmers selling over \$9,000 worth of juvenile giant clams to the two Majuro-based export companies in 2018.



New tanks for Likiep

At Likiep Atoll, despite countless efforts to patch up leaking raceway tanks and improve artificial spawning, giant clam larvae and juvenile mortality remained high resulting in numerous unsuccessful distributions in 2017 and 2018. Plans are being developed to demolish existing raceway tanks and construct new ones. Meanwhile, several local farmers with privately-owned raceway tanks distribute clams seed to their fellow farmers in the atoll from their own batches. Despite ongoing issues with getting the Likiep Loto Hatchery in full operation, Likiep giant clam farmers account for many of the clams sold to the Majuro companies for export internationally.



Increase in exports of giant clams thanks to Likiep, Arno

AQUACULTURE

The Marshall Islands has two registered companies that export marine ornamental fish, cultured giant clams, and cultured coral.

The number of exported giant clams and corals for ornamental aquarium trade increased significantly in 2018 compared to the previous year. Three of the five species of giant clams that exist in the Marshall Islands are currently being cultured and exported. These include *Tridacna maxima*, *T. derasa* and *T. squamosa*. The *T. maxima* were the highest export clam in 2018, increasing from under 2,000 in 2017 to over 5,000 in 2018. Exports of the other two species of giant clams also increased in 2018 over the previous year. The increased number of giant clam exports in 2018 can be attributed to the growing number of local farmers on Likiep and Arno atolls, where the majority of exported clams are being cultivated. MIMRA supports hatcheries at both locations that assist local farmers on the two atolls.

A total of 18 species of coral are being cultured for export from soft and hard coral fragments. The Long polyp sarcophyton and the Majuro Zooanthids were the most popular cultured corals for export in 2017-2018.

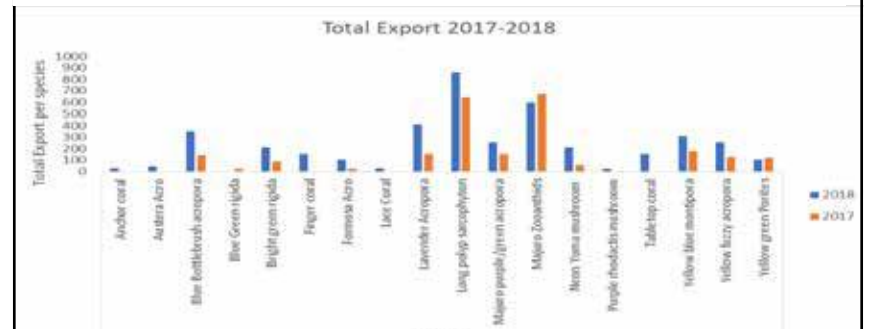
Companies in Majuro both export corals and giant clams cultured in the Marshall Islands as well as re-exporting giant clams that are cultured in neighboring Kiribati and the Federated States of Micronesia. Re-exportation of giant clams and corals is a result of products being imported from the FSM and Kiribati by the two registered exporters in Majuro for re-export to international markets.

The demand for cultured giant clams and coral for the ornamental aquarium trade is increasing so we can anticipate expanding numbers of exported cultured giant clams and corals in the future.

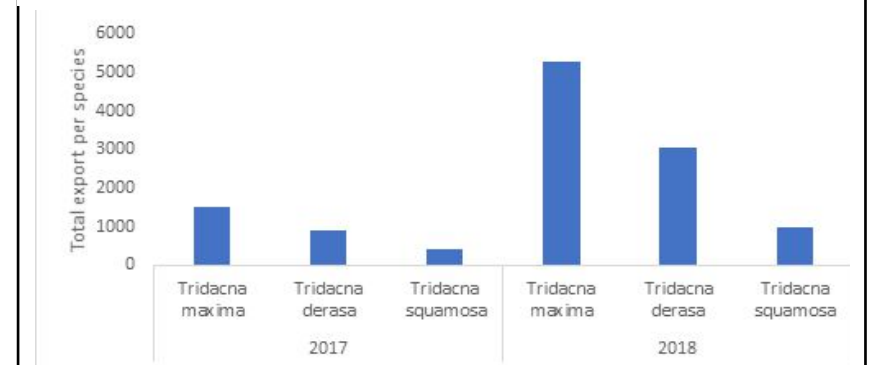
Top 10 Marine Ornamental Exports

	FY2017	FY2018
Flame angel (<i>C. loricula</i>)	50119	43125
Blue eye hermit crab (<i>Paguristes Sp.</i>)	19982	18662
Blue leg hermit crab (<i>C. elegans</i>)	19035	17450
Bumble bee (<i>Pusiostoma sp.</i>)	12400	15280
Multicolor angel (<i>C. multicolor</i>)	1954	7825
Elongated giant clam (<i>T. maxima</i>)	1491	5862
Helfrich goby (<i>N. helfrichi</i>)	972	8410
Bartlett's anthias (<i>P. bartlettorum</i>)	947	7431
Long polyp leather soft coral (<i>Sarcophyton sp.</i>)	642	924
Majuro Zooanthids (<i>Zoanthus sp.</i>)	222	945

Ornamental export of cultured coral



Ornamental export of cultured *Tridacna*





MIMRA Coastal Division staff Armer Ishoda and Lyla Lemari (above), and Jessie Capelle (opposite page) dissect samples from fish and giant clams from Ailinglaplap Atoll to check for ciguatera toxins.

Ailinglaplap ciguatera

A ciguatera fish poisoning problem has continued to affect Ailinglaplap Atoll in recent years.

MIMRA first became involved in responding to the problem in 2016 at local government request. While conducting ciguatera surveys in Ailinglaplap, MIMRA staff has held consultations with the local communities on different islands.

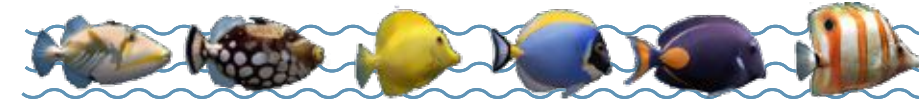
CIGUATERA

The first visit to Ailinglaplap by Coastal staff in 2016 was to collect benthic macro algae samples using the artificial substrates method to test for ciguatera-causing toxins.

A MIMRA Coastal Division team was dispatched to Ailinglaplap Atoll in April 2018 to collect fish and giant clam samples known to contain ciguatoxins for laboratory analysis.

The team successfully completed two days of fieldwork, collecting samples of both fish and clams.

The team succeeded in collecting



issue checked by lab

more than 120 pounds of fish from the islands of Woja, Kattiej, Unitor and Ennak and a few samples of giant clam, *Tridacna maxima*, from Mejel Island.

The team managed to collect 12 fish species that are known to contain ciguatoxins.

These included: *Aprion virescens* (Laum), *Lethrinus erythracanthus* (Be-

rak), *Lehrinus olivaceus* (Jalia), *Lethrinus rubrioperculatus* (Drijin), *Epinephelus cyanopodus* (Pooklum), *Epinephelus maculatus* (Lojebjeb), *Epinephelus polyphkadion* (Kuro), *Lutjanus bohar* (Paan), *Lutjanus gibbus* (Jato), *Pseudobalistes flavimarginatus* (Liele), *Crenimugil crenilabis* (Iool) and *Hippocampus longiceps* (ek mouj).

The Ailinglaplap community reported that all of these species contain ciguatoxins. The samples were then brought to Majuro for pre-treatment prior to sending to an overseas laboratory for further analysis. MIMRA aims to revisit these sites after the analysis by overseas laboratories to have consistency of sample collection.



