CHAPTER 1

Native Commercial Fishing and Indigenous Debates over Regulations in the U.S. Pacific

Multiple entities have a stake in the waters around American Sāmoa. At the federal level, the National Oceanic and Atmospheric Administration (NOAA), an arm of the U.S. Department of Commerce, has overall jurisdiction for waters surrounding American Sāmoa, specifically under the office of NOAA Fisheries. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), controls the ocean from three to two hundred miles offshore, known as American Sāmoa's Exclusive Economic Zone (EEZ). The NMFS also manages the use of the high seas through international treaties and agreements. The goal of NOAA Fisheries is "stewardship of the nation's ocean resources and their habitat. . . . productive and sustainable fisheries, safe sources of seafood, the recovery and conservation of protected resources, and healthy ecosystems—all backed by sound science and an ecosystem-based approach to management."[1] The NMFS aims to protect ocean resources for human consumption and long-term preservation grounded in scientific research. The Western Pacific Regional Fishery Management Council (Wespac) is the local arm of NOAA Fisheries in American Sāmoa and the wider U.S. Pacific.[2] While Wespac can make policy recommendations, only the NMFS can create laws. However, regulations cannot be changed without being reviewed by the Council.

In American Sāmoa, the local government's Department of Marine and Wildlife Services (DMWR) creates its own regulations for ocean use from the shore to three miles out. As an unincorporated territory of the United States, Federal Public Law 93-435 designated the American Sāmoa Government (ASG) as the administrator of all submerged lands from the mean high tide line out to the limit of the territorial sea, including mineral rights.[3] This Western-based shared structure of ocean control due to U.S. colonial status has resulted in several debates and complications over fishing policies.

With the boom of commercial angling in the Pacific since the 1980s, fishing regulations have increased in the waters around American Sāmoa. Some say open admission for all types of fishers will result in overfishing. Others believe there are plenty of fish in the ocean for everyone. This chapter examines the two major types of indigenous commercial fishing that developed in the second half of the twentieth century and are intimately involved in debates over angling policies: small-scale alia fishing boats and mid-sized ships, known as large-vessel longliners. Overall, the U.S. federal government encouraged a transition from subsistence fishing and other traditional livelihoods to a cash-based export economy and Western-style fishing techniques in this region. Since 1976, the NMFS, not the local indigenous population, has controlled the management of who gets permission to use most of the ocean spaces surrounding the unincorporated U.S. territory of American Sāmoa.

Often, the general public is unaware of the processes that fish in their local restaurants and supermarkets go through to end up on their dining tables. This chapter provides details on the chain of events, people, and regulations involved in the fishing industry to highlight the connection between global food consumption demands and the historic, as well as current, colonial implications of this commercial venture in the U.S. Pacific. While NOAA agencies position themselves as the best guardians to prevent overfishing, Western seafood consumption is also a main contributor to the problem. From January to September 2017, approximately 152 million tons of fish were caught for human consumption.[4] In the twenty-first century, Asia, Europe, and the United States have been major consumers of seafood. In this context, American Sāmoan fishers work hard to make a living and provide for their families through Western-style commercial fishing for the cash-based market economy introduced and supported by the U.S. federal government.

As subjects of the United States, these indigenous anglers call upon colonial management structures to protect their livelihoods while also vocally protesting federal infringements on their native rights to fish in their local, ancestral waters. Even though NOAA Fisheries tries to accommodate native desires while maintaining overall control, the diversity of positionalities among American Sāmoan fishers has placed one group against the other. Violations of *vā fealoa'i* (respectfully maintaining proper social relations) have also created tensions between alia fishers and federal government representatives. Policies developed in this region impact nonnative fishers in the U.S. Pacific as well, adding yet another layer of influence on this total bioregion (all ecological and cultural relationships) of international fishing and fish consumption.

Historical Forms of Fishing

Fishing has always been a part of Sāmoan culture. Texts by Augustin Krämer, Te Rangi Hiroa (also known as Peter Buck), and Lowell Holmes, as well as research by Karen Armstrong, David Herdrich, and Arielle Levine, have all outlined traditional practices based on the communal village system.[5] According to Armstrong, Herdrich, and Levine, "there were common fishing techniques—gleaning, diving, rod and line, netting and trapping (including communal fish drives), and boat fishing—throughout the Samoan islands but there were also slight differences in practices according to particular village rules and techniques related to the habits of the marine resources."[6] Regardless of the angling tools used, fishing was central to life in the Sāmoan islands.

In a global context, anthropologist Brian Fagan stated, "How little the methods and technology have changed over thousands of years. The net, the spear, the hook and line, and the trap were the fishing tools of prehistory; they are still the tools today. What mattered were experience, careful observation, knowledge of the environment, and familiarity with the potential catch. This was the closely held expertise that passed from generation to generation, rarely to others."[7] Developed knowledge of the local waterscape and behaviors of birds were passed on from generation to generation within fishing families across the world as well as in American Sāmoa.

For example, Afoa Lutu, a former alia fisherman and an American Sāmoa *Fono* senator, talked about using visual cues to find traditional fishing spots. He started fishing in the late 1980s and explained how fish was plentiful at the time. He stated how American Sāmoan fishers are navigators who "learn to use the moon and stars around South bank. There's nothing around it. We used stars before modern instruments were available. Mountains and other points for navigation" as well.[8] Detailed knowledge about the contours of the physical environment has always been key to fishing success.

Others interviewed also mentioned the use of a flock of birds over banks to indicate the location of fish, another traditional Sāmoan fishing skill.[9] Some fondly remembered group bonito boat fishing that involved following sea birds in *vaʻaalos* (offshore canoes) to hunt for sea life, including sharks. According to scholars Craig Severance and Robert Franco, "for a long time before Western contact, and up until the 1950s in Tutuila, and even into the 1960s and 1970s in Manuʻa, American Samoan fishermen pursued atu [bonito] in offshore water using specialized canoes and gear as an expression of the strength and skill of the crew and tautai" (the recognized village fishing expert).[10] For centuries, this

type of ocean activity was engrained in native masculinity, indigenous social and political hierarchies, as well as community functions in Sāmoan villages.

Prior to the introduction of motorized boats in 1972, Sāmoans paddled out in *paopaos* (small outrigger canoes) to fish, usually going out three to four miles and maxing out at about five miles from shore. According to Vaʻamua Henry Sesepasara, the Governor's Advisor on Fisheries and DMWR director, about 90 percent of the catch from these manually powered traditional vessels went to cultural use.[11] Cultural use includes providing fish for weddings, funerals, the bestowment of chiefly titles, church fundraisers, and other community gatherings. Involvement in these activities were part of *vā fealoaʻi* and *faʻa Sāmoa* (the Sāmoan way of life) discussed in the introduction.

In American Sāmoa, the annual highlight of fishing involved the once-a-year catches of *atule* (bigeye scad) and *palolo* (sea worms). *Atule* were "often caught by using a communal effort—*lauloa*—of driving the fish towards a trap with branches" while *palolo* were traditionally "caught in small funnel-shaped baskets."[12] These seasonal runs required group participation and represented the social blessings, prosperity, as well as the unity and identity of a village: in other words proper *vā* (social relations).

The type of fish gathered has also remained constant over the years. According to P. Craig, A. Green, and F. Tuilagi in 2008, "the current composition of fish harvested was also similar to that previously found in a nearby archeological excavation dated 1,000–3,000 years ago. These findings indicate that the harvest has been sustainable over the millennia."[13] Fagan also explained how "subsistence fishing, what one might informally call fishing for one's dinner, is almost as old as humanity."[14] Angling for familiar species has been a cornerstone for long-term and persistent marine lifeways in Sāmoa and across the globe.

While the kind of fish has been steady over the years, the style of fishing started to shift in the mid-twentieth century. According to Arielle Levine and Stewart Allen, "by the 1950s, many of the small boats in American Sāmoa were equipped with outboard engines, modern steel hooks were used rather than pearl shell, and monofilament fishing lines had replaced hand woven sennit lines."[15] Outboard engines enabled fishers "to travel farther offshore in shorter time periods. With this technological boost came additional costs in the form of fuel and engine maintenance. Fishermen offset these costs by selling portions of their catch for a profit. These changes initiated a divergence from traditional fishing activities to more of a commercial enterprise."[16] By 1961, only approximately ten traditional-style canoes regularly fished around the main island of Tutuila.

