On June 6 to 8, scientists will make their final recommendation to the Western Pacific Regional Fishery Management Council on the maximum allowable biological catch (ABC) for seven deep-water snappers and grouper for the 2018–2019 Hawai‘i bottomfish fishing season. The ABC is the maximum pounds that can be harvested without overfishing the stock complex and is based on life history information, independent surveys and stock assessment models. The Hawai‘i fishing year for the Deep 7 bottomfish runs from Sept. 1 to Aug. 31 the following year.

From the ABC, the Council will determine the annual catch limit (ACL) at its 173rd meeting, June 11 to 13 on Maui. The ACL takes into consideration scientific uncertainties and social, economic, ecological and management factors. The ACL can be less than or equal to the ABC.

Management of the Hawai‘i bottomfish fishery has evolved into a complex process that relies on trip reporting and daily monitoring of landings and sales, the best scientific information available and a coordinated management regime between state and federal fishery agencies. The system is not perfect, but positive strides each year have made the Hawai‘i bottomfish fishery among the best managed fisheries in the state.

The bottomfish fishing community is extremely informed and participates throughout the management process. Fisherman volunteers worked with the National Marine Fisheries Service (NMFS) over a two-year period to investigate the historical time-series of the fishery’s catch and effort. Changes in the fishery have been seen in the participants, gear (from handline to electric and hydraulic power) and technology (addition of depth finders and GPS). Fishermen stressed the importance of weather as the largest factor governing this fishery’s activities. NMFS scientists have incorporated this information into their models.

Better information in the upgraded models resulted in a positive stock assessment and a likely increase of almost 200,000 pounds of Deep 7 bottomfish for the 2018–2019 fishing year in the main Hawaiian Islands. (See page 2 for overview of quotas from the 2007 to 2017–2018 fishing years.)

Work will continue to improve the information that goes into the stock assessment model. They will review the management framework and information gaps that relate to unreported catch in the noncommercial sector of the fishery. They will also focus on improving the commercial marine license and seafood dealer reporting programs run by the State of Hawai‘i.
Main Hawaiian Islands Bottomfish Fishery, 2007-2018 Overview

### FISHING YEAR | FLEET QUOTA | MANAGEMENT REGIME | CLOSURE DATE | LANDINGS (LBS)
--- | --- | --- | --- | ---
2007 | n/a | Interim closure to reduce effort by 24% | May 15 | n/a
2007-08 | 178,000 | Total allowable catch (TAC) | April 16 | 196,147
2008-09 | 241,000 | TAC | July 6 | 259,194
2009-10 | 254,050 | TAC | April 20 | 208,412
2010-11 | 254,050 | TAC | March 12 | 270,880
2011-12 | 325000 | Annual catch target (ACT) | No closure | 228388
346000 | Annual catch limit (ACL) |
2012-13 | 325000 | ACT | No closure | 237,434
346000 | ACL |
2013-14 | 346000 | ACT / ACL | No closure | 308,865
2014-15 | 346000 | ACT / ACL | No closure | 303,738
2015-16 | 326000 | ACT / ACL | No closure | 259,530
2016-17 | 318,000 | ACT / ACL | No closure | 231,381
2017-18 | 306,000 | ACT / ACL | No closure as of April 24 | 201,129 as of April 24

How Old Is Nemo?

*We know Nemo is a kid in fish years,* but have you ever wondered how old he is in human years? To find out, scientists would have to catch him, chop off his head and pull out his ear bones (otoliths) to reveal their growth rings. These rings, like the rings on a tree stump, would give an estimate of Nemo’s age.

That is the grim reality of current life history research. Scientists must roll up their sleeves and get downright dirty cutting dead fish to retrieve the otoliths, mount them on microscope slides and then spend endless hours counting every ring. Doing this reveals important information used to generate stock assessments. With enough samples, scientists can estimate a species’ longevity (how long the fish lives), growth rate (how fast the fish grows), age at maturity (when the fish is reproductively mature), age at sex switching (when certain fish change from male to female or vice versa) and length at maturity (size when the fish becomes sexually mature). Part of conducting life history research is collecting fish samples from the market or the fishery itself. Once the samples are collected, the real work of extracting and processing otoliths, gonads (fish sex organs), fin clips and muscle tissues begins.

Otoliths extracted from an eight-bar grouper (Epinephelus octofasciatus). *Photo courtesy of Casandra Pardee-Kyffin.*

The Western Pacific Regional Fishery Management Council is working with a contractor to establish a BioSampling Program in Hawai‘i. The goal is to gather and process life history samples from willing commercial reef fish markets, commercial reef fishermen and spearfishing clubs. The fish species to be sampled are those found in the Pacific Island Fisheries Science Center’s recently released benchmark stock assessment for 27 reef fish species. That assessment lacks local life history information. The BioSampling Program plans to fill this gap.

The contractor will work with the commercial reef fish markets and spear fishers to collect samples of reef fishes of varying sizes. The samples will be taken to the lab to extract life history information from the otoliths and gonads.