FAD PROGRAM



Three fabulous FADs

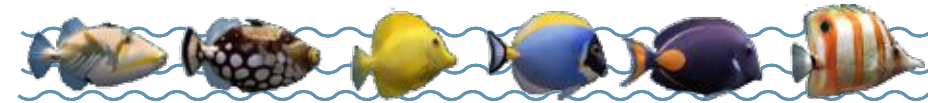
The Kwajalein Atoll Local Government (KALGov) and Lib Island Local Government formally requested MIMRA technical assistance in implementing MIMRA's Fish Aggregating Device (FAD) and aquaculture projects. An initial consultation process between MIMRA and the two local governments took place in November 2017 to discuss logistics and required equipment and materials. The MIMRA team met with KALGov and Lib Island Local Government representatives to plan how (transportation), where (sites) and when the activities would commence.

Both local governments committed to providing support for the work.

Since Kwajalein Atoll has the biggest lagoon in the Marshall Islands, the team decided to divide the atoll into zones. A total of three zones were identified based on the community populations on islands around the atoll. The target zone for this trip was Zone One, which encompassed the islands of Enebouj, Carlos, Ebeye, North Looj, South Looj and all the small islands on the eastern reef to Gueegegue.

A team of four MIMRA staff along with three Outer Islands Fish Market

Center Jebro boat crew were dispatched in August 2018 to conduct an Aquaculture Habitat Assessment and to deploy FADs in Kwajalein Atoll (Zone One) and Lib Island. Presentations on MIMRA's FAD program were made by the team to inform the communities about the project and activities that were to be conducted throughout the week including the Aquaculture Habitat Assessment and related interview assessments. Proposed sites for FADs were presented to the community to get feedback and recommendations for potential sites. Due to insufficient fuel on Ebeye, the team



Both pages: Coastal Division staff worked with Kwajalein Atoll Local Government and Lib Island Local Government officials to build and deploy two FADs in Kwajalein Atoll and one near Lib Island in 2018.



at Lib & Kwajalein

decided to combine fishermen from Ebeye, Gueegegue, North and South Looj, and Enebouj in one session during the community consultations. A separate visit was carried out just for the Carlson Island community.

Over the course of two weeks, the team along with local fishermen successfully deployed two FADs around Kwajalein Atoll (Zone One) and one at Lib Island.

Prior to rigging FADs, the team conducted a site survey of the proposed areas around Zone One. GPS and depths were recorded to be able to measure the

amount of required ropes to construct the FADs. With the assistance of some local fishermen who committed their time to assist the team with the rigging of the FADs, the team was able to build two FADs and load them with their anchors on the Jebro boat over a three-day period, and deployed them on the fourth day.

One day was set aside to travel by boat from Ebeye to Lib Island to conduct a consultation prior to deploying the FAD. A presentation on MIMRA's FAD program was similarly carried out by the team with the community. The

proposed site for the Lib Island FAD was decided and agreed on by the community. After the consultation, the team carried out a site survey, measuring the depth of the site that was proposed by the community. After the site survey, the team rigged and deployed the FAD.

All meetings and community consultations followed through for both KALGov and Lib Local communities. All three FADs have been successfully deployed at the proposed sites. Communities committed themselves in supporting MIMRA with monitoring the FADs and sharing data in the future.



PNA leaders sign the communique at the end of the Second Leaders' Summit of the PNA.

Management of fisheries much improved in 2018

The Marshall Islands-initiated call for an end to illegal, unreported and unregulated (IUU) fishing by 2023; Parties to the Nauru Agreement (PNA) full support for extending the Vessel Day Scheme (VDS) to longline vessels; the expanding use of electronic monitoring on fishing vessels; improvements in fisheries observer operations; development of PNA's Fisheries Information Management System; and numerous initiatives at the Western Central Pacific Fisheries Commission in 2018 all had one overriding goal in common: Improving the management and sustainability of tuna fisheries in the Pacific region, both in-zone and on the high seas.

Regional cooperation through PNA, the Forum Fisheries Agency and the Pacific Community (SPC) reinforced rights-based management of tuna re-

'The most important indicator of success ... is the fact that in 2018 the four tuna stocks — bigeye, yellowfin, albacore and skipjack — were in healthy condition.'

sources in the Marshall Islands 200-mile exclusive economic zone and throughout the region.

This can be seen in the increasing levels of fisheries revenue generated by VDS management of the purse seine

fishery, ongoing improvements in management through improved monitoring, control and surveillance, stable purse seine tuna catches reflecting sustainable management of in-zone fishing, work to develop "target reference points" and "harvest strategies" for the different tuna species, and the production of regular stock assessments that guide management decisions.

The most important indicator of success of this multi-layered management of tuna fisheries in the Western and Central Pacific Ocean is the fact that in 2018 the four tuna stocks — bigeye, yellowfin, albacore and skipjack — were in healthy condition based on scientific evaluation of the stocks. This is in contrast to other oceans where many tuna stocks are on the decline as a result of over-fishing.

MIMRA both led and joined in a vari-



MIMRA key in regional efforts

ety of regional efforts in 2018.

These included:

- MIMRA Director Glen Joseph chaired the Western and Central Pacific Fisheries Commission's Intersessional Working Group on the organization's Compliance Monitoring Scheme. An important aim of the CMS IWG was to present recommendations to the WCPFC annual meeting for a new process to develop and implement a response to the fishing vessel non-compliance procedure of the Commission.

- The Marshall Islands hosted the Second Leaders Summit of the PNA and the WCPFC's annual Technical and Compliance Committee meeting. Both meetings were of significance to advancing the interests of sustainable use of tuna fisheries.

- At the conclusion of the PNA Leaders Summit, Leaders signed the Delap Commitment, a document that outlines the leaders' priorities for PNA. The leaders were in agreement with PNA's goals for sustainable management of the fishery, adding priority to pursue legal recognition of the defined baselines established under the United Nations Convention on the Law of the Sea to remain in perpetuity irrespective of the impacts of sea level rise. They also tasked ministers to reduce marine pollution, address high seas fishing, bring tankers into zone for refueling, manage fish aggregating devices (FADs), and address the fishery sector's carbon emissions.



MIMRA Director Glen Joseph, center, at the WCPFC TCC meeting in Majuro.

'MIMRA continued to join with other PNA members to add value to the VDS by "pooling" fishing days for sale to purse seine vessels ... these sold for well in excess of the PNA benchmark of \$8,000 per day.'

- At the conclusion of the WCPFC's Technical and Compliance Committee meeting in Majuro in September 2018, President Hilda Heine challenged the region to agree to abolish IUU fishing by 2023. President Heine's call to action underlined the serious problems IUU fishing causes for the Western and Central Pacific, including undermining sustainable management measures and costing the islands hundreds of millions of dollars in revenue annually. The

President's push for action was quickly endorsed by FFA Director General Dr. Manu Tupou-Roosen, who said the FFA would align its work programs to meet the IUU goal.

- In 2015, five of the nine PNA members agreed to extend VDS management to the longline industry. While this initiated the process, it was not as effective without all PNA islands participating. In 2018, the remaining PNA Parties agreed to join the VDS plan for longline vessels, increasing the momentum for fully establishing the VDS, which has proved successful in managing the purse seine industry.

- MIMRA continued to join with other PNA members to add value to the VDS by "pooling" fishing days for sale to purse seine vessels. In 2018, these pooled fishing days sold for well in excess of the PNA benchmark of \$8,000 per day. Similarly, fishing days sold to bilateral partners such as the United States, China, Taiwan and others generated significantly more than the benchmark. During 2018, MIMRA also increased the price of fishing days for the domestic fleet. These sales of fishing days showed both the power of the VDS as a management tool and the



Team effort by local agencies

opportunity it presents to add value to increase benefits to the Marshall Islands and other PNA Parties.