In addition to diversified fishing techniques, the American Sāmoa Govern-

ment requested the predecessor to NOAA, the Bureau of Commercial Fisheries, to conduct a study on ways to increase local fishery production in the region in 1961. This survey, known as the Marr Report, resulted in multiple projects that introduced Western fishing styles, as well as spurred the growth of local commercial fishing. New types of bottom-fishing and deep sea fishing, as well as new techniques such as fish exporting, long-lining, and fish farming were all tried and supported by the U.S. federal government from 1961 to 1987 to expand for-profit fishing in the region.[17]

Types of Commercial Fishing in American Sāmoa

"Fisheries" is a term that can describe multiple aspects of ocean use. In one sense, a fishery can be a regional concept, meaning the actual latitude and longitude of fishing grounds or the distance of a section of water from land (fishing from shore, just offshore, or in international waters). A fishery can also refer to a type of angling, whether trolling, bottom-fishing, long-lining, or purse seining, all discussed in this chapter. A fishery can be a classification of fish: reef, bottom-feeder, or migratory. Fisheries can also be the level of water that fish are caught at, such as the top level of water, the center column of water (known as pelagic), and the ocean floor. All of these definitions come into play in the deliberations and discussions over marine practices in American Sāmoa.

With fishing already a part of indigenous life in American Sāmoa, the U.S. federal government's encouragement of commercial fishing for local and global markets through the use of Western techniques and technology could provide a profitable and easy transition for some indigenous fishers into the cash-based market economy, especially with the growth and dominance of tuna canneries on Tutuila after World War II (also supported by the U.S. federal government).[18] Two types of Western-style local commercial fishing predominate in the waters surrounding American Sāmoa: bottom-fishing and pelagic fishing. While some fishers associate bottom-fishing with subsistence fishing and long-lining with commercial fishing, bottom-fishing can also be used for commercial fishing.[19] Bottom-fishing generally yields commercial fresh fish and pelagic fishing mostly produces flash-frozen fish for canning.

Bottom-fishing involves the use of weighted lines with a hook to catch fish that feed close to the ocean floor. Bottomfish in American Sāmoa typically include snapper, jobfish, bream, grouper, and amberjack. Historically, bottom-fishing was profitable during three different periods in American Sāmoa: 1982 to 1988 (garnering up to 50 percent of the commercial market share during that

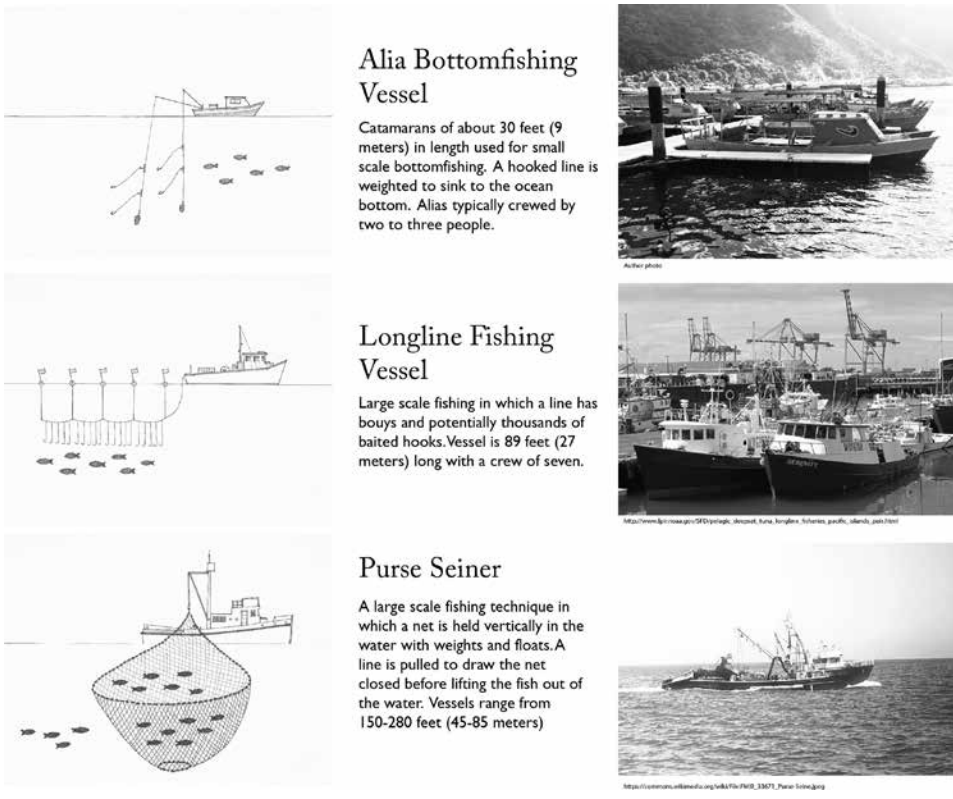

FIGURE 1.01. Major fishing and boat styles in American Sāmoa.
(Created for author by Michael Pesses and illustrated for author by Joanna Sokua.)

period), 1994 to 1997, and 2000 to 2002.[20] However, this kind of catch in the region has never been sustainable long-term due to "limited nearshore bottomfish habitat."[21] Fisheries scientist David Itano found that "the promotion of domestic bottom fishing in American Samoa has been so successful that some of the local bottom fish grounds have become significantly depleted."[22] Over time, the availability of fresh fish from nearby Independent Sāmoa, as well as more profitable yields from pelagic longline fishing for canneries, also contributed to the reduction of bottom-fishing efforts in American Sāmoa.

In this unincorporated territory of the United States, pelagic fishing usually occurs through trolling or long-lining methods. Trolling was the main pelagic fishing method in American Sāmoa until long-lining started in 1995. Trolling

involves one or more lines with lures or bait being dragged from behind a boat to simulate a school of small fish to attract bigger fish. Yellowfin and skipjack tuna have made up most of the trolling landings in the region. According to Levine and Allen, "In 1986, when trolling was the only pelagic fishing method, 53 trolling boats landed 137,100 pounds of skipjack tuna and 54,622 pounds of yellowfin tuna. In 1996 when longlining was just getting started, these two species comprised 75% of the trolling landings. . . . By 2001, when longlining became the dominant fishing method in American Sāmoa, the number of trolling boats and their total catch dropped dramatically. Only 18 boats were engaging in trolling."[23] This fishing method dominated the industry in the region for over fifteen years until the newer, more intense, and more effective process of long-lining developed. Today in American Sāmoa, fishers mostly engage in trolling for personal use.

Starting in 1996 and continuing through today, long-lining has been the leading form of local commercial fishing in this unincorporated U.S. territory. Since the introduction of this Western technique, "the fleet grew rapidly with the addition of new alias up to about 38 feet in length and, more significantly, with the addition of other larger monohull vessels that fished much longer trips. The primary target species for longline vessels is albacore tuna for delivery to the canneries" along with yellowfin tuna, bigeye tuna, wahoo, blue marlin, mahimahi, and some other incidentally caught species.[24] Both alias and large-vessel longliners use long-lining in American Sāmoa.

Long-lining has been popular among local fishers "because they catch more fish with less effort and gas consumption."[25] This particular fishing method involves "a mainline longer than 1 nautical mile suspended horizontally in the water column, anchored, floating, or attached to a vessel, and from which branch or dropper lines with hooks are attached."[26] While many sizes of ships use this fishing technique, "longline fishing using *alia* vessels is generally a small scale operation, typically setting approximately 350 hooks per set and hauling the gear with hand-operated reels."[27] In contrast, a larger longliner boat will have 1,600 to 2,000 hooks and mechanized reels.