Commercial reef fish retailers and spear fishers interested in supporting this important project are asked to contact Marlowe Sabater at Marlowe.Sabater@wpcouncil.org or phone (808) 522-8220.

*Bullet head parrotfish (Chlorurus sordidus) with heads cut open to access the brain cases where the otoliths are located. Photo courtesy of Casandra Pardee-Kyffin.*
No Consensus on False Killer Whale ‘Weak Hook’ Improvements

False killer whales feeding on longline bait and hooked fish may themselves become hooked or entangled in the gear. In the Hawai‘i longline fishery, no effective and practical solution is known to reduce false killer whale interactions as these are rare events with no clear pattern. Thus, the main focus has been to minimize the injury of individuals released alive by requiring the use of “weak” circle hooks and strong branch lines. These hooks are intended to straighten and release a false killer whale without any gear attached. Since the regulation was implemented in 2012, only 10 percent of the observed interactions had the desired outcome. In many of the remaining cases, the line either broke or was cut.

The National Marine Fisheries Service (NMFS) convened the False Killer Whale Take Reduction Team (FKWTRT), April 10 to 13, 2018, in Honolulu, to take stock of the Take Reduction Plan (TRP) implementation and to develop recommendations on ways forward. Detailed descriptions of observed interactions clearly showed that many factors contribute to whether the crew can safely apply tension on the line to straighten the hook. Each event differs in the response by the animal and crew, situation of the gear (e.g., tangle or no tangle in the line) and sea condition. The FKWTRT considered strengthening the branch line, testing weaker hooks and improving training for captain and crew. A consensus recommendation was not reached. NMFS is expected to facilitate additional FKWTRT discussions and meetings to find a consensus recommendation.

The Western Pacific Regional Fishery Management Council, in advance of the FKWTRT meeting, had recommended moving toward a commonsense approach of minimizing trailing gear and releasing the animal as quickly as possible. However, the NMFS policy for categorizing interactions as serious injury posed a challenge for progress on this front at the FKWTRT meeting. Based on available data from other dolphin and small whale species such as bottlenose dolphins and pilot whales, NMFS classifies most cases in which any gear is left in the mouth as a serious injury. This means that an animal that is released with hook and trailing gear is likely to be considered at the same injury level as an animal released with hook only in the mouth, providing little incentive for the captain and crew to remove as much line as possible.

Besides the weak hook and strong branch-line requirements, the TRP measures include improving captain and crew response to interactions; modification to the main Hawaiian Islands longline exclusion zone established in 1992 under the Council’s Pelagic Fishery Management Plan (currently, the Pelagic Fishery Ecosystem Plan); and a Southern Exclusion Zone (SEZ) closure when the number of interactions inside the US exclusive economic zone exceeds a certain threshold. The TRP for the Hawai‘i longline fishery was implemented in 2012.

A take reduction team is assembled to develop recommendations for reducing impacts to strategic marine mammal stocks to sustainable levels. The FKWTRT was first convened in 2010 to develop the draft TRP by consensus. The Council has participated in the FKWTRT process from its inception.

Weak circle hooks and stronger branch lines are intended to allow false killer whales to release themselves from longline hooks. Photo courtesy of NMFS Pacific Islands Regional Office
A Better Option to Proposed Ban of US Pacific Island Billfish Sales

The 115th US Congress (2017–2018) is considering amendments to the Billfish Conservation Act that would prohibit sailfish, spearfish and black, blue and striped marlin caught by US fishing vessels and landed in Hawai’i, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI) from being sold in the continental United States. Billfish as defined in the Act does not include swordfish. If amended, opportunities would be lost for seafood distributors to market and consumers to enjoy domestically harvested, sustainable, high quality, ice-chilled billfish.

The Billfish Conservation Act generally prohibits the sale of billfish in the United States whether domestically caught or imported. It was introduced by US Rep. Jeff Miller (R-Fla.) and passed in 2012 by the 112th Congress. The Act states its purpose to be to “address the global population decline of billfish,” which is attributed to billfish bycatch in foreign fisheries, and “to protect the economic benefits to the US economy of recreational fishing and marine commerce and the traditional cultural fisheries.” The introduced legislation in 2012 would have allowed billfish landed in Hawai’i and Pacific Insular Areas to be sold only locally but was revised to alleviate concern that “this blanket prohibition might unnecessarily harm US fishermen.”

Part 4(c) of the implemented Act exempts billfish caught by US fishing vessels and landed in Hawai’i and the Pacific Insular Areas (American Samoa, Guam and CNMI), allowing them to continue to be sold in local and continental US seafood markets.

In October 2017, the Senate passed S.396, which would remove the exemption for traditional fisheries and markets. The legislation was introduced by Sen. Bill Nelson (R-Fla.) and co-sponsored by Sen. Marco Rubio (R-Fla.), Sen. Jerry Moran (R-Kan.) and Sen. Joe Manchin III (D-W.Va.). Its stated purpose is “to make technical amendments that would clarify an exemption in the Billfish Conservation Act of 2012.” The Senate Committee on Commerce, Science, and Transportation (report 115-160) summarized the bill’s purpose as to “close the exemption loophole in the Act of 2012 by specifying that billfish can only be landed and retained in Hawai’i, thus ensuring billfish are not routed through Hawai’i and sold to the US mainland.” House Resolution 4528 contains identical language as S.396.