- 2018 saw continued development of the capacity of MIMRA Fisheries Observers, expansion of Fisheries Observers' use of electronic reporting, monitoring trips on both purse seiners and longliners, and involvement in monitoring tuna transshipment in port and electronic monitoring of longline vessels.

- Majuro continued to be a major tuna transshipment port for the purse seine industry, with 402 transshipment and off-loading operations moving 306,796 metric tons of tuna from purse seiners to carrier vessels or to the Pan Pacific Foods tuna loining plant in Majuro in 2018. MIMRA Fisheries Observers and Enforcement Officers provided monitoring of nearly 100 percent of tuna transshipments and off-loadings. The 402 transshipments also established the record for average tonnage per transshipment at 762mt.

- MIMRA engaged with the Marshall Islands Ports Authority, Marshall Islands Police Department's Sea Patrol, Majuro Atoll Local Government Police, Marshall Islands Environmental Protection Authority and others in monitoring and enforcing laws and regulations governing tuna transshipment activities. MIMRA also collaborated on monitoring, control and surveillance work with the FFA and regional partners including the United States, Australia, New Zealand and Japan.



A transshipment vessel flanked by purse seiners in Majuro lagoon.

The VDS and zone-based management

PNA's Vessel Day Scheme (VDS) continued to show in 2018 it is the most important management tool for the purse seine fishery. Since its full implementation began in 2010, the VDS has led to unprecedented revenue generation for the nine PNA Parties and participating islands. The Parties include Marshall Islands, Federated States of Micronesia, Palau, Kiribati, Tuvalu, Nauru, Solomon Islands, and Papua New Guinea with Tokelau as a participating member. The amount of revenue accruing to the PNA through the VDS increased from \$60 million in 2010 to an estimated \$500 million in 2018. MIMRA has seen the revenue generated by the VDS and fishing rights increase from \$5,936,978 in 2012 to the record set in 2018 of \$29,144,696.

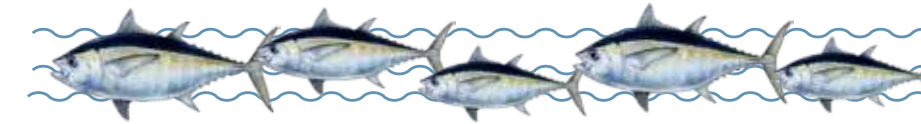
The VDS is not simply a mechanism to generate revenue from the fishing industry. Through the VDS, the Marshall Islands together with the rest of the PNA implements a system of sustainable fish-

ing for the purse seine industry in the region. The PNA began to implement a VDS for the longline industry as well. With all members coming on board in 2018, it is expected that the pace of implementation of the VDS for longline vessels will increase from 2019 onward until fully enforced.

For the purse seine fishery, PNA's VDS limits fishing effort to about 45,000 days per year together with the benchmark minimum price of \$8,000. Each of the nine participating PNA islands are given an allotment of fishing days. Limiting fishing effort raises the value of fishing days while maintaining fishing at sustainable levels. The impact of VDS limits has been demonstrated in stable in-zone purse seine vessel catch levels over recent years compared to uncontrolled high seas fishing.

In addition, the VDS system includes monitoring and verification requirements that improve overall management of the fishery: 100 percent coverage of purse seine vessels by Fisheries Observers, in-port transshipment, an annual moratorium on use of fish aggregating devices (FADs), and other conservation and management measures.

The EEZ of the Marshall Islands is



Revenue levels remain strong

on the margins of the prime tuna fishing zones in the Western and Central Pacific. This means fishing effort by purse seiners in most years is modest in the Marshall Islands EEZ compared to some of its PNA neighboring islands, changing mainly due to El Niño and other environmental factors from time-to-time. The nearly five-fold increase in revenue to MIMRA from the VDS and fishing rights from 2012 to 2018 demonstrates the value of the VDS and the benefit derived from unity of the islands in the PNA.

Total operating and non-operating revenue remained strong, though down slightly from 2017 as a result of lower return from the joint venture purse seine vessel operation with Koo's Fishing Company and other non-operating revenues below 2017. Total revenues for 2018 amounted to \$34,871,329 compared to \$36,104,641 the previous year. By comparison, revenue generated in 2012 amounted to \$10,506,958. The commercial tuna fishery accounts for nearly all of this revenue. In addition to the VDS and fishing rights, other revenue is generated from the fishery through fishing licenses, transshipment fees, fishing violation fines and observer fines. In addition, the Marshall Islands Fishing Company, a joint venture with Koo's Fishing Company for operation of Marshall's 201 purse seine vessel injects revenue annually. Despite a downturn in revenue in 2018 from the JV vessel, for the five-year period 2014-2018, the Mar-



A tuna net ready to be lifted onto a transshipment vessel.

shall's 201 averaged \$652,599 a year in revenue to MIMRA.

Sales of fishing days under the VDS to purse seine vessels that are not Marshall Islands-flagged or based averaged over \$11,000. These included fishing days that were pooled with other PNA members to add value to the VDS and sale of days to fishing nations on a bilateral basis.

Sales of fishing days to Marshall Islands-flagged or based purse seine vessels generated over \$6,600 each in 2018, a 10 percent increase from the previous year.

The transfer of fishing revenue to the national government budget set an all-time record in 2017 at \$40.1 million. The 2017 transfer included fishing revenue generated in 2017 and an accumulation from previous years. In 2018, the amount dropped \$29.4 million — a figure higher but comparable to 2016's total transfer of \$26.3 million.

Tuna transshipments and exports

The PNA requirement of in-port transshipment for purse seine vessels

licensed to fish in PNA waters has seen Majuro develop since 2014 into the world's highest-tonnage tuna transshipment port. The number of transshipments has declined from 2016 when the record was set with 551. Both 2017 and 2018 saw over 400 transshipments at 424 and 402, respectively.

Although the 402 transshipments in 2018 was the lowest since 2014, the 402 transshipments set a Majuro transshipment record for average metric tons per transshipment at 762mt. This compares to the previous record average of 733mt tons set in 2016. The 402 transshipments resulted in 306,796mt of tuna moving through Majuro. Of special note in 2018 is that the private sector firm Pacific International Inc., which has developed a net repair yard and related dock facilities to support the purse seine industry, handled its first off-loading of tuna from a purse seine vessel for transshipment in freezer containers. This shore side service is expected to expand in 2019.

The majority of the tonnage transhipped through Majuro in 2018 was skipjack tuna, which accounted for 271,373mt. In addition, 30,681mt of yellowfin tuna and 4,742mt of bigeye tuna rounded out the transshipment total.



Total Catch Purse Seine Fleets* in the Marshall Islands EEZ 2012-2018

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

Figures are metric tons. * Marshall Islands, Taiwan, S. Korea, PNG, Us, FSM, Kiribati, Japan, China, Solomon Islands, Philippines (listed in order of catch tonnage). **Key:** BET=Bigeye Tuna, SKJ=Skipjack Tuna, YFT=Yellowfin Tuna, OTH=Other.

Total Catch Longline Fleets* in the Marshall Islands EEZ 2012-2018

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

Figures are metric tons. * Marshall Islands chartered, FSM, China and Japan (in order of catch tonnage). **Key:** ALB=Albacore, BET=Bigeye Tuna, YFT=Yellowfin Tuna, OTH=Other.