According to Levine and Allen, five longline vessels began fishing in American Samoa in 1995. The researchers found that "2001 was marked by a peak in the number of longline vessels fishing in American Samoa, and an abrupt shift towards tuna as the dominant species caught. The number of larger boats had swelled to 32 and the number of alias grew to 35, and the average number of hooks per set climbed to 1200 (for alias and large boats combined). The large monohulls now accounted for 88% of the catch."[28] The year 2002

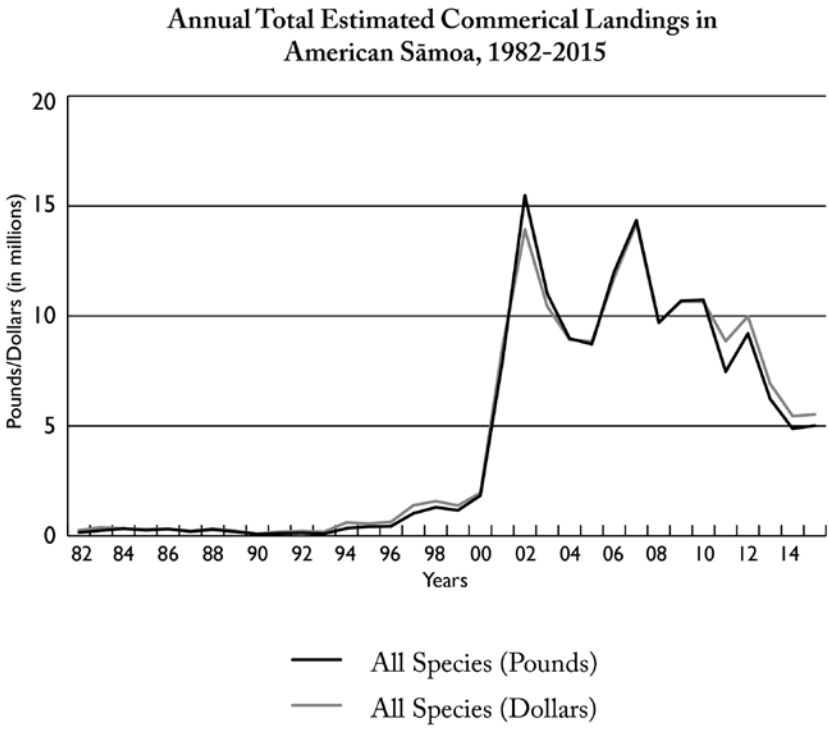

FIGURE 1.02. (Created for author by Michael Pesses.)

was the peak of fish landings in American Sāmoa at 15,482,079 pounds worth $13,924,701.[29] While the most lucrative year for fishing in American Sāmoa was 2007, with 14,366,471 pounds landed at $14,205,971, other high-revenue years over $10 million included 2003, 2006, 2009, and 2010.[30]

In a global historical context, American Sāmoa did not get involved in the commercial fishing industry until other fisheries had become depleted. According to Fagan, "since the Industrial Revolution the strategy of intensified fishing to feed more people has mushroomed into a major international industry" and by the eighteenth century, signs of overfishing were developing.[31] The development of new fishing technologies also increased the reduction of fish stocks and the destruction of marine environments in the Atlantic and the North Pacific. "With the adoption of steam power in the 1830s and 1840s and then, a century

ago, the diesel-powered trawler, fishermen could stay far offshore for much longer periods, icing their catch as they worked. . . . With the development of modern-day trawls and purse seines, encircling nets first used in the 1850s, fishing became . . . an efficient way of exploiting the ocean on an industrial scale."[32] More ships were sailing farther into the ocean to catch more fish to feed the ever-rising market demand for seafood consumption.

Fagan also highlighted how "after World War II fishing became a fully industrial business, with Japan leading the way."[33] Wartime technology developments such as radar and sonar were now being used to locate fish.[34] Mansel Blackford also described how "Hydraulic power blocks, which came into use in the 1950s, assisted in pulling some nets on board the vessels. No longer did all the work in lifting nets have to be done by hand."[35] Such mechanization resulted in a massive increase in fishing intensity and effectiveness. According to Blackford, "between 1970 and 1995, the number of commercial fishing vessels increased from 451,000 to 885,000, and their aggregate size from 11.6 million to 23 million gross registered tons."[36] Such increases in angling placed global fisheries on an unsustainable path of resource extraction.

At the same time that commercial fishing was increasing in the Pacific, the world was becoming more concerned with environmental issues, such as pollution and overfishing. Western nations started to develop regulations to address various forms of ecological degradation. Spurred by Rachel Carson's book *Silent Spring,* published in 1962, an environmental movement developed in the United States. The National Environmental Policy Act, which created a federal policy to "encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality," was passed in 1969.[37] The U.S. Environmental Protection Agency (EPA) was formed in 1970. This administration's charge includes "a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. Since its inception, EPA has been working for a cleaner, healthier environment for the American people."[38] Ironically, most of the environmental destruction targeted by this administrative unit was actually caused by historic U.S. resource needs, policies, and consumption.

In the fishing realm, between 1976 and 1977, the United States, Canada, the Soviet Union, and North Korea all declared Exclusive Economic Zones (EEZs).

For two hundred nautical miles from their territorial seas, each nation claimed sovereign rights over the natural resources within those waters, as well as the ability to regulate activity in those areas. Today, EEZs, "which include most continental shelves, contain an estimated 75–90 percent of the world's commercial fish."[39] However, these initial moves to control vast swaths of ocean often involved nationalist protectionist motivations rather than ecologically minded goals.

For example, the United States' EEZ was created at a time when the "U.S. economy in 1976–77 was just emerging from a deep recession, and the FCMA [Fisheries Conservation and Management Act] won noncontroversial congressional approval mainly as a jobs bill."[40] Politicians supported this legislation to manage fish and other species in the EEZ, because such regulations would create a variety of jobs through various aspects of the fishing industry, from fishers and processors to distributors and industry support services, like gas, bait, and repairs. In fact, the Fisheries Conservation and Management Act, also known as the Magnuson-Stevens Act, did not prioritize the conservation of fishery resources until the passage of the Sustainable Fisheries Act in 1996.

This amendment aimed to sustain "participation of fishery dependent communities and minimize economic impacts to those communities and minimize by catch and its mortality. . . . identify overfished species and take action to rebuild those stocks. . . . establishes a fishing capacity reduction program [and] mandates research on fishery management/conservation and the economics/social characteristics of the fisheries."[41] Until this shift in approach for the U.S. Fish and Wildlife Service (USFW), as will be discussed later in this chapter, decisions made by the Regional Fishery Councils often benefited larger, for-profit fishing industry businesses. American Sāmoa's local commercial fishing industry developed within this wider international and historic context of long-term overfishing and new efforts to regulate and control future angling.

In the 1980s, confrontations between American fishers and Pacific coast Latin American countries also developed. Boat seizures, the firing of weapons, and fines for regulation violations escalated in the Exclusive Economic Zones of Ecuador, Chile, and Peru.[42] Such tensions encouraged U.S. tuna fishers to relocate to the western Pacific, where two-hundred-mile EEZs were harder to enforce over long distances for Pacific Island nations. The United States also had its own Exclusive Economic Zone waters around their Pacific territories, like American Sāmoa.

Alia Efforts

With fishing in eastern Pacific waters restricted from the United States, and Americans having access to the EEZs in their colonized parts of the Pacific, angling efforts within U.S. waters became more important for the U.S. fishing industry. The first official attempt to commercialize fishing in the unincorporated territory of American Sāmoa occurred with the Dory Project in the 1970s. According to Blackford, American fishers used dories since the first commercial fishing efforts in Alaska in 1888. These anglers "dropped long, baited lines to the sea bottom and soaked them there for several hours to attract halibut. They pulled up the lines hand-over-hand or through hand-cranked rollers, took the fish off the hooks, and rowed or sailed back to their schooners, where they cleaned and iced the halibut before returning to port. Hours were long, and work was physically demanding."[43]

Close to one hundred years later in American Sāmoa, the territorial government encouraged this same style of commercial bottom-fishing among native people to help supply Tutuila's tuna canneries. In 1972, the American Sāmoa Office of Economic Opportunity started the Dory Project, which provided "easy credit and loans to fishermen to develop offshore fisheries. The project developed a boat-building facility that produced 23 vessels over a 3-year period. These dories were made available to local residents interested in commercial fishing on the understanding that the cost of materials and construction costs would be paid back to the government at a low rate of interest generated by fish sales."[44]