Proponents of the legislation claim the exemption in 2012 was a legislative error. They group US Pacific Island and foreign caught billfish together and imply, without documentation, that foreign billfish is laundered through Hawai’i and the Pacific Insular Areas.

Opposition to the legislation has come from Hawai’i fishermen and seafood distributors and other persons within the region.

Pacific blue marlin is not experiencing overfishing and is not overfished. Striped marlin is experiencing overfishing and is overfished in the Western and Central North Pacific Ocean, but it is subject to national catch limits. Catch rates for other billfish species such sailfish and spearfish in Hawai’i and Pacific Insular Areas have been stable; these stocks are not believed to be subject to overfishing or in an overfished condition. On the other hand, Atlantic billfish are subject to overfishing and in an overfished condition. Sales of Atlantic billfish have been prohibited since the mid-1990s in part due to their poor stock status.

The annual commercial landings of billfish by US vessels is about 2.5 million pounds in Hawai’i and an estimated 75,000 pounds in American Samoa; 25,500 pounds in Guam; and 2,500 pounds in the CNMI. Landings are higher if non-commercial catches are included. Billfish in the US Pacific Islands are caught by longline, troll, handline and purse-seine gear.

The ability to sell sustainable, high quality seafood is important to local seafood distributors in the US Pacific Islands. Billfish comprise a wide range of seafood products including sashimi, fillets, poke and smoked jerky. Billfish landed by Hawai’i commercial troll and longline vessels is currently sold in nearly all 50 states. Around 550,000 pounds, worth around $800,000 in 2016 dockside value and $2.5 million in retail value, go to seafood markets on the US continent.

In a letter sent to the Council in December 2017, Chris Oliver, Assistant Administrator for NOAA Fisheries, US Department of Commerce, said:

The United States carefully regulates domestic fisheries for billfish through the Western Pacific Regional Fishery Management Council and Atlantic Highly Migratory Species Division. … I have full confidence in these existing management processes to sustainably manage billfish populations. Current requirements for reporting domestic landings pursuant to federal fishery management plans, the [Billfish Certificate of Eligibility] COE requirement and import screening through the government-wide International Trade Data System Program also provide robust documentation and tracking of billfish products.

Since 2002, all billfish sales to the US continent from the US Pacific Islands must be accompanied with a Billfish COE, which certifies that the billfish was not caught in the Atlantic. The Billfish COE is administered by NMFS and requires the fishing vessel’s name and homeport and the offloading port and date.

Last year, NMFS published a request for comments in the Federal Register (82 FR 39412) on potential changes to the Billfish COE with regards to the development of implementing regulations for the Billfish Conservation Act of 2012. NMFS should finalize implementing regulations for the Act, including modifications to the COE as necessary. Concerns of foreign billfish being illegally laundered through Hawai’i and US Pacific Insular Areas could be addressed by improved monitoring and enforcement of the existing COE system. This alternative is a practical solution that would not unnecessarily preclude interstate commerce of high quality, domestic seafood.
American Samoa Identifies Fishery Priorities in Draft Marine Conservation Plan

American Samoa’s Department of Marine and Wildlife Resources (DMWR) has completed a draft framework of the Territory’s Marine Conservation Plan (MCP). The draft framework incorporates input from the local public and was shared with Western Pacific Regional Fishery Management Council at its 172nd meeting March 13 to 16, 2018, in Honolulu.

The draft framework lists six main objectives and 21 priority projects.

1. Maximize social and economic benefits through sustainable fisheries
2. Support quality scientific research to assess and manage fisheries
3. Promote an ecosystem approach in fisheries management
4. Recognize the importance of island culture and traditional fishing in managing fishery resources and foster opportunities for participation
5. Promote education and outreach activities and regional collaboration regarding fisheries conservation
6. Encourage development of technologies and methods to achieve the most effective level of enforcement and to ensure safety at sea

Top projects for the first objective include enhanced fishing infrastructure, such as constructing the longline dock extension in Pago Pago, and fisheries development in the Manu’a Islands. DMWR also prioritized building the capacity of local fishermen to can and pack fish, developing and identifying markets for those and other fishery resources, promoting fishing tournaments and developing mariculture technologies and broodstocks.

Priority projects for the second objective include enhanced research on stock assessments for key species, improved data collection methods, training for data staff and development of infrastructure to support data collection.

Two projects were listed to promote ecosystem-based fisheries management: 1) develop technologies to help rehabilitate corals, and 2) research and monitor red tides.

Projects to recognize island culture and traditional fisheries include promoting traditional fishing practices and beefing up data collection of fisheries with seasonal runs such as ‘atule, palolo and i’asina.

American Samoa, like Guam and the Commonwealth of the Northern Mariana Islands, is required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) to develop an MCP. The plan details the use of any funds collected under a Pacific Insular Area fishery agreement or by other means, such as contributions received in support of conservation and management objectives or fines and penalties imposed under the MSA for foreign vessel violations in the exclusive economic zone around the island.