Total Catch Pole-and-Line Fleets* in the Marshall Islands EEZ 2012-2018

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

Figures are metric tons. * Pole-and-line fleet is exclusively Japan. **Key:** BET=Bigeye Tuna, SKJ=Skipjack Tuna, YFT=Yellowfin Tuna

Taiwan moves most tonnage in Marshalls



A total of 52 of the 82 transshipments by Marshall Islands-flagged purse seine vessels were carried out in Majuro. Marshall Islands-flagged purse seine vessels transshipped 64,414mt of tuna in Majuro and three other ports in the Western and Central Pacific in 2018.

For transshipments in Majuro, Taiwan-flagged vessels accounted for 35 percent of the 402 transshipments with 139. These transshipments handled 102,201mt of tuna, almost exactly one-third of the total tonnage transshipped in 2018. Taiwan has been the biggest transshipment user of Majuro 2016-2018. US-flagged and Marshall Islands-flagged vessels conducted the next largest number of transshipments, at 52 each. US purse seiners transshipped 40,466mt of tuna, while Marshall Islands fishing vessels accounted for 38,315mt of tuna. The top five was rounded out by China, 46 transshipments for 39,285mt, and Papua New Guinea, 44 transshipments for 32,337mt. Other purse seine vessels that used Majuro to transship in 2018 included the Federated States of Micronesia, Solomon Islands, Philippines, Kiribati, S. Korea, Tuvalu, Vanuatu and New Zealand.

Tuna transshipments in 2018 produced \$475,500 in revenue compared to \$596,000 the previous year. MIMRA monitored almost 100 percent of the import transshipments during the year with Fisheries Observers or Fisheries Enforcement Officers.

In addition to the revenue generated from transshipment fees paid to MIMRA, there is significant spinoff benefit to the Marshall Islands economy from these purse seine vessels and carrier vessels making use of Majuro. Many carrier ves-



PII net yard grows services



Two purse seiners at PII's busy net yard in Majuro.

sels anchor in Majuro for weeks at a time waiting for purse seiners to transship their catches. Crewmembers regularly buy from local retail and wholesale stores, and use restaurants, bars and hotels. The vessels also often re-provision and refuel in Majuro, further benefiting the local economy.

In addition to its first container-based transshipment handled in 2018, Pacific International Inc.'s net yard saw continued growth in 2018. PII provided service to 18 purse seiners in 2018, up from 15 in 2017. The availability of net repair and related services for purse seine vessels at the PII dock facility in Majuro allows vessels to carry out repairs close to the fishing grounds, saving them long trips to Asian or other ports for repairs.

In addition to monitoring purse seine vessel transshipments, MIMRA Fisheries Observers and Enforcement Officers monitored almost all off-loading of tuna by the locally-based longline vessels associated with the Marshall Islands Fishing Venture, a Majuro-based company. MIFV is a subsidiary of Luen Thai.

The MIFV longline fleet off-loaded 2,822mt of tuna in Majuro, most of it bound for export markets. A total of 2,424mt was exported to markets in the US, China and Canada. Frozen fish — rejects and bycatch — is designated as “Local,” and is shipped to Asia via containers and/or sold locally.

The local portion of the tonnage amounted to 398mt in 2018. The 2,822mt of tuna off-loaded by MIFV vessels was a

decline from 4,067mt landed in 2017.

The breakdown of the MIFV longline catch in 2018 shows most of the total caught was bigeye tuna, 1,570mt, and yellowfin tuna, 949mt. Blue marlin, albacore, wahoo, escolar, mahimahi, oil fish, opah, pomfret, short-billed spearfish, skipjack, and swordfish account for the balance.

Three Marshall Islands-flagged and two chartered purse seiners operated by Pan Pacific Fishing supplied some of their tuna catch to the Pan Pacific Foods tuna loining plant in Majuro for processing, with the majority of their catch being transshipped. During 2018, PPF processed 7,065mt of tuna for export, nearly triple the 2,398mt tons processed for export in 2017. The 7,065mt tons include 804mt of processed skipjack loins, 6,160mt of whole skipjack and yellowfin, and 101mt of fishmeal. The processed tuna was exported to Vietnam, Thailand, China and Taiwan, with the fishmeal all going to Taiwan.

Tuna caught in RMI EEZ

The number of foreign fishing vessels licensed to fish in the EEZ of the Marshall Islands declined after two years of increases.

A total of 231 longline, pole-and-line, and purse seine fishing vessels were licensed to fish in 2018, a decrease from the 257 licensed in 2017. The Marshall Islands sees year-to-year fluctuations in vessels licensed largely related to location of tuna throughout the PNA region. Several fleets showed reductions in numbers in 2018. The number of FSM Arrangement purse seine vessels (fishing vessels that are domestically licensed in PNA member countries and receive discounted access) dropped from 76 to 49 in 2018. The US and Japan purse seine fleets, 31 and 25 vessels, respectively, remained stable with no change in their number of vessels licensed from 2017-2018. Taiwan and S. Korea remained major players in purse seining, with 23 and 24 licensed, respectively, both showing small decreases from the previous year.

Two fleets, however, were new entrants to licensing in the Marshall Islands: The Philippines, with 13 purse seine vessels registered to fish, and Kiribati, with five purse seiners. Both Kiribati and S. Korea fleets operated under the PNA sub-regional pooling, not bilateral arrangements.

Overall, the number of purse seine



A healthy haul of tuna is off-loaded from a longline vessel in Majuro.

Breakdown by fishing styles

vessels showed the biggest decrease from 192 licensed in 2017 to 179 in 2018. The number of pole-and-line vessels, exclusively Japanese, decreased from 16 to 11 (but the 11 produced a 14-fold increase in catch compared to 2017). Longliners dropped from 49 in 2017 to 41 in 2018.

The majority of the tuna tonnage caught in the EEZ of the Marshall Islands in 2018 was by the purse seine fishery. Purse seine vessels accounted for 28,903mt or 86 percent of the total tuna for all gears combined of 33,759mt.

Longline vessels caught 3,838mt, and pole-and-line caught 1,018mt. Despite the fewer vessels licensed to fish in 2018 than the previous year, the 33,759mt caught during the year by all gears was an increase over the 30,195mt caught in 2017.

Catch tonnage for the three types of fishing vessels operating in Marshall Islands waters in 2018:

- **Purse seine catch** in the EEZ of the Marshall Islands increased slightly

in 2018 compared to the previous year, 28,903mt to 26,519mt, respectively. Both years were well below 2016, when purse seiners caught 78,767mt in Marshall Islands waters. The year-to-year fluctuation primarily reflects environmental conditions affecting location of skipjack tuna. Higher catches are generally recorded during or immediately following strong El Niño periods. An El Niño began building in 2015, for example, and peaked in the first half of 2016.

The breakdown of purse seine catch by fleets shows that Marshall Islands-flagged vessels caught the highest amount of tonnage in the EEZ of the Marshall Islands, totaling 6,249mt, followed by Taiwan vessels that caught 6,222mt. S. Korea (4,405mt), PNG (3,954mt) and the US (2,901mt) rounded out the top five purse seine catches.

- **Pole-and-line fishing** by Japan-only showed a big rebound in catch following three years of decline leading to the all-time low of 72mt set

in 2017. In 2018, 11 license vessels caught 1,018mt, a 14-fold increase over the previous year. Skipjack tuna accounted for 99 percent of the fish caught by pole-and-line vessels: 1,017mt of skipjack and one metric ton of yellowfin accounted for the 1,018mt total.

- **Longline vessel catches** remained consistent in the 2016-2018 period, with all three years in the 3,000mt range. Longline vessels showed a small increase in catch in 2018, with 3,838mt of tuna, compared to 3,604mt in 2017. Nearly two-thirds of the total longline catch was caught by the Marshall Islands-chartered longline vessels, which accounted for 2,204mt. FSM vessels caught 1,199mt, Chinese vessels 326mt, and Japan 109mt.