This initiative ultimately failed due to the inability of fishers to keep up with the costs of constant boat repairs. Itano stated that "a wide range of mechanical problems beset several dory owners and many of the dories were out of service for extended periods of time. . . . After the first few years, the lack of routine maintenance on many of the dories took a heavy toll on dories that eventually became unserviceable and some were out of service due to repossession for failure to pay the vessel loans."[45] Wespac American Sāmoa Advisory Council member William Sword also explained how dory boats were small and mostly good for bottom-fishing.[46] These vessels could not handle rough seas and the fishing gear involved hard labor because of manually operated cranks. Only twenty-three boats were purchased in total and all were defunct by 1980.[47]

According to Levine and Allen, "in the 1980s, dories were replaced by alia catamarans, larger, more powerful boats that could stay multiple days at sea. Alias were usually 28 to 32 feet long and powered by an outboard engine."[48] This particular design came from independent Sāmoa. Navigation on these double-hulled

aluminum boats with fiberglass or wood superstructures "was visual, using landmarks. Fishing gear was stored on deck, including a hand-crank reel which could hold between two and ten miles of monofilament mainline."[49] Despite new vessel and fishing gear technology, American Sāmoan fishers still relied on observation and past experiences with angling in the area. As Fagan explained, the art of "knowing when and where to look" has always been an important skill for small-scale fishing success throughout time and across the globe.[50]

A variety of definitions exist for small-scale fisheries. According to marine science scholar Theodore Koboski, "while vessel size was typically an indicator of a small-scale fishery, differences in the types of technological complexity, capital investment, and market structure within small-scale fisheries" should also be taken into account.[51] Alias have been central to the commercial small-scale fishery in American Sāmoa that supplies both the canneries in Tutuila and fresh fish for local consumption. Equipment on alias remain relatively modest, with costs for maintenance and market fluctuations often having negative impacts on continued participation in commercial fishing.

In the beginning of alia fishing in American Sāmoa, trolling and bottom-fishing were the preferred catch methods, with spearfishing, netting, and vertical long-lining used occasionally. In 1995, "some alia captains began using horizontal longline gear."[52] This change in fishing technique, though still mostly manual, significantly increased catch rates for these indigenous small-scale fishers. According to a Wespac report, alia long-lining "trips were 1 day long (about 8 hours). Setting the equipment generally began in the early morning and hauling was generally in the midday to mid-afternoon. The catch was stored in boxes built into the hull of the boat or in portable coolers or freezer chests."[53] In 2005, the alia fleet on Tutuila usually consisted of three-man crews who fished eleven hours per trip and caught about 173 pounds of fish on average. The Manuʻa-based fleet typically had two-man crews, fished about five hours, and landed around eighty-one pounds of fish.[54]

According to Koboski, "The typical alia vessel held just about one ton of albacore tuna (the target species of the alia fleet), and fish were stored on the boat in each hull of the catamaran. Once the vessel was back at port, the fish were transferred to freezers, usually located at the fisherman's place of residence. One fisherman reported having as many as seven deep freezers to store his catch. Once the freezers reached capacity, the fishermen would transport their catch to the canneries on the island, where it was sold."[55] The entire process involves less technology compared to large-vessel long-lining vessels and purse seiners.

At the time of this research, Alvin "Eo" Mokoma was the most active alia

fisher in American Sāmoa. He started long-lining from alia boats in 1995.[56] Mokoma worked his way up to owning four boats, all of which he ran until the 2009 tsunami. Two of his boats were destroyed during this catastrophe. In the summer of 2016, he used one of his remaining boats for commercial long-lining and the other for bottom-fishing for personal use. Mokoma discussed how "if I make a penny from my small alia, then I'm happy." He, like many others interviewed, acknowledged that being "a fisherman is not easy. You have to look for fish, it's not an easy job."[57] To be effective, a fisher has to love fishing, crave the ocean, and know go where the fish go.

Maʻa Maea, who was the secretary of the Pago Alia Fishing Association in 2015, was another alia fisherman interviewed. He enjoyed long-lining because this method was "very exciting, a nice way to catch a wild animal or fish. It's like doing a trick. All set up, ties, right performance, technique, art to bring fish. It's a modern form of art."[58] Setting out the lines and the bait involved a certain level of skill and knowledge for success. In addition to the personal challenge of angling, Maea discussed the social and cultural significance of fishing in Sāmoan life. Seafood has been a key aspect of major events such as weddings, title bestowments, funerals, and feasts. He believed it was his "duty as fisherman to provide these resources. It is a distinct honor for fishermen, family look up to you to play this role."[59] Maea was proud of the responsibility he fulfilled to feed his extended family and his community, as well as maintain ancient cultural traditions and proper *vā*.

Christinna Lutu-Sanchez, longline boat owner and daughter of Afoa Lutu, explained how her family started commercial fishing with alias. "At one time we had eight alias fishing. It was great, fishing was really good. . . . Everyone was longlining."[60] After long-lining began among alias in 1995, commercial fish landings and revenue increased. The first five longline vessels that fished that year landed an estimated fifty-eight thousand pounds of albacore.[61] In 1997, thirty-three vessels held permits for longline fishing, and twenty-one of those were actively fishing in the region primarily catching 681,000 pounds of albacore tuna.[62]

With alias dominating long-lining from 1995 to 1997, the arrival of the first, much larger monohull longline vessel in 1997 expanded the growth of commercial fishing in American Sāmoa. Intensified extraction from the American Sāmoan fishery began just as U.S. Fish and Wildlife was starting to work on fish conservation in general. Since commercial angling in this Pacific region was relatively new, USFW was not concerned with fish stock depletion. Initially, the Service did not create any regulations to manage commercial fishing practices in the area.

Large-Vessel Longliners

Large-vessel longliners, at eighty-nine feet long, usually have a crew of seven and a full array of electronic navigation and communications equipment. The hydraulic powered reel can hold twenty to thirty miles of monofilament mainline and 1,600 to 2,000 hooks suspended from sixty floats. The crew sets and hauls the gear each day the vessel is actively fishing. Each ship usually makes three-to four-week trips, sometimes as far away as Tonga, and each ship can hold up to forty-four tons of frozen albacore that can be brought back and sold to the canneries in American Sāmoa after each trip.[63]

According to Levine and Allen, "in 1999, two other large monohulled longline vessels, similar to the first, arrived in American Sāmoa and began longline fishing. Then in 2000 and 2001, large monohulled longline boats began arriving from places such as San Diego, Korea, Taiwan, Hawai'i, New Zealand, and Australia. In 2002, about thirty-six large vessels were operating from Pago Pago. The rapid fleet expansion caused the fishing effort to increase from about 1 million hooks per year at the end of 2000 to 5.6 million hooks by the end of 2001."[64] The year 2001 became the peak in the number of longline vessels fishing in American Sāmoa. The number of larger boats increased to thirty-two and the number of alias climbed to thirty-five.[65] Both alias and large monohull ships were profiting and prospering at that time. But this peak also represented the point at which large-vessel longliners started to dominate commercial fishing in the area. In 2001, there was a major shift toward tuna as the main species landed. The large monohulls made up 88 percent of the catch of 7,125,000 pounds of albacore, 417,000 pounds of yellowfin tuna, and 165,000 pounds of bigeye tuna. That year, the annual net revenue averaged about $177,000 per vessel.[66] By 2003, seafood provided 15.5 percent of animal protein in global diets, with American Sāmoa fishers providing a significant contribution to the canned tuna market.[67]

In 2005, fifty-four fishing vessels were active in American Sāmoa waters. Fifty-one of these boats were based in Tutuila and three docked in the Manu'a Islands. Many of these vessels used more than one type of fishing method. Forty-one of the Tutuila boats (including twenty-seven vessels, which were over fifty feet in length) engaged in some long-lining. Of the fifty-four total boats, thirteen went trolling and bottom-fishing, and four used other types of fishing. According to a NOAA report, "essentially, all of the longlining was based out of Tutuila and the majority of their catch was sold to the canneries on island."[68] Supplying local tuna factories motivated the development of this style of fishing.