The Council staff is currently reviewing the draft MCP for American Samoa to ensure it meets MSA requirements and is consistent with the Council’s Fishery Ecosystem Plan for American Samoa. The Council will review the next draft of the American Samoa MCP at its 173rd meeting June 11–13, 2018, on Maui. If approved by the US Secretary of Commerce, the plan will be in effect from 2019 to 2021.
The Western Pacific Regional Fishery Management Council concluded its 172nd meeting March 14 to 16, 2018, in Honolulu, delaying decision on a proposed amendment to the American Samoa Large Vessel Prohibited Area (LVPA) and taking final action on three regulatory measures and initial action on four others.

The LVPA amendment would reduce the size of the LVPA to US longline vessels in American Samoa. This fleet has been experiencing economic hardship due to declining catches and increased operating costs. The LVPA currently restricts pelagic fishing vessels larger than 50 feet in length from operating within 50 nautical miles of shore.

Council Member Christinna Lutu-Sanchez, owner of several longline vessels, reminded the Council of its obligation to apply the national standards of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including upholding a fishery’s optimum yield and removing regulatory barriers to efficient operations.

Council Member Archie Soliai, a StarKist Samoa manager, said the albacore supplied by the US-flagged fleet is needed for the cannery’s school and military contracts and some of the StarKist brands. He said it is important that the cannery receives supply from these US-flagged vessels and that they have some support and relief.

The Council deferred final action on the American Samoa LVPA in order to consider potential impacts to cultural fishing and to allow the Government of American Samoa to develop an alternative for the Council’s consideration. Final action will be considered by the Council at its 173rd meeting to be held June 11 to 14, 2018, on Maui.

The measures for which the Council took final action at its 172nd meeting include the following. They will be transmitted to the Secretary of Commerce for approval.

- **US Territory Longline Bigeye Specification:** The Council recommended that the National Marine Fisheries Service (NMFS) specify a 2018 quota of 2,000 metric tons (mt) of longline bigeye catch each for American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI) and allow each territory to allocate up to 1,000 mt of its bigeye catch limit. The Council recommended that NMFS implement these specifications by July 1, 2018. According to current stock assessments, Pacific bigeye tuna is neither overfished nor experiencing overfishing.

- **Removal of the swordfish limit for the American Samoa longline fishery when operating south of the equator:** Removing the limit would eliminate unnecessary discards and may increase the supply of swordfish for local markets and community distribution channels, while not impacting the stock, sea turtles or the enforceability of the gear requirements that have been in place since 2011.

- **Amendment to the Pelagic Fishery Ecosystem Plan (FEP) to establish an FEP framework to implement conservation and management measures adopted by the Western and Central Pacific Fisheries Commission (WCPFC), Inter-American Tropical Tuna Commission and other regional fishery management organizations (RFMOs) that authorize rulemaking consistent with the MSA, which would be appropriate for Council consideration and implementation under the MSA.** This action amends a motion of the Council adopted at its 161st meeting “to amend the Pelagic FEP to establish a FEP framework to implement RFMO conservation and management measures applicable to pelagic fisheries of the Western Pacific Region.”
The measures for which the Council took initial action are as follows. The Council is expected to take final action on these measures at its 173rd meeting.

- **Technical modifications to the Amendment 7 framework of the Pelagic FEP:** The modification would allow the Council more options when specifying pelagic fishery allocation limits for American Samoa, Guam and the CNMI. There may be instances where specifying an allocation limit without having to first specify total catch and/or effort limits would be more consistent with WCPFC and more reflective of existing fishing conditions.

- **Framework to effectively manage impacts to leatherback and loggerhead sea turtles,** while maintaining fishing opportunities during peak swordfish season. The framework may include a limit on the allowable interactions between the fishery and the sea turtles, a temporary closure when a proportion of the loggerhead or leatherback limit is reached, measures for real-time spatial monitoring and management of interaction hotspots and fluctuations, and a communication program to facilitate implementation of these measures and to disseminate interaction information to the fleet. A potential initiative could give the industry discretion to manage fleet-wide sea turtle interactions based on hard caps identified by the Council and NMFS and could include industry-implemented transferable interaction quotas or other methods, such as risk pools.

- **Establishment of an aquaculture management program for the US exclusive economic zone (EEZ) waters.** The aquaculture plan would establish a regional permitting process and provide a comprehensive framework to regulate activities so as to protect wild fish stocks and fisheries. Requirements would include a federal permit that is renewable and transferable, an aquaculture operations plan, prohibition areas, allowable species, and recordkeeping and reporting. “Supplementing the harvest of domestic fisheries with cultured product would help the United States meet consumers’ growing demand for seafood and may reduce the dependence on seafood imports,” notes Kitty M. Simonds, the Council’s executive director.