In the purse seine fishery, most fishing in Marshall Islands waters happens in the southern portion of the EEZ. Longline fishing also occurs in the southern areas of the EEZ, but is generally more widely distributed throughout Marshall Islands waters.



Efficient gathering of data

Fisheries data collection, electronic monitoring, and databases (SPC/PNA FIMS)

The capacity of MIMRA Fisheries Observers and Debriefers continued to improve through trainings and the use of new technology. MIMRA Fisheries Observers, Debriefers and Fisheries Officers are the front line in fisheries data collection at sea and in port that is essential to management of the purse seine and longline fisheries. Fisheries Observers went on 145 purse seine trips and 34 longline trips. In addition, in 2018, six domestically-based longline vessels were equipped with electronic monitoring (EM) cameras, the same number as the previous year. This is part on the ongoing collaboration between MIMRA and The Nature Conservancy (TNC) trialing and developing EM for longline vessels. A total of 24 longline trips were observed electronically by nine Fisheries Observers trained in EM.

The number of trips observed through EM decreased in 2018 compared to 2017 due to scheduled maintenance of vessels using EM cameras. It is envisaged that the trainings of Fisheries Observers in EM will encourage Fisheries Observers to adapt by using new tools and technology in gathering data more efficiently and in a timely manner.

Data management and handling capacity continues to be a vital tool for MIMRA's management of fishing within its EEZ. The Pacific Community's Oceanic Fisheries Program (SPC-OFP) has been instrumental in supporting expansion and improvement of data collection efforts. MIMRA continues to employ a dedicated port sampler covering almost 100 percent of longline tuna unloading at the Marshall Islands Fishing Venture fish base in Majuro. The port sampler along with other MIMRA staff collate the data and enter it into the TUFMAN II database.

In 2018, MIMRA continued to migrate away from paper forms for both its port-sampling operation and onboard Fisheries Observers, the latter expanding the use of tablets for E-reporting during purse seine trips in 2018.

Several of these purse seine trips included the continuation of trials for observer data E-reporting utilizing rugged tablets. In 2018, SPC introduced TAILS, an electronic port-sampling app that was trialed to improve data flow and eliminate the use of paper sampling forms. The TAILS app has since been replaced by the OnShore app, which is more suited for longline port sampling activities.

MIMRA began to shift its focus toward the Parties to the Nauru Agreement (PNA) Office Fisheries Information Management System (FIMS) as the standard by which it will manage and handle its data complemented by existing databases such as the TUFMAN II currently in use.

Further development of E-reporting (ER) and EM initiatives continue to be a priority for MIMRA. In addition to going on a total of 179 purse seine and longline trips combined, Fisheries Observers also participated in the WCPFC shark-tagging project on post-release mortality in longline fisheries. In 2018, 11 Fisheries Observers were trained for this task and 14 silky sharks were tagged on longline trips on which Fisheries Observers participated.



MIMRA Fisheries Officer Melvin Silk, right, obtains data from a visiting purse seiner with the help of an I-Kiribati Fisheries Observer.



Oceanic highlights

Record year

While the number of tuna transshipments in Majuro at 403 was below the record of 551 set in 2016, 2018 set an all-time record for average metric tonnage of tuna per transshipment at 762mt.

Top nations

The top five purse seine flag states using Majuro to transship tuna in 2018 were Taiwan (139), Marshall Islands and the United States (52 each), China (46), and Papua New Guinea (44).

VDS success

Revenue generated by the Parties to the Nauru Agreement Vessel Day Scheme (VDS) and fishing rights set another record in 2018. Audited figures for 2018 show that VDS and fishing rights generated \$29,144,696, an increase from 2017 when \$28,532,685 was realized. The revenue in these categories has increased every year this decade with the full implementation of the VDS.

Financial reward

A total of \$29,440,214 was transferred to the Marshall Islands national government budget in 2018.

National fleet

Eight Marshall Islands-flagged and two chartered purse seine vessels operated throughout the West-



Collecting the data.

and 34 longline trips during the year. An additional 24 longline fishing trips were electronically observed in an ongoing E-monitoring trial with domestically-based vessels.

231 licenses

A total of 231 purse seine, longline and pole and line vessels were licensed to fish in Marshall Islands waters in 2018. Although fewer than the 257 licensed vessels in 2017, the 2018 number is consistent with ongoing year-to-year fluctuations. As in previous years, not all the vessels licensed actually fished in the Marshall Islands during the year.

Tonnage

After three years of decline, the tonnage of skipjack and yellowfin caught by Japan's pole and line vessels increased to 1,072mt. This compares to 2017 when 72mt were caught.

Tuna transshipment Majuro Port 2014-18

Year	Number	Metric Tons	*Average
2014	382	158,065	414
2015	504	368,323	731
2016	551	403,809	733
2017	424	292,754	690
2018	402	306,796	763

* Average metric tonnage per transshipment. Source: MIMRA.

ern and Central Pacific Ocean. The total estimated catch by the national purse seine fleet in 2018 was 71,963mt, up from the estimated 64,527mt tons caught by the same number of purse seine vessels in the national fleet in 2017. Skipjack tuna accounted for 93 percent of the total catch in 2018, followed by yellowfin, six percent, and bigeye, one percent.

E-monitoring trial

Marshall Islands Fisheries Observers carried out 145 purse seine

Joint venture \$\$

The Marshall Islands Fishing Company joint venture with Koo's Fishing Company, which operates the Marshalls 201 purse seiner, generated \$148,763 in 2018. The five-year 2014-2018 average annual revenue generated by the joint venture is \$652,599.

Edwards new chair

During 2018, MIMRA Director Glen Joseph chaired the Western and Central Pacific Fisheries

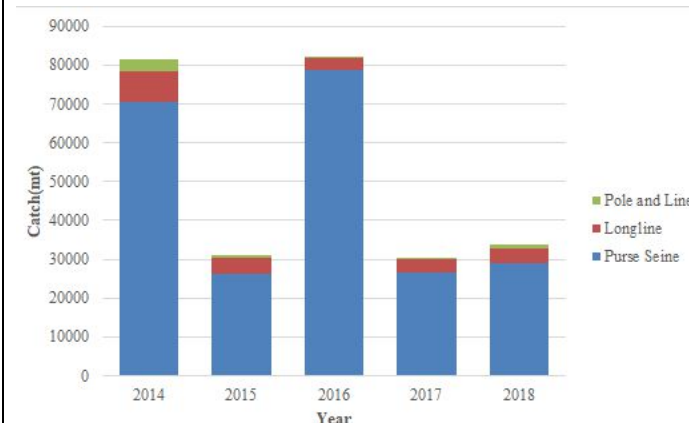


for MIMRA in 2018



As a result of discussions in 2018, a historic fisheries cooperation agreement was signed between MIMRA and Thailand's Department of Fisheries (above) in early 2019. MIMRA Deputy Director Samuel Lanwi, Jr. (center, blue shirt) led a MIMRA team to the signing. Below, MIMRA staff engage with officials at Thailand's Fisheries Monitoring Center.

Total catch by different fishing gear-types operating in the RMI EEZ, 2014-2018



Commission's Compliance Monitoring Scheme Intersessional Working Group. At the WCPFC annual meeting in Honolulu, MIMRA Legal Counsel Laurence Edwards, II, was elected to chair the WCPFC's Technical and Compliance Committee (TCC).

PII transshipment

Pacific International Inc. continued to expand services to the purse seine fleet at its Net Yard and dock facility

in Majuro. PII, which opened its net repair service in 2017, provided services to 18 purse seiners in 2018, up from 15 in 2017. It also performed its first container-based tuna transshipment of 50 tons of tuna at the dock facility.