In 2016, Krista Corry ran one of the first large-vessel longliners in American Sāmoa. Her father, Vince Haleck, started fishing in 1997. Corry took over management of the family business in 2010, but her father still owned the boats. Their company, Tuna Ventures Inc., owned three longliners in 2016: the *Fetuolemoana* carried up to twenty-four tons, the *Sivaimoana* held twenty-two tons, and the *Manaolemoana* stored between twenty-eight and thirty tons of fish. According to Corry, her longliner boats went out for thirty to forty-five days, about 150 miles out, and caught about one thousand fish at a time. Her ships set more than three thousand hooks a day. The crew was like a family, watching out for each other. On her ships, crewmembers came from Western Sāmoa, Tonga, American Sāmoa, and Indonesia. When she started to run the family business, the fishing industry was in a downturn. She discussed how "the fishing industry is very difficult. We try our best to do with what we have. . . . We are figuring out ways to survive, not only for our company but for the guys' families. . . . We're doing our best to hang on."[69] Lutu-Sanchez also explained how "it's been a really rough last several years."[70] She lamented the "misconception that boat owners are millionaires. If there is no fish, there is no money."[71] Overall, fishing is hard work for everyone involved, regardless of boat size and the amount of available technology.

While longlining can be lucrative, this type of fishing is also a complicated and expensive endeavor. Like any boat, repairs are constant. Refrigeration is key to the process. An engineer is always needed onboard. With two generators, two compressors, a six-cylinder engine, and an electric-powered reel, anything could break and stop the fishing process at any moment. Corry recounted one fishing trip when the hydraulic system that draws up fishing line broke. The crew had already put out the line so they had to manually pull up twenty-six miles of monofilament. She explained how "every time the boys got tired, the captain yelled 'What boat are we from?' And the crew would respond 'Mana!' Mana means power."[72] Pride in their boat and their job motivated crewmembers to push through the painful and difficult task. So while these larger monohulled boats generate bigger catch amounts than alias, these vessels still involve a relatively small and locally based crew. Lutu-Sanchez also explained how "this is our home."[73] American Sāmoan longliner companies and their workers are part of the local economy and society, taking their rest, getting their supplies, and conducting their repairs in American Sāmoa. Some owners also live and raise their families in this region, their ancestral home.

To protect their interests, local longline owners formed an association called

Tautai-O-Sāmoa Longline & Fishing Association. The group's president, Lutu-Sanchez, explained how this organization "represents close to 40 longliners—including U.S.-flagged longliners and foreign vessels—and all operate out of American Samoa. The only difference is that the U.S.-flagged fleet fish in the U.S./American Samoa EEZ and the other fish in other Pacific islands EEZs, such as the Cook Islands."[74] As significant suppliers for the tuna canneries in American Sāmoa, this coalition of U.S. and Pacific boat owners from multiple regions have common interests in the regulation of marine practices for fishing in the region.

Regulating Fishing in the U.S. South Pacific

In the United States, there are eight Fishery Management Councils that have been in charge of different regions of U.S. jurisdiction since their establishment through the Fisheries Conservation and Management Act of 1976. The general mandates for these councils, under the purview of the U.S. Fish and Wildlife Service, are to create "measures to control foreign fishing in US waters, to allow overfished stocks to recover, and to monitor, conserve and manage fishery resources in a manner that maximizes long-term benefits to the nation."[75] Councils regulated outside fishing and prioritized the preservation of fisheries for future use.

However, scholars like Blackford have found that "the goal of most international and national fishery laws . . . has been to make fishing profitable and sustainable. The laws and the commissions set up to administer them have very much been in the mainstream American Progressive tradition of putting nature to efficient use. The goal was not to preserve oceanic nature in a pristine state, except in the establishment of a relatively few preserves."[76] Continued access to resources has always been central to the U.S. conservation movement since the late nineteenth century, as will be discussed in chapter 3.

Marine policy scholar Thomas Okey also stated there is an "overwhelming dominance of extractive interests" in these councils that have led to unrealistic fishing quotas which do not protect fish species or reduce overfishing.[77] This tension between the stated goals of the councils and actual actions through the years has occurred in all colonized regions of the U.S. Pacific, including American Sāmoa. In fact, continuous fish stock depletion under this overall administration ultimately led Congress to pass legislation in 2006 to mandate an end to overfishing in U.S. waters by 2011.[78]

The Western Pacific Council covers Hawai'i, American Sāmoa, Guam, and

the Northern Mariana Islands, as well as "fisheries in the Pacific Ocean seaward of such states and of the commonwealth, territories and possessions."[79] The council system includes council members, council staff, advisory bodies, and the public that can participate in the decision-making process. There are thirteen voting members and three nonvoting members. Eight members are private citizens with some familiarity with commercial and/or noncommercial fisheries and/or marine conservation appointed by the secretary of commerce from a list of suggestions provided by the governors of the regions served by the council. The five other members are government representatives from each Pacific region covered by the council. Three nonvoting members assist with decision making from the perspectives of the U.S. Coast Guard (for enforcement and safety issues), the U.S. Department of State (for information on international implications), and the U.S. Fish and Wildlife Service (for advice on flora and fauna impacts).

According to the official guide to the council, "Council members must balance competing interests while trying to make decisions for the overall benefit of the nation."[80] Council staff coordinates meetings and provides information to all constituents. Advisory bodies provide feedback on topics being addressed by the council. The three main bodies include the Scientific and Statistical Committee, Advisory Panels (composed of subpanels of marine-concerned individuals from each covered Pacific region), and Regional Ecosystem Advisory Committees that focus on marine ecosystem impacts.

The Council meets three times a year where issues are brought up and discussed. The public is allowed to comment on any agenda item. But as Blackford pointed out, "as a practical matter, this system favored well-established fishers and seafood processors, who had the time and funds to attend meetings. Council Meetings typically lasted for several days, but sometimes for a week or longer" often held in Hawai'i, but sometimes in Guam and American Sāmoa.[81] A small-scale fisher in the Pacific region would likely not be able to afford to attend a Council meeting held outside their home region. Once an issue has been investigated and commented on by advisory bodies, and public comment has been taken, the Council deliberates and may vote on a topic. Decisions, which must comply with multiple federal acts and other applicable laws, are then forwarded to the secretary of commerce for a second review, more public comment, and final approval. Once finalized and approved, the National Marine Fisheries Service implements the new regulations.

Since its creation, Wespac has approved longline closures in the Commonwealth of the Northern Marianas, specified annual catch limits in all regions

under its jurisdiction, established management measures for noncommercial and recreational fishing within National Monuments in the Pacific, and prohibited commercial fishing within Pacific National Monuments.[82] However, purse seiner activity, the largest and most extractive form of commercial fishing, has not been specifically regulated in this region.

Okey explained this disconnect as "the general pattern in the US . . . councils dominated by industry (user group) representatives make the decisions about exploitation of public (marine fishery) resources. This has been referred to as 'capture' of the regulatory or management process by industry."[83] Consequently, "a natural tendency of capital-minded fisheries sectors is to maximize short-term profit at the expense of sustainability (and social and ecological considerations) thereby degrading the public value of the exploited resources."[84] Maximum catch for their own ships or companies, as opposed to maintaining or protecting fishery resources, took priority in many Council members' decisions. Blackford also highlighted how "catch quotas that were much too high to be sustained, against the advice of its own marine scientists" also dominated Council policies until the twenty-first century.[85] Both scholars found that indigenous issues are often ignored or subsumed to large commercial fishing interests in the Council process.

In contrast to these typical stories, NMFS regulations have prioritized fishers based out of American Sāmoa since 2002. Due to the peak of angling vessels from all over the globe in this area during this time period, on March 1, 2002, NOAA Fisheries created a Large Vessel Prohibited Area (LVPA) that physically separated smaller commercial American Sāmoa indigenous alia efforts from large-vessel long-lining endeavors. At the time, close to forty alias actively fished in local waters. Boats larger than fifty feet were prohibited from fishing within fifty nautical miles of American Sāmoa "to protect the islands' local, small-scale fishery."[86] However, any large-vessel pelagic ships that already operated in American Sāmoa on or before November 13, 1997, were also allowed to continue fishing in the zone.