- **Reclassify hundreds of species as “ecosystem component species” and retain dozens of species as management unit species.** The species to remain classified as in need of conservation and management include about a dozen bottomfish species each found in American Samoa, Guam, the CNMI and Hawai’i as well as seven precious coral, two crustacean and three seamount groundfish species in the Hawai’i Archipelago. All of the coral reef ecosystem species would be reclassified as ecosystem component species because they are mostly caught in state/territory waters rather than federal waters. Management measures and implementing regulations would be retained for the ecosystem component species, but other federal actions would no longer be required such as stock assessments, annual catch limits and essential fish habitat designations. Final action at the 173rd Council meeting on the reclassification of the species is contingent on the completion of an environmental assessment, which is expected to be completed by June.

The Council also took action on a variety of non-regulatory actions:

- **Hawai’i Bottomfish Restricted Fishing Areas (BRFAs):** The Council reiterated its position that the State should remove all BRFAs extending into federal waters and strongly recommended that the closures in State waters also be removed.

- **Hawai’i Yellowfin Tuna Minimum Size:** Prior analysis and community scoping by the Council and the Hawai’i Division of Aquatic Resources on changing the minimum size of juvenile ahi (yellowfin tuna) indicated that an increase of the current minimum size from 3 pounds was not supported at that time as the biological benefits to resource would be minimal while the socioeconomic impacts to the community could be significant. However, the Council encouraged the State of Hawai’i to evaluate the continued use of the “damshi-type” gear that uses hundreds of hooks on a branch line to target undersized ahi (less than 3 pounds) for commercial sale. In addition to evaluating enforcement options, the Council recommended that the State consider alternate management options such as gear restrictions and/or bag limits that may address the social concerns in the fishery.

- **US Territories’ Specified Fishing Agreements:** The Council will explore options to facilitate the direct transfer of funds from Specified Fishing Agreements between US Participating Territories and Hawai’i longline vessels permitted through the Pelagic FEP.

- **American Samoa:** The Council recommended the American Samoa Government look into NOAA’s derelict vessel fund to assist in removing the grounded vessels including the foreign longline vessels in Leone and Pala Lagoon.

- **Guam:** The Council requested that NMFS, US Fish and Wildlife Service, Homeland Security and NOAA Enforcement provide federal funding for law enforcement to have a separate dock in Guam’s existing boat marinas.

- **CNMI:** The Council will encourage the Marianas Visitor Authority to use the Council-produced Fishers Code of Conduct to create a brochure to give to visitors upon their arrival to ensure proper care of the fishery resources in CNMI.

- **Marianas Trench Marine National Monument:** The Council requested that NMFS and the US Fish and Wildlife Service provide an update on the monument’s management plan and timeline for completion, including public commenting options, at the June Council meeting.

- **Advisory Bodies:** The Council supported structural changes to the Advisory Panel that would reduce the number of members in each island area from 12 to six and appoint an overall AP chair and four island area vice-chairs.
Simonds noted that the Council and the Micronesian nations, states and territories encounter similar stresses to the marine ecosystems within their respective jurisdictions. She shared that the Council has been working with the Consulate General of the FSM, the local fishing communities, the University of Guam and indigenous and Micronesian communities to address impacts of Compact of Free Association (COFA) fishermen residing in Guam and Hawai‘i. Since the COFA was enacted in 1986 for FSM and the RMI and in 1994 for Palau, the United States has supported the Micronesian communities by giving them access to US domestic programs. Most citizens of the associated states are free to live, work and study in the United States and the US Territories. An estimated 34,530 COFA islanders resided in Guam, Hawai‘i and the CNMI as of 2013. About 70 percent of compact residents are from the FSM.

Simonds reviewed several Council initiatives over the past four decades to promote environmentally sustainable fisheries management in the region and focused on three: 1) the management of the Hawai‘i longline fishery, which has been recognized as a global model; 2) the Council’s role in the creation and support of the Western and Central Pacific Fisheries Commission; and 3) the Council’s ecosystem-based approach to management through its Fishery Ecosystem Plans. Simonds also spoke about the Council’s initiatives to support cultural values and traditional practices, beginning in the 1980s, with the formation of the Fishery Rights of Indigenous People Standing Committee.

Simonds said climate change is an important indigenous issue, as indigenous coastal communities are expected to feel the impacts of climate change more severely than others. Pacific Island Countries should particularly take note that the stocks of skipjack and bigeye tuna are expected to move eastward with climate change. Skipjack tuna already move eastward during El Nino, the frequency of which is predicted to double due to climate change. The Hawai‘i longline fishery, effort has shifted from southwest of the islands in earlier years to a strong increase in effort northeast of the islands during the third quarter in recent years. The 300-meter thermocline preferred by bigeye tuna is projected to move to the northeast in response to climate change and is being tracked in the Council’s annual report for the pelagic fishery.

Other cultural values and traditional efforts by the Council include support for community-based management. This has led to finalization in Guam of the Community-Based Management Plan for Malesso Coastal and Marine Resources in 2014 and ongoing assistance to the mayor of Yigo with a similar plan for his village.

In the end, the Council is about maximizing benefits from marine resources for the good of the local people and the nation. Simonds invited the Micronesia Islands Forum to support the US goal to eliminate illegal, unreported and unregulated (IUU) fishing. She noted that the Mariana Islands have significant ocean resources including fisheries...
and marine minerals and the need for coordinated, comprehensive planning to ensure that future initiatives that access these resources are sustainable and provide the most benefits as possible to local residents.