Four turtles released

Preliminary data in 2018 for observed interactions with species of special interest by the Marshall Is-

lands purse seine fleet included six sea turtle interactions, with four released alive and two with an unknown condition upon release. In addition, a total of 118 individual mammals were involved in 21 fishing interactions: 63 were released alive, 45 dead, and 10 with an unknown condition.

There were nine whale shark interactions, with eight released alive and one in an unknown condition.

No seabird interactions were observed.





Observers provide vessel and port coverage

MIMRA's Fisheries Observer program continued to improve in data collection, debriefing, and training opportunities. Despite ongoing challenges with limitations of supplies and equipment, Observers leaving the program, and transition from paper to electronic reporting, MIMRA Fisheries Observers went on 179 fishing trips, both purse seine and longline, in 2018. Data submissions for both national and regional programs was close to 100 percent. In addition, MIMRA Fisheries Observers were also engaged in monitoring of in-port transshipments and reviewing video data collected by video cameras installed on locally-based longline vessels as part of an E-monitoring trial and ongoing collaboration between MIMRA and TNC since 2017.

Two Fisheries Observer training programs during this period increased the observer force by 18, to 61 — including 59 men and two women. Throughout 2018, 10 left the program so that by the end of 2018, MIMRA had 51 active observers.

The MIMRA Observer Program was managed by six staff in 2018: Observer Program Advisor/Coordinator Bernard Fiubala, Placement Officer/Debriefer Jacob Keju, Compliance Officer/Debriefer Makbi Bwijko, Data Specialist Ziggy Duffy, Pacific Islands Regional Fisheries Observer (PIFRO) Trainer Trainee/Debriefer Iaokiri Barai, and Longline Port Sampler Lo-



MIMRA staff Tatiana Alik records data as part of a purse seine vessel's visit to Majuro for transshipment.

modro Jibas.

In 2018, MIMRA had six certified debriefers on staff and two debriefer trainees.

As briefly mentioned, MIMRA Fisheries Observers went on 179 total trips in 2018. This included 145 on purse seiners and 34 on longline vessels. The 145 purse seine trips involved 28 national (MIMRA) trips, 97 PNA trips, and 20 Forum Fisheries Agency (FFA) trips.

The 179 trips in 2018 compares to 192 in 2017, which included 145 on purse seine and 34 on longline vessels.

MIMRA Observer Program statistics showed observer national data submission was 99 percent complete, while observer regional data submission was 97 percent complete in 2018.

A variety of trainings were conducted in 2018, including a PIFRO training that involved nine male and one female trainee, with funding support of the National Training Council. All 10 passed the seven-week program that covered 17 training units for both purse seine and longline vessels.

Sixteen observers — 15 male and

one female — participated in and completed the two-week Standard of Training, Certification and Watch-keeping for Seafarers (STCW95). This emphasized seamanship, basic sea survival, firefighting and CPR.

Additional capacity building and in-house trainings during 2018, including: purse seine and longline vessel refresher course, Marine Stewardship Council (MSC) training, and developing standard operating procedures and emergency action plans, the latter involved funding support of the FFA.

A total of 60 tablets for E-reporting went into use by MIMRA Fisheries Observers in 2018, including two-way communication devices. Electronic reporting trials have been an ongoing process for MIMRA and continued in 2018. The major issue for 2018 was resolving double entry of data in work books and transferring data to the new tablets.

A standard operating plan for Fisheries Observers was drafted and was in final review stage for MIMRA Board/Management approval. An emergency action plan was in the planning stage



Provisional purse seine transshipments in Majuro port in 2018

Flag	Number of PS Transshipment	SKJ	YFT	BET	TOTAL
China	46	33,106	5,327	853	39,285
CH-Taipei	139	91,732	8,947	1,522	102,201
FSM	30	20,906	2,416	270	23,592
Kiribati	6	2,747	839	164	3,750
Korea	5	4,217	625	26	4,868
RMI	52	35,311	2,349	656	38,315
New Zealand	2	1,058	679	16	1,753
PNG	44	28,022	3,935	379	32,337
Philippines	8	5,030	1,401	84	6,515
Solomon Islands	12	7,151	957	2	8,110
Tuvalu	3	2,782	246	167	3,195
USA	52	37,628	2,310	528	40,466
Vanuatu	3	1,683	650	77	2,410
TOTAL	402	271,373	30,681	4,742	306,796

Note: Numbers listed under different tuna species are metric tons.
Key: SKJ: Skipjack; YFT: Yellowfin; BET: Bigeye.



Updating safety equipment

but not yet developed. The aim is to develop the EAP in partnership with Marshall Islands Police Department/Sea Patrol, Marshall Islands Red Cross Society, the US Coast Guard, and other emergency-related entities from other islands.

Needed equipment and supplies to improve the safety and work environment for Fisheries Observers were approved and were in the process of being procured during 2018 through the World Bank PROP project.

Number of foreign longline, pole-and-line and purse seine vessels licensed to fish in RMI EEZ by year and flag from 2014 to 2018.

FLAG	GEAR	2014	2015	2016	2017	2018
CHINA	LL	26	26	27	30	0
	PS	6	7	0	6	8
FSM	LL	14	14	12	13	9
FSMA	PS	57	54	76	76	49
	LL	8	8	2	6	6
JAPAN	PL	20	13	11	16	11
	PS	28	29	30	25	25
KIRIBATI	PS	0	0	0	0	5
KOREA	PS	26	5	25	26	24
NZ	PS	0	2	0	0	0
PHILIPPINES	PS	0	0	0	0	13
CH-TAIPEI	LL	2	2	0	0	0
	PS	25	25	26	27	23
TUVALU	PS	1	1	0	1	1
USA	PS	39	39	33	31	31
VANUATU	PS	3	0	0	0	0
	LL	50	50	41	49	15
TOTAL	PL	20	13	11	16	11
	PS	185	162	190	192	179

LEGAL



Marshall's President Hilda Heine (third from left) and Minister of Natural Resources and Commerce Dennis

PNA leaders promote

The Second PNA Leaders' Summit, hosted by the Marshall Islands in Majuro on March 2, 2018, endorsed a number of initiatives that involved a significant level of legal work among the Parties. The high-level meeting discussed PNA accomplishments to date and goals of PNA to maximize economic gains from tuna fisheries by implementing PNA's Vessel Day Scheme (VDS) that combines conservation and management measures. Revenue generated through PNA's VDS has become a

major source of revenue for many PNA Parties.

PNA Leaders expressed their desire for continued cooperation in managing the PNA fishery with renewed focus on the VDS and sustainability of tuna fisheries in the western and central Pacific. The meeting concluded with the signing of the Delap Commitment, a document that outlines the leaders' priorities for PNA.

The Delap Commitment added tasks to the Fisheries Ministers and fisheries departments to work to reduce marine

pollution, develop management of high seas fishing, implement a prohibition on tankers refueling fishing vessels on the high seas by establishing in-zone bunkering requirements, and develop standards and regulations for managing fish aggregating devices (FADs). The Delap Commitment also binds Leaders to meet at least every three-to-five-years and to establish PNA's strategic plan to implement their vision for the PNA going forward. Drafting and development of PNA's new strategic plan was an ongoing process in 2018.



Momotaro (far right) joined with PNA leaders at the Second PNA Leaders' Summit held in Majuro in 2018.

cooperative action

ENFORCEMENT: MIMRA continued active enforcement of fisheries laws and regulations. MIMRA maintains a zero tolerance policy for fishing vessels that violate fisheries provisions in national laws. MIMRA, with the support of the Marshall Islands Police Department/Sea Patrol and the Attorney General's office, actively monitored commercial tuna fishing operations in RMI waters.