The LVPA accomplished the goal of safeguarding smaller artisanal native commercial fishing in nearby waters. Wespac chose to protect this aspect of fisheries in American Sāmoa because the Council recognized that this particular group of fishers provided "important socio-cultural and economic benefits to the American Samoa fishing community."[87] Wespac acknowledged the symbolic and financial importance that native marine practices had in the region, through the encouragement of American Sāmoan fishers themselves. However, these laws also further subjected American Sāmoans to U.S. authority and control.

To protect fish stocks in American Sāmoa waters and also encourage larger-

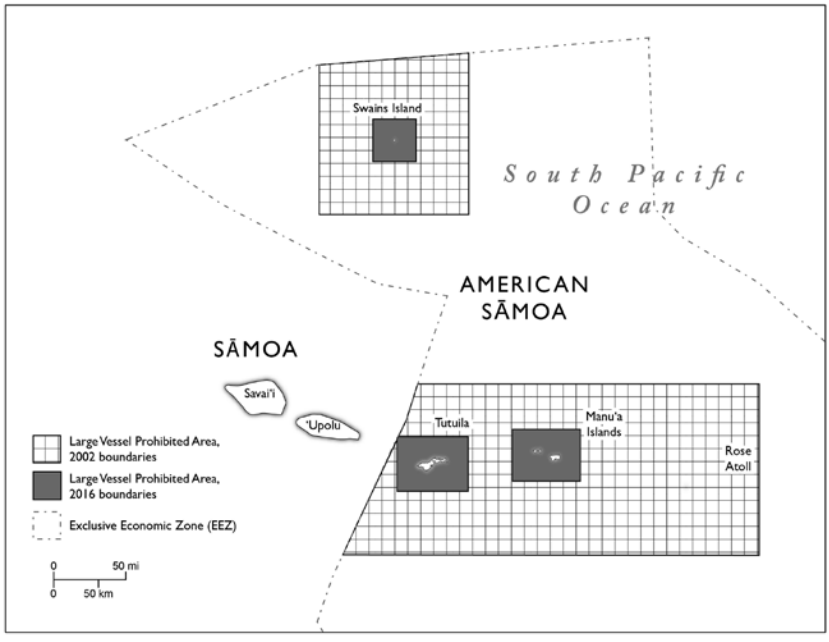

FIGURE 1.03. Large Vessel Prohibited Area: 2002 and 2016.
(Created for author by Michael Pesses.)

scale fishing specifically based in American Sāmoa, the NMFS created an American Sāmoa Longline Limited Entry (ASLLE) program that went into effect on August 1, 2005.[88] This permit allowed a limited number of longline owners operating out of American Sāmoa to fish in the region's Exclusive Economic Zone. This initiative "intended to establish management measures that would stabilize effort in the fishery to avoid a "boom and bust" cycle of fishery development that could disrupt community participation and limit opportunity for substantial participation in the fishery by indigenous islanders."[89] As a result of this policy, a maximum of sixty permits became available for ships from American Sāmoa using longline gear to catch pelagic or migratory fish between three and two hundred nautical miles from shore. These permits are available to four vessel sizes: Class A boats are forty feet or smaller, Class B (and B-1) ships are between forty-one feet and fifty feet, Class C (and C-1) vessels are fifty-one feet to seventy feet, and Class D (and D-1) boats are longer than seventy feet.[90] These permits have never been fully used up. In 2018, forty-six of the sixty permits were being used.[91]

Lutu-Sanchez explained how she helped spearhead both of these regulations to specifically protect smaller American Sāmoan fishing boats. At the time of creation, alia long-lining was at a peak. By limiting the number of longline vessels that could fish in the American Sāmoa EEZ, alias had more access to migratory fish in the area. Lutu-Sanchez also discussed how the ASLLE program was created because "we thought there would be up to 200 alias owned by American Sāmoans. We had high hopes and we really thought it was going to happen. We are not happy" that alias did not continue to succeed.[92] During the creation of these regulations in 2002, both alia and large monohulled American Sāmoan fishers agreed with and supported federal government measures to control angling in these waters.

However, after 2005, alia long-lining drastically reduced. That year the "total fishing effort was decreasing, and the era of the alias was ending. There were 30 monohulled vessels and only 6 alias."[93] Several reasons contributed to this decline. First, longliners started to sell extra catch that was not purchased by the canneries to local stores and restaurants, directly competing with alias for income in the regional market. According to Wespac American Sāmoa representative Nate Ilaoa, "stores prefer longline fish because it is stored in frozen brine, so it's higher quality" product."[94] Daily imports of fish from Independent Sāmoa also started to drive the price of fish down in American Sāmoa. Levine and Allen additionally found that "an increased reliance on imported store-bought food has discouraged development of locally based offshore fishing for the local market" and "these factors, as well as an increase in fuel prices and vessel and engine breakdown and repair problems, combined to make small scale alia operations challenging and largely unprofitable in American Samoa."[95]

In addition to cost and price factors, Koboski found a decrease in catch numbers and an increase in fishing risk to be other key reasons for the decline in commercial alia angling. Alia fishers he interviewed stated that bigger boats "were catching all the tuna offshore before they could come in. They were suffocating the inshore area."[96] Consequently, alia boats had to travel farther than their vessels were built to handle to reach more fish, posing safety hazards in more distant and rough seas with equipment and structures built to stay closer to shore. The high cost of bait and required vessel safety equipment, as well as lower albacore catch rates stopped many commercial alia fishers from going out on a regular basis.[97] Additionally, many alia crewmembers came from Independent Sāmoa. Increasing enforcement of immigration laws also made it harder to get willing and qualified fishers to work on boats.

To bolster fishing out of American Sāmoa and preempt overfishing of local

resources, Wespac recommended the prohibition of purse seiner vessels within seventy-five nautical miles of American Sāmoa in 2011. According to the International Seafood Sustainability Foundation, "purse seine fishing vessels catch nearly 62% of the 4.2 million tons of tuna caught globally every year. Globally it is estimated that 1,664 purse seine vessels are authorized to fish for tuna"[98] These industrial-scale fishing vessels cast huge nets up to 6,500 feet in length and 650 feet in depth.[99] Purse seiners also involve a lot of equipment compared to alias and longliners. According to the Food and Agriculture Organization of the United Nations, "industrial tuna purse seiners are usually large vessels which length ranges between 45 and 85 meters, sometimes over. . . . Those seiners are facilitated with a large skiff, often with a few speed boats, and with a helicopter. Also equipped with brine freezing fish wells."[100] Purse seiners catch the most fish and use the most resources, such as fuel and the creation of greenhouse gases, to supply the tuna canning industry.

According to Levine and Allen, "while purse seiners did not fish frequently in American Samoa's waters, the Council determined that the recent increase in the number of these vessels had the potential to disproportionately impact the local fishery."[101] Since no American Sāmoan has ever owned a purse seiner, the seventy-five-mile regulation would have continued the historical pattern of National Marine Fisheries Service regulations protecting smaller-scale native fishing efforts out of American Sāmoa. However, this law did not pass because the proposed measures were inconsistent with the Magnuson-Stevens Fishery Management and Conservation Act that "requires conservation and management measures to be based on the best scientific information available, and requires that fishery actions be founded on thorough analyses that allow NMFS to conclude that the selected alternative will accomplish necessary and appropriate conservation and management objectives."[102] Without clear scientific evidence to prove such a regulation would "prevent localized stock depletion, as well as reduce catch competition and gear conflicts," NOAA Fisheries could not limit the activity of purse seiners in American Sāmoa EEZ waters.[103] As scholars Jon Barnett and John Campbell explained, the lack of substantial and validated Western-style data in Pacific Island regions often prevents the development of policies and regulations to address immediate and long-term environmental issues.[104] Such reliance on precise technical data ignores historic and non-Western forms of indigenous knowledges and skills in local ecologies, as well as subsumes native fishing rights to western logics, categorizations, and oversight that is difficult to establish and maintain in these underfunded and understudied regions.

Since 2006, Wespac has specified annual catch limits to prevent the depletion

of targeted fish species. The goal of these ceilings is "to ensure long-term fishery sustainability by ending and preventing overfishing, and by rebuilding overfished stocks."[105] These Western-style regulations include maximum sustainable yield (the most catch that can be engaged in on a continual basis without destroying the fishery), annual catch limits, and accountability measures.