She concluded by saying that the Council’s slogan “Fish Forever” means not only to have fish stocks forever but also for local fishermen to have access to catch fish forever and for residents to eat locally caught fish forever. Local fish is fresh, not frozen; safely harvested and processed; and comes from sustainably managed fisheries. Maintaining the ability to access fish to feed the local community is particularly important for Pacific Islands Countries and Territories in the Western Pacific where tuna distribution is projected to shift with a changing climate, she said. The fishermen, fishery scientists and local fishery managers who work with the Council have faith in the ability of men and women to wisely use our natural resources, which can be done through regulations and within a code that respects nature and moderates harvests to needs, as promoted in the Council’s Fishers Code of Conduct.

The Forum concluded with adoption of resolutions “on shifting distribution of tuna stocks and other climate change impacts on food security” and on “requesting assistance to combat illegal, unregulated and unreported fishing in Micronesia.”

Looking for a Few Good Advisors!!!

Do you fish? Do you want to get involved in managing marine resources? Then the Western Pacific Regional Fishery Management Council wants you! Fishermen, members of fishery-related industries and other individuals from fishery or marine-related organizations are invited to apply for membership on the Council’s Advisory Panel (AP). Advisors provide management suggestions and insights to the Council on all aspects of the region’s fisheries.

The AP’s three sub-panels focus on the American Samoa Archipelago Fishery Ecosystem Plan (FEP), Hawai‘i Archipelago and Pacific Remote Island Areas FEP, and Mariana Archipelago FEP. Each sub-panel also deals with the Pelagic FEP.

Applicants will be considered based on the following selection criteria:

- Present or recent activity in recreational, commercial or subsistence fishing;
- Present or recent involvement in the buying, processing or marketing sectors of the fishing industry and/or involvement in conservation or management organizations, fishing clubs or other organized groups concerned with marine or fisheries issues;
- Willingness to play an active role in fisheries management; and
- Ability to dedicate time for fishery document review and participate in meetings.

The AP term is four years and commences Jan. 1, 2019. Positions are voluntary (not paid). However, members are reimbursed for expenses related to their participation in meetings.

Applications are being accepted electronically and can be found at www.wpcouncil.org/2019-ap-application/. For those who may need other arrangements, please call the Council office at (808) 522-8220 for assistance. Completed applications must be received by the Council before Sept. 1, 2018.
**RECIPE**

Marlin Poke with Tobiko Drizzle, Taro Chips and Black Sesame Seed Garnish

Serves 6

*Courtesy of Kusuma Cooray (Professor, Culinary Institute of the Pacific, University of Hawai‘i, and Maître Rôtisseur and Conseiller Culinaire Provinciale, Chaine des Rôtisseurs, Hawaii-Pacific Region)*

**Ingredients**

- 1½ lbs marlin fillet, cut into ½” cubes and chilled
- ½ cup green onions, chopped
- 2 tbsp roasted sesame seed (optional)
- 1 tsp low sodium soy sauce
- 2 tbsp sesame oil
- ¼ cup red ogo (seaweed), chopped
- 1 tsp dried chili flakes
- 1 tsp inamona (traditional Hawaiian condiment made from roasted, ground and seasoned kukui nut meat) (optional)
- 1 tbsp Hawaiian salt
- 2 tbsp olive oil
- 2 tbsp tobiko (flying fish roe)
- 6 large taro chips
- 1 tsp roasted black sesame seed

**Method**

Place fish in chilled bowl. Add green onions, sesame seed, soy sauce, sesame oil, ogo, chili flakes, inamona and Hawaiian salt. Toss to combine the fish with the seasonings.

**Plating**

Spoon the fish (poke) to chilled serving plates. Combine the olive oil and tobiko, and drizzle around the poke. Garnish the plates with taro chips, and sprinkle plates with black sesame seeds.

For other fish recipes from the Pacific, download the Fish Forever Favorites booklet at www.wpcouncil.org/education-and-outreach/educational-library/.

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**Council Family Updates**

REAR ADM. BRIAN K. PENOYER is assuming command of the US Coast Guard, 14th District, and will be replacing Rear Adm. Vincent B. Atkins as the non-voting Council member representing the Coast Guard.

MICHAEL SEKI, director of the NOAA Pacific Islands Fisheries Science Center (PIFSC) joins the Scientific and Statistical Committee as an ex-officio member.

RYAN OKANO, PhD, an aquatic biologist with the State of Hawai‘i Division of Aquatic Resource, replaces retiring Jo-Anne Kushima and Alton Miyaska on the Plan Team.

MELANIE HUTCHINSON, PhD, replaces Carl Meyer, PhD, on the Protected Species Advisory Committee.

KIM AL’ITASI MCGUIRE of the American Samoa Department of Marine and Wildlife Resources joins the Marine Planning and Climate Change Committee.

TIA BROWN of NOAA PIFSC joins the Education Committee.