Two fishing vessels/companies paid fines ranging from \$50,000 to \$500,000, with a total of \$550,000

in fines paid to MIMRA during FY2018.

Fishing vessels were fined for various violations, including unlawfully entering into RMI Ports without properly notifying MIMRA prior to commencing transshipment operations, failure to submit reports to MIMRA within the required 24-hour period, conducting prohibited fishing in a fisheries exclusion zone, contravening conditions of fishing licenses, and/or fishing in the conservation zone.



At the WCPFC's TCC meeting in Majuro, from left: WCPFC Executive Director Feleti Teo, MIMRA Director Glen Joseph, and WCPFC Compliance Manager Lara Manarangi Trott.



A plenary session of the TCC annual meeting held in Majuro in September 2018.

President Hilda Heine's call for end to IUU fishing

At the 14th Regular Session of the Technical and Compliance Committee (TCC14) of the Western and Central Pacific Fisheries Commission held in Majuro from September 26-October 2, 2018, the organization recommended to the WCPFC that MIMRA Legal Advisor Laurence Edwards, II, be appointed as TCC Chair for a two-year term. The recommendation was subsequently endorsed by the full WCPFC at the December 2018 annual meeting.

At wrap up of the TCC14 meeting in Majuro, Marshall Islands President Dr. Hilda C. Heine issued a call to end illegal, unreported and unregulated (IUU) fishing. With her statement to TCC14, President Heine officially launched a campaign for an IUU-Free Pacific by calling on Pacific nations and those fishing in the region to aim to eliminate IUU fishing by 2023. Noting that the Forum Fisheries Agency said in 2016 that IUU fishing was costing Pacific Islands over \$600 million a year in lost revenue, President Heine called for a “five-on-five program” involving communication, cooperation, innovation, engagement and diplomacy.



A Fisheries Officer monitors a tuna transshipment in Port Majuro.

Engagement with WCPFC

A Marshall Islands delegation, led by Minister of Natural Resources and Commerce and MIMRA Board Chairman Dennis Momotaro, participated in the Fifteenth Regular Session of the Western and Central Pacific Fisheries Commission (WCPFC15). The annual meeting was held at the Honolulu Convention Center in Honolulu 10-14 December, 2018. Minister Momotaro, in a formal statement to WCPFC15, said he was attending his first annual meeting of the WCPFC and was eager to see why essential issues at WCPFC meetings are not being resolved. He emphasized that Small Island Developing States (SIDS) are the most-affected by the fisheries management issues under discussion and his delegation was ready to engage constructively. He urged agreement on a number of critical issues: the need to

review transshipments to increase monitoring and oversight, changes to the compliance monitoring scheme (CMS) process, and opportunities to increase effective participation by SIDS and territories in the annual meeting and the various committees of the WCPFC. He also informed the fisheries management organization of the challenge made by the Marshall Islands for an IUU-free Pacific by 2023, and the challenge from Federated States of Micronesia to institute electronic monitoring (EM) of all fishing vessels by 2023.

The Commission made a number of appointments to Commission positions commencing in 2019: a) Jung-re Riley Kim (Korea) was appointed as WCPFC Chair replacing outgoing chair Rhea Moss-Christian, and Dr. Josie Tamata (Niue) as WCPFC Vice-Chair; b) Jonathan Kidu (PNG) was appointed as a

new Finance and Administration Committee Co-Chair; c) Laurence Edwards, II, (RMI) was appointed as TCC Chair, and Dr. Robert Day (Canada) as TCC Vice-Chair; and d) Masanori Miyahara (Japan) was appointed as Northern Committee Chair, and Michael Tosatto (United States) as NC Vice-Chair.

In support of Intersessional Working Group activities during 2019, which are to be progressed electronically, the WCPFC confirmed the following: a) Tom Graham (United States) would continue to lead the TCC Observer-related IWG; b) Sarah Williams (New Zealand) would continue to lead the South Pacific Albacore Roamap IWG; c) Kerry Smith (Australia) would continue to lead the ER and EMWG; and d) Samuel Lanwi (RMI) and Dr. Alex Kahl (United States) would co-chair the Transshipment Review IWG.

FINANCE

AND CORPORATE AFFAIRS

High financial standards a

The Fiscal Year 2018 annual audit demonstrates that the Marshall Islands Marine Resources Authority continues to maintain a high-standard of accountability in its financial operations. Deloitte auditors confirmed that the audit was “unqualified,” meaning that all financial information was satisfactorily maintained and available for audit.

“In our opinion, the financial statements...present fairly, in all material respects, the financial position of the Marshall Islands Marine Resources Authority as of September 30, 2018 and 2017, 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,” said the Deloitte audit for FY2018.

Financial accountability is essential for MIMRA to successfully carry out its mandate to manage marine resources for the nation.

Overall net operating revenues in FY2018 and FY2017 were stable. The \$33,938,061 operating revenue recorded for FY2018 showed a less than half-a-percent decline from FY2017, when the total was \$34,057,294. Non-operating revenues — a combination of grants, interests on investments, and revenue from a joint venture fishing vessel — was lower in FY2018 than the previous year, at \$779,393 compared to \$2,047,217. MIMRA’s total



revenue for FY2018 was \$34,717,454, which exceeded the estimated revenue budget figure at the beginning of the year of \$30,190,000.

Fisheries revenue contributed \$29,440,214 to the Marshall Islands national government budget for the fiscal year. This was less than the \$40,129,700 transferred to the national government in FY2017. MIMRA had operating expenses of \$4,030,989, a 15 percent reduction from the previous year. Coupled with the transfer to the national government, which was classified as a non-operating expense, the total expenses for FY2018 were \$33,485,997. For FY2018, MIMRA showed positive net income of \$1,385,332, an improvement over the net loss of \$8,794,049 in FY2017 that

resulted from the highest-ever funds transfer to the national government budget.

In FY2018, MIMRA saw continued revenue growth from the sale of fishing days to purse seiners through the Vessel Day Scheme (VDS) of the Parties to the Nauru Agreement (PNA). The Marshall Islands is one of nine participating islands implementing PNA’s VDS for the purse seine industry. The increase in VDS and related fishing rights revenue has seen revenue increase from \$5,936,978 in FY2012 to \$29,144,696 in FY2018. FY2018 showed a two percent increase in VDS and fishing rights revenue compared to FY2017, when it was \$28,532,685. This reflects the overall increasing value of fishing days to the

FINANCE

major highlight of FY2018



MIMRA’s revenue is generated largely by the tuna industry. Top: purse seiners in Majuro lagoon; far left and above right, tuna processing at Marshall Islands Fishing Venture; above left, transshipping tuna.

purse seine industry, the higher sales value of “pooled” fishing days with other PNA nations and sales of fishing days through the treaty with the United States and its purse seine industry, and finally small increases in the price of fishing days for domestically registered vessels.

Licensing fees declined slightly as a result of an eight percent decline in vessel registration, from 284 vessels in FY2017 to 260 in FY2018. Total revenue was \$2,320,700 in FY2018, down from FY2017’s \$2,508,762. But the FY2018 amount was higher than the \$2.2 million recorded for licensing fees in FY2016.

Tuna transshipment fees also showed a decline, from \$596,000 in FY2017 to \$475,500 in FY2018. This

reflected the change in the number of transshipments from 560 in FY2017 to 468 in FY2018.

Boat charter fees remained stable at \$700,000 annually, while fishing violation fines netted MIMRA \$550,000 in FY2018, a decrease from the \$715,000 collected in FY2017. The three-year annual average for fishing violation fines collected by MIMRA is \$548,333.