Some scholars question the usefulness of concepts such as maximum sustainable yields. According to Callum Roberts,

> the greatest surplus yield, termed maximum sustainable yield, could be obtained, according to the fishery models, by reducing a population to half of its unexploited size. Since then, the concept has exerted a hegemonic grip over fisheries science that is proving extremely difficult to loosen, despite serious shortcomings. . . . The goal of sustaining yield over the long-term has proven elusive and is too often sacrificed for short-term gain. . . . estimates of target population sizes needed to achieve maximum sustainable yield being set too low, thus leading to a greater risk of population collapses.[106]

Despite half a specific fish population being maintained, many other species critical to a healthy and stable fishery are often caught in the process and not counted. In today's highly regulated world of fishing, if a vessel does not have a quota for a particular species, the boat must discard all others caught, regardless of whether the catch could still be used for eating or for fish meal.[107] Even if they are returned to the ocean, this bycatch of noncataloged species often die in the process, further depleting the fishery. Despite such realities of high amounts of sea life death from one fishing net, the calculation of 50 percent maximum sustainable yield for one specific type of fish has become accepted and naturalized as sufficient to create and maintain fishery stability.

Such an approach has not worked. According to the 2018 State of the World Fisheries and Aquaculture report provided by the Food and Agriculture Organization of the United Nations in 2015, "the world's marine fisheries had 33.1 percent of stocks classified as overfished."[108] In addition to this status, bycatch or "discarded fish are not recorded in fishery statistics. But they are just as dead as those landed."[109] Consequently, Western-style fishery statistics are fallible and have prevented the creation of true sustainability in global waters. Ultimately, the leaders making decisions on fishing rules are "bound to fail because they have vested interests that maximize short-term returns for themselves at the expense of long term sustainability for the general public."[110] The logic, motives, or actions of fishery decision makers who were connected to large-scale fishing

businesses usually did not coincide with government goals for conservation or sustainability.

An indigenous marine management perspective could provide one path to move away from segmented, narrow-minded, and unsuccessful Western accounting methods to prevent overfishing. In American Sāmoa and many other global indigenous cultures, all parts of anything caught from the ocean are used. Sea life holds an equal status, if not sacred status, in the hierarchy of life and is treated respectfully. If seafood stocks seem low, temporary prohibitions on angling are put into place by local leaders. As described by Tui Atua Tupua Tamasese Taʻisi, "All matter, human, water, animal, plant and biosphere are. . . . divine creations connected by genealogy. They share the same biological beginnings. . . . the respect or *faaaloalo* that must be shown by man to all things is a respect for the sacred essence, the sacred origins of their beginnings. This is the cornerstone of Samoan indigenous religious thought." [111] Such beliefs are central to the creation and maintenance of harmony between Sāmoans and the environment. Tui Atua also explained how "ancient Samoa protocols were developed to ensure that the environment was preserved. . . . During times of re-growth certain trees and plants were prohibited from being cut or picked."[112] Sāmoan culture has age-old policies and practices to protect and manage their ecology.

In fact, as Roberts described, "the idea of creating refuges from fishing has a long pedigree . . . Across the Pacific, from Papua New Guinea to Hawaiʻi, islanders traditionally placed some areas of reef off limits to fishing. In most places these were "rested" for a time before being fished again to supply some feast, rather than given permanent protection. But the penalties applied for taking fish could be severe. In Hawaiʻi, offenders were clubbed to death for violating such kapu areas." [113] Once the marine environment seems to have recovered, fishing resumes. Barnett and Campbell also claimed that "small island states have alternative knowledge and specificity that could enhance or work better on the ground than blanket, generalized environmental policies."[114] With more equitable representation by noncommercial interests on the fishery councils, especially native groups (as recommended by Okey), more effective alternatives for ocean-use policy could develop.

A focus on "optimum yields, which considered social and economic community issues, especially job creation and destruction," over maximum sustainable yields, "which looked only at biological matters" is another alternative, more balanced way to rethink fishery management from a Western perspective.[115] The current study and standard use of isolated quantitative numbers for a limited

number of species ignores the interconnectedness and dynamics of all entities within an ecosystem.

From a bioregional perspective, one must look at the overall impact and well-being of all key players when creating marine policies. According to Fagan, "People have caught fish for more than a million years, yet only in the past century and a half, with the growth of industrialized fisheries, has the quest become unsustainable. Now that insatiable demand from rising populations is coming into ever-greater conflict with decimated fisheries," fishery councils are trying to figure out how to move forward.[116] At the same time, "Fish having become the most traded commodity in the world, the fish business employs millions of people worldwide. Careful management and the creation of ocean reserves are thus vital to jobs and trade as well as to nutrition."[117] Multiple groups, including the seafood-consuming public, have a stake in the success of the global fishing industry and long-term sustainability. However, one must also remember that any federal marine regulation continues to subject American Sāmoans to U.S. control and authority. Until 2015, indigenous fishers did not oppose such colonial marine management.

Policy Changes

In 2013, the longline fleet out of American Sāmoa was 100 percent monohulled and accounted for "about 80% of the fishing effort reported in 2012. There were only 22 active vessels, 12% less than 2012. A total of 177,627 fish were caught (all species combined), which was 38% less than in 2012."[118] Overall, boats were going out less frequently in the 2010s. Ships were setting more hooks in one day to try and catch more fish more quickly and shorten the amount of days for each trip, hoping to reduce costs in fuel, labor, and fishing permits. Despite such efforts, the total amount of catch also fell during this period. Increased competition from foreign fishing vessels not subject to ecologically minded U.S. fishing quotas and size regulations, often purse seiners, also impacted the local fleet.[119] Such shifts in the abundance and profitability of fishing in the waters surrounding American Sāmoa motivated discussions to change ocean-use policies in American Sāmoa, starting in 2014.

With the encouragement of local large-vessel longliner owners in American Sāmoa, Wespac proposed the opening of the Large Vessel Prohibited Area to mid-size U.S.-flagged boats starting at twelve nautical miles from shore. Two public meetings were held in American Sāmoa on May 3, 2014, and January 28, 2015. The Council's eventual proposal to reduce the restricted zone was the first

time this entity did not abide by the sentiments of their local Pacific representatives. Such a move could be considered a violation of *vā fealoa'i* (social respect) because Council members Taimalelagi Dr. Claire Claire Poumele, director of the American Sāmoa Port Authority, and Dr. Ruth S. Matagi-Tofiga, director of the American Sāmoa Department of Marine and Wildlife Resources, voted against reducing the Large Vessel Prohibited Area in 2015.[120] The other regional Council representative abstained from the vote.

Despite this lack of support, Wespac chair Ed Ebisui Jr. said that "reducing the LVPA from its current 50 nautical mile limit to 12 nautical miles would reduce operational costs of the longline vessels and allow the American Samoa longline fleet to continue to provide an important domestic source of albacore to local canneries, while still protecting important areas for other coastal resource users, including troll and recreational fisheries."[121] Wespac believed this change represented a fair compromise for both small-scale alia and longliner fishing needs. NOAA Pacific Islands Regional Administrator Michael Tosatto also stated that the Large Vessel Prohibited Area reduction "supported the people who are fishing now."[122] Lutu-Sanchez explained how "the request to change the LVPA was to follow the fish. If we are fishing in the north and catch some fish, if they go south, we can still catch them there.[123] Corry also stated that the twelve-mile protected area is the norm in other Pacific regions, except for Fiji and Tonga.[124]

The Council also pursued this adjustment in zone size because scientific assessments of the South Pacific deemed local fish stocks healthy. The Scientific and Statistical Committee stated in October 2015 that "none of the bottomfish stocks in the U.S. Pacific Island territories are currently overfished or experiencing overfishing."[125] This group predicted that American Sāmoa would be 13 percent below the allowable federal overfishing levels of 50 percent in 2017.[126] Based on these statistics, small-scale alia boats should have plenty of bottomfish to catch within the twelve-mile Large Vessel Prohibited Area reduction. But as already discussed, isolated statistics for a limited number of species can ignore the larger impact of fishing on the total ecosystem, including bycatch and social and economic impacts.