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**2018–2019 US Pacific Islands Fishery Scholarship Recipients Announced**

The Western Pacific Regional Fishery Management Council is pleased to announce the recipients of the 2018–2019 US Pacific Islands Territories Fishery Capacity-Building Scholarships. The scholarships are offered annually to college students with close connections to American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI) who are pursuing degrees that will bolster the Territories’ capacity to manage their fishery ecosystems. Students who accept a scholarship agree to work with their local fishery agency for an equivalent amount of time that they receive the scholarship.

The 2018–2019 recipients include Katelynn Delos Reyes (CNMI) who will be pursuing a bachelor’s degree in oceanography with a concentration in fisheries science at Hawai‘i Pacific University (HPU); Andrew Kang (Guam) who is pursuing a master of science degree at the University of Guam; and Duncan Sevaaetasi (American Samoa) who is pursuing a bachelor’s degree in marine biology at HPU.

Since inception of the scholarship program in 2016, three recipients have graduated and are now fulfilling their work requirements in American Samoa and the CNMI and three recipients are completing their course work and are poised to graduate in 2018 (two students) and 2019 (one student).

The scholarship program was established through a memorandum of understanding involving several federal agencies, the local fishery agencies in the Territories and several colleges and universities in Hawai‘i and the Territories. It is funded by the Council, NOAA Pacific Islands Fisheries Science Center and NOAA Pacific Islands Regional Office. For more information, contact Sylvia Spalding at info.wpcouncil@noaa.gov.

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**Postcard from the Pacific**

The winning circle of the San Jose Fiesta Derby held May 5, 2018, in Tinian, Commonwealth of the Northern Mariana Islands, included Diomedes Patio of Team Patio Brothers taking home the billfish category with a 106.65-pound marlin; George Moses of Team Sweet Candy with a 78.25-pound yellowfin tuna; Kervin Yamada, James Reberto and Capt. Paul Reberto of Team Conservation Minded hauling in 20.55-pound skipjack tuna; Bernardo Ragu of Team San Antonio with a 26.60-pound mahi; Rico Lagunay of Team SMA with a 25.60-pound wahoo; and Ray Yumul and the Lt. Gov. Victor Hocog Team Villa Marie taking home the side bet. Pictured are the side-bet winners Yumul (left) and Lt. Gov. Hocog (right) with their catch of skipjack tuna and a marlin.

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**Fish Forever**

**Favorites**

For other fish recipes from the Pacific, download the Fish Forever Favorites booklet at www.wpcouncil.org/education-and-outreach/educational-library/.

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US Sen. Daniel Kahikina Akaka will be remembered as one of Hawai‘i’s finest diplomats, who shared the spirit of aloha and recognized the importance of family, tradition and culture in all aspects of his life’s work. During his distinguished career in Congress, Sen. Akaka provided unwavering support to the Western Pacific Regional Fishery Management Council, the US Pacific Islands fishing communities and the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Sen. Akaka’s core value to recognize and include the local people parallels the bottoms-up approach of the MSA, which includes provisions that recognize traditional fishing practices and provides benefits for the indigenous people of Hawai‘i, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands.

The NOAA Fish Fry will surely miss the Akaka ‘ohana and other distinguished guests who would join Council members and staff along with famous chefs from Hawai‘i and the US Pacific Islands in the Department of Commerce courtyard to showcase and celebrate our islands’ freshest, sustainable and mouth-watering seafood.

In retirement, Sen. Akaka remained steadfast in supporting the local community by joining former Hawai‘i Governors George Ariyoshi and Benjamin Cayetano in opposing the federal expansion of the Pāpahānaumokuākea Marine National Monument from 50 to 200 nautical miles offshore. Sen. Akaka blessed the Council with his presence at the 40th anniversary celebration of the MSA and the Council’s existence. Sen. Akaka championed every opportunity to provide the people of Hawai‘i the ability resolve tough issues through local governance. The Council’s thoughts and prayers are with him and his family. His rich life and legacy will be celebrated today and for generations to come.
Upcoming Events

173rd meeting of the Western Pacific Regional Fishery Management Council
The Council will convene its Executive and Budget and Legislative Standing Committees on June 10, 2018, and the full Council from June 11 to 13, 2018, at the Wailea Beach Resort – Marriott, 3700 Wailea Alanui Dr., Kihei, Maui. The Council will consider and may take final action on the following measures:

- **Annual Catch Limits for Main Hawaiian Island Deep 7 Bottomfish for Fishing Years 2018–2019, 2019–2020 and 2020–2021.** Based on the best scientific information available, the estimated overfishing limit is 566,000 pounds and maximum sustainable yield is 509,000 pounds. The Council will consider a risk level recommended by its Scientific and Statistical Committee based on scientific uncertainty. The Council will consider taking final action to specify annual catch limits and accountability measures to prevent overfishing of the stock.

- **Managing Sea Turtle Interactions in Hawai‘i:** The Council will consider a framework for managing loggerhead and leatherback interactions in the Hawai‘i shallow-set longline fishery, while maintaining fishing opportunities during the peak swordfish season. The framework may include (a) specification of hard caps, (b) in-season measures to implement a temporary closure when a certain proportion of the loggerhead or leatherback limit is reached, (c) real-time spatial management measures to monitor and manage interaction hotspots, and (d) non-regulatory components including a pilot program that utilizes fleet communication program to facilitate implementation of real-time spatial management measures and dissemination of interaction information to the fleet.