Fisheries observer fees continued an upward trend with the requirement of 100 percent observer coverage on all purse seine fishing trips. Observer fees were \$826,797 in FY2018 and \$815,987 the previous year. Other revenue was little changed from the previous year, with \$170,904 in FY2018 compared to \$196,430 in FY2017.

RMI VDS and Fishing Rights Revenue FY2012-2018

Fiscal Year	Revenue
2012	\$5,936,978
2013	\$10,225,353
2014	\$15,555,239
2015	\$24,406,606
2016	\$26,970,078
2017	\$28,532,685
2018	\$29,144,696

Source: MIMRA audited annual financial reports.

FINANCE

MIMRA: Management's Financial Condition and Operations for FY 2018, 2017 and 2016

This table summarizes the financial condition and operations of MIMRA for fiscal years 2018, 2017 and 2016. This appears in the FY2018 audit.

Statements of Net Position

	2018	2017	(%) Change	2016
ASSETS:				
Current and other assets	\$25,963,219	\$ 25,170,217	3%	\$35,141,562
Capital assets	3,842,778	1,965,793	95%	1,183,609
Investment in JV	4,917,702	6,209,153	(21%)	5,298,919
Total Assets	\$34,723,699	\$ 33,345,163	4%	\$41,624,090
LIABILITIES:				
Current liabilities	\$ 903,041	\$ 909,837	(0.7%)	\$ 394,715
NET POSITION:				
Investment in capital assets	3,842,778	1,965,793	95%	1,183,609
Restricted	740,138	636,077	16%	423,049
Unrestricted	29,235,100	29,833,456	(2%)	39,612,717
Total Net Position	\$33,820,658	\$32,435,326	4%	\$ 41,229,375

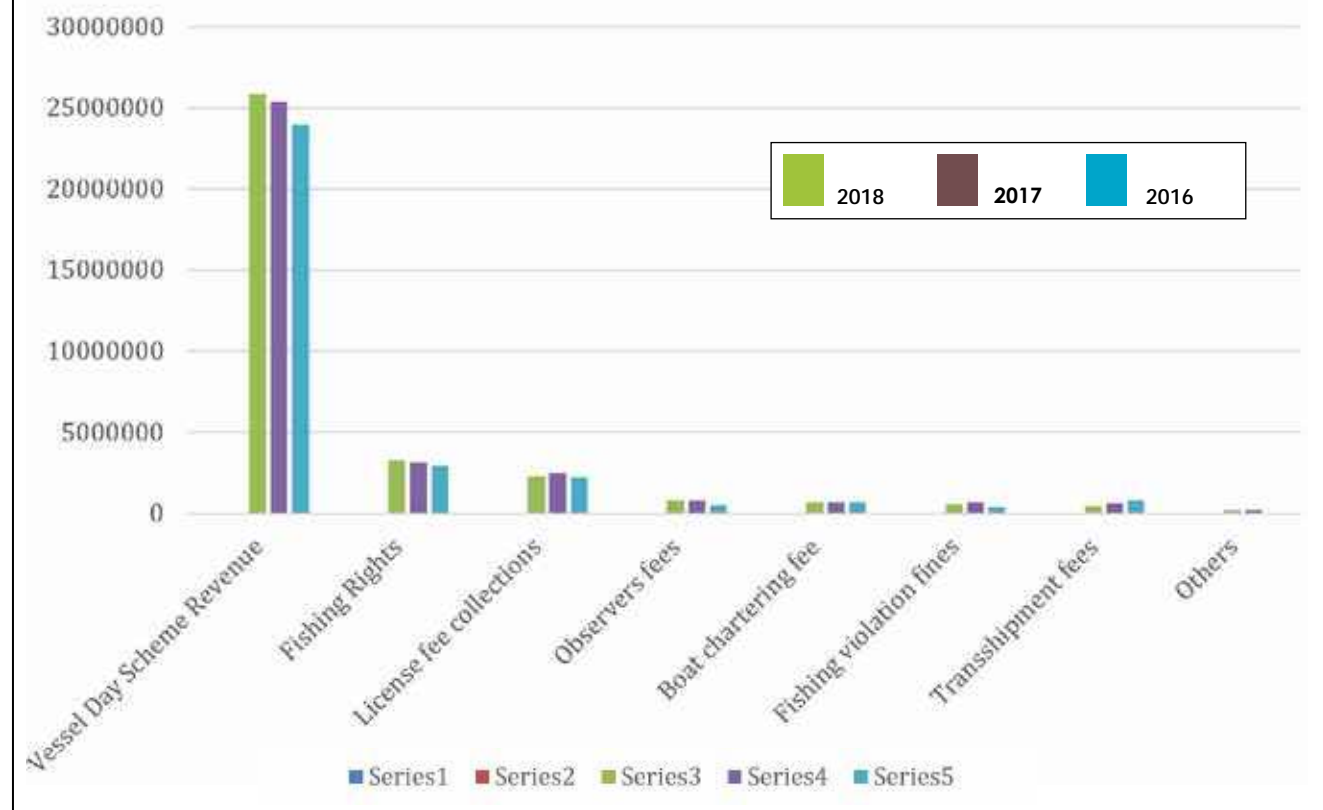
Statements of Revenue, Expenses and Changes in Net Position

	2018	2017	(%) Change	2016
REVENUES:				
Operating Revenue	\$ 33,938,061	\$34,057,424	(0.4%)	\$31,666,145
Non-Operating Revenue	779,393	2,047,217	(62%)	2,122,087
Total Revenue	34,717,454	36,104,641	(3.8%)	33,788,232
EXPENSES:				
Operating Expenses	4,030,989	4,759,761	(15%)	3,520,937
Non-operating expenses	29,455,008	40,138,929	(27%)	26,285,938
Total Expenses	33,485,997	44,898,690	(25%)	29,806,875
CAPITAL CONTRIBUTIONS:	153,875	-	100%	-
Changes in net position	1,385,332	(8,794,049)	84%	3,981,657
Net position at beg. of year	32,435,326	41,229,375	21%	37,248,018
Net position at end of year	\$33,820,658	\$32,435,326	4%	\$41,229,375

FINANCE

MIMRA: Management's Discussion and Analysis for fiscal years 2018, 2017 and 2016

Comparative Revenue: FY18 vs FY17 vs FY16



	2018	2017	2016
1 Vessel Day Scheme Revenue	\$25,842,384	\$25,389,600	\$23,991,991
2 Fishing Rights	\$3,302,312	\$3,143,085	\$2,978,087
3 License fee collections	\$2,320,700	\$2,508,762	\$2,202,988
4 Observers fees	\$826,797	\$815,987	\$544,040
5 Boat chartering fee	\$700,000	\$700,000	\$700,000
6 Fishing violation fines	\$550,000	\$715,000	\$380,000
7 Transshipment fees	\$475,500	\$596,000	\$799,000
8 Others	\$176,904	\$196,430	\$70,039
9 TOTAL REVENUES	\$34,194,597	\$34,064,764	\$31,666,145
Recovery (Allowance) for bad debts	(256,536)	(7,470)	
NET REVENUES	\$33,938,061	\$34,057,294	\$31,666,145
Overall Change FY2018 vs FY2017	(119.2333)	-0.35%	

Opening day February 8, 2019



MIMRA's new home

The Marshall Islands Marine Resources Authority's new headquarters building in Majuro opened with an official ceremony in early 2019. President Hilda Heine, Natural Resources and Commerce Minister Dennis Momotaro and numerous other elected, traditional, religious and private sector leaders attended the event.





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