- **American Samoa Large Vessel Prohibited Area (LVPA):** The Council will consider LVPA options that may improve economic efficiency of the larger longline vessels while taking into consideration, among other things, the need to prevent overfishing, impacts on small vessels and protecting American Samoa cultural fishing practices. This action addresses continued poor economic performance in the American Samoa longline fishery and regulations that may unnecessarily restrict fleet movement and harm fishing efficiency. The options run the gamut from maintaining the 50-nautical mile (nm) LVPA around Tutuila, Mau‘a ‘a Islands and Swains Island to reducing the LVPA to 12 nm around these islands.

- **US Participating Territory Catch and Effort Limit Amendment 7 Framework:** Amendment 7 to the Pelagic Fishery Ecosystem Plan (FEP) established a process to specify catch and/or effort limits for pelagic fisheries in American Samoa, Guam and the Commonwealth of the Northern Mariana Islands (CNMI), known collectively as the US Participating Territories. The process also allows the National Marine Fisheries Service to authorize the government of each US Participating Territory to allocate a portion of its catch or fishing effort limit of pelagic management unit species to a US fishing vessel permitted under the Pelagic FEP through specified fishing agreements to support fisheries development in the US Participating Territories. The existing regulations require that the Council first establish a catch limit for the US Participating Territories if also specifying an allocation limit. The Council will consider technical modifications to the Amendment 7 framework and associated regulations to allow more options in the specification process.

- **Ecosystem Component Species Classification:** The Council proposes to amend the American Samoa, Hawai‘i and Marianas (Guam and CNMI) FEPs to reclassify certain management unit species (MUS) as ecosystem component species (ECS). The ECS reclassifications would improve efficiency of fishery management in the region by allowing the Council and NMFS to better prioritize monitoring, assessment and management resources on MUS that are in need of conservation and management.

- **Evaluation of 2017 Catch to the 2017 Annual Catch Limits:** The catches of stocks that are managed by ACLs are annually evaluated to determine if an overage adjustment needs to be applied. Based on the Council’s recommendation from its 160th meeting, the 2017 ACLs were evaluated against the three-year running average of the catches (2015 through 2017). The CNMI exceeded its ACL of 60 pounds for slipper lobster with a three-year average catch of 130 pounds. The estimated landing in 2017 from the commercial receipt books was 86 pounds. The Council may recommend that NMFS either keep the slipper lobster ACL at 60 pounds due to improvements in the fishery data collection or to reduce the ACL by the amount of the overage and set the ACL to 0 pound for the following fishing year.

- **Aquaculture Management:** The Council may select a preliminary preferred alternative for a federal management program to develop a sustainable aquaculture industry in the US exclusive economic zone (EEZ) waters around American Samoa, Hawai‘i, Guam, the CNMI and the Pacific Remote Island Areas. An aquaculture management program is needed to provide the Council and NMFS with a framework for review and authorization of the location, method and extent of aquaculture projects in federal waters of the US EEZ.

- **American Samoa Marine Conservation Plan:** The Council will review a three-year Marine Conservation Plan (MCP) developed by the American Samoa government that provides details on uses for any funds collected under a foreign fishing agreement or from fines and penalties from violations within the US EEZ around American Samoa. Upon concurrence by the Council, the MCP can be transmitted to the Secretary of Commerce for final approval.

For a copy of the agenda with meeting times, a more in-depth summary of the action items and other informational documents, go to the Calendar and Meetings tab at www.wpcouncil.org.

**Fishers Forum on Hawai‘i Bottomfish:** As part of its 173rd meeting, the Council is hosting *Going Deep: Hawai‘i’s Bottomfish Story*, a free, family friendly evening from 6 to 9 p.m. June 11 at the Maui Beach Hotel Ballroom, 170 W. Kaahumanu Ave., Kahului, Maui. Fishermen and members of the public will learn about the evolution, monitoring, research and management of the fishery. The Forum will begin with an open house featuring eight information booths; continue with presentations on the culture and tradition of the fishery, the former Northwestern Hawaiian Islands fishery, a new benchmark stock assessment of the main Hawaiian Islands Deep 7 bottomfish complex and running a successful seafood business; and conclude with a question-and-comment period and door prize drawings.

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**2018 Council Calendar**

**Upcoming Events**

**June**

6–8
129th Scientific and Statistical Committee, Kihei, Maui

10–13
173rd Western Pacific Regional Fishery Management Council, Kihei, Maui

11
Fishers Forum, Kahului, Maui

**July**

14–15
Saipan International Fishing Tournament, Saipan, CNMI

**August**

4–11
Hawaiian International Billfish Tournament, Kailua-Kona, Hawai‘i

8–16
14th Scientific Committee, Western and Central Pacific Fisheries Commission, Busan, Korea

24–30
93rd Inter-American Tropical Tuna Commission, TBD

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