The Magnuson-Stevens Fishery Conservation and Management Act mandates that NOAA Fisheries policies "promote fishing efficiency and . . . not discriminate among fisheries."[127] While protecting boat owners in American Sāmoa has always been a part of NMFS regulations, the designation of a fifty-mile Large Vessel Prohibited Area for the exclusive use of smaller American Sāmoa alia boats was difficult to justify with Western-based statistics in the 2010s. By

2015, there was only one commercial alia fisher actively long-lining for a living on a regular basis. There were about nineteen other alias boats with licenses, but these ships focused on bottom-fishing or trolling.[128] These fishers went out more irregularly and their catch was mostly used for personal consumption and *fa'a Sāmoa* obligations. These alia usually sold fish when they needed to pay for their monthly expenses.

American Sāmoa Governor Lolo Matalasi Moliga countered diminutive portrayals of a small alia fleet by "explaining that even if there is only one small vessel fishing with long-lines in the protected area, there are approximately 29 others that bottom-fish or troll within the fishery—having converted from long-line fishing."[129] The governor wanted to protect angling access for any small-scale local indigenous fisher who went out for profit or not. When the access of native peoples to their traditional functions seemed threated, members of the local population readily spoke out against U.S. colonial authority and policies.

In fact, the proposed modification of the Large Vessel Prohibited Area angered several alia owners and American Sāmoa Government officials. At a Wespac Council meeting in October 2015, the president of the Pago Alia Fishing Association, Fuega Moliga, made a statement on behalf of this organization that works to protect the interests of small-scale artisanal fishers. He said "that's one thing that's getting on our nerves—people making decisions on us without us having input. . . . I hate to see President Obama declare the Pacific Ocean a sanctuary . . . [he] doesn't understand our needs, we solely depend on the ocean."[130] In this situation, the conflict between local needs and federal policies becomes clear. Alia fishers hail from a historic tradition of angling the waters surrounding American Sāmoa to support their families and cultural practices. Rules that threaten such access are strongly opposed, especially if this group of fishers is not actively involved in the decision-making process, part of *vā fealoa'i*. NOAA policies, on the other hand, examine global ecosystem issues from Western scientific, economic, and bureaucratic perspectives when developing fishing regulations.

Some individuals posted about Fuega's comments online at Talanei.com, an online local news source in American Sāmoa connected to the local radio station. Two of three commentators were unsympathetic to the Fishing Association's position, with one stating how "opening the 50 mile zone does not stop you from fishing there. Alias are free to fish anywhere in the entire 200 mile zone."[131] One factor this commentator did not acknowledge is that alia boats have a maximum distance of about thirty miles at which they can safely fish from shore.[132] The other commentator said, "Stop crying and go fishing."[133] Both sentiments

alluded to the negligible amount of alia fishing in American Sāmoa. If more people were angling, then the case for maintaining the fifty-mile Large Vessel Prohibited Area would be stronger to federal lawmakers. While alia owners are focusing on a fundamental indigenous rights-based argument for maintaining traditional fishing grounds, not everyone in American Sāmoa supported their efforts to stop the reduction of the small-scale fishing zone for both commercial and personal use. The debates over zone changes became quite heated among American Sāmoans.

Wespac believed a change to the LVPA was appropriate for current circumstances of lower commercial catch rates for larger long-lining vessels and lack of overfishing in the region. Alia fishers, in contrast, focused on the infringement upon their ancestral rights and the lack of acknowledgment and regard for their positionality in policies that directly impacted their lives, an absence of *vā fealoa'i*. Koboski also commented how "in American Samoa, where devotion to the family and the community is so strong, the depletion of albacore as a resource is seen as an affront to future generations of Samoan fishermen. In the interviews, the conservation of the resource was repeatedly mentioned as an important component to the healthfulness of the fishery."[134] As discussed in the introduction, the centrality of family in *fa'a Sāmoa* and the priority of raising and maintaining the status of one's *'āiga* (family) are critical aspects of indigenous social, political, and economic life in the region.

While one person I interviewed claimed the public meetings in American Sāmoa were more informational, not open to alternative opinions, and even hostile to expressions of resistance or disapproval, the NMFS stated that "there appeared to be more support for the reduction of the LPVA at the 2015 meetings, given that the longline fishermen were for the most part local American Samoans."[135] No mention was made in the draft regulatory amendment of any strong opposition to the exemption in the on-site public meetings.

On March 18, 2015, Westpac approved a temporary exemption to the LVPA, allowing longliner boats to fish from twelve nautical miles offshore. This change would be evaluated every year for effectiveness and impact. Within one week of this decision, the *Fono* passed a joint resolution to request that the Council "maintain the current 50 miles of the LVPA."[136] Governor Moliga also asked the American Sāmoa attorney general to look into legal options to maintain the original size of the restricted zone. In July 2015, the *Fono* took another step in opposing the amendment by passing a resolution against the reduction of the LVPA. The American Sāmoa legislature stated that the shift in regional

coverage "will not protect some of the most productive fishing grounds from fishing vessels larger than 50 feet."[137] In September that same year, Governor Moliga wrote a letter of protest to the U.S. secretary of commerce. He explained that decreasing the Large Vessel Prohibited Area "will create competition and gear conflict."[138]

In response to these concerns, Corry stated that she has not heard of any large-vessel longliner coming into contact with local alias, especially since monohulled lines are set much deeper. She stated that her ships "haven't seen alias that far out, mostly four to five miles, not more than ten miles."[139] Lutu-Sanchez also claimed "there is no gear conflict" because these longliners are much farther out than alias usually travel.[140] For these reasons, plus the fact that only one alia boat fished on a regular basis, longline owners believed the restricted zone was an underutilized area and resource.

In contrast, those who opposed the shrinking of the Large Vessel Prohibited Area worried that alia fish stocks would dwindle when larger boats with a bigger capacity started to angle in the same waters. Maea explained how a longliner could get "tons of fish catch by one line, five to seven miles long, they are going to catch tons of fish. Local alia are lucky to catch ten yellowfin" at a time.[141] The scale of a catch was a major concern for alia boat owners, the *Fono,* and the American Sāmoa governor when discussing changes to the restricted zone. In contrast, local large-vessel longline owner Edgar Feliciano believed the reduction of the Prohibited Area was not detrimental to alia fishing because bottom-fishing uses different methods and targets different species of fish.[142] Corry concurred that "we target albacore" while alias focus on bottomfish."[143] These conflicting opinions have riddled indigenous debates over reducing the restricted zone.

Many large-vessel longline owners in American Sāmoa believed the conversations surrounding the reduction of the Large Vessel Prohibited Area involved a lot of lobbying and misrepresentations that presented them in a negative light. Corry stated that "it's all perception and misinformation. . . . I think there needs to be more public information and awareness" especially about the differences and similarities among local longliners, much larger purse seiner boats, and Chinese fishing boats.[144] Large-vessel longliners are medium-sized U.S.-flagged boats, not the very large purse seiners often seen in Pago harbor or the foreign Asian boats also increasing in the area. Several large-vessel longliners are American Sāmoan businesses whose employers and employees live, work, and spend their money in the region with their families. Asserting her company's native roots and the contributions of all longliner boats to the local economy, Lutu-Sanchez stated that "we all operate out of here, we all fuel our boats here, buy

bait locally, buy all supplies, food, lube oil, gear, and equipment here in American Samoa and do all repairs here in American Samoa."[145] American Sāmoan large-vessel longliners can, should, and have had native rights to fish in the Large Vessel Prohibited Area. Both indigenous alia and large-vessel longliner owners have steadfastly fought for their ability to maintain such traditional access to their ancestral waters under U.S. colonial rule.

While alia and large-vessel longliner owners generally agreed on U.S. federal policies in 2002, strong lines were drawn between these American Sāmoan fishers by 2015. As sociologists Cluny Macpherson and La'avasa Macpherson found, in a globalized environment "Sāmoan society is becoming increasingly plural and less able, or willing, to agree on how to confront and manage these forces."[146] Fishers have adapted to changing economic and ecological circumstances through the centuries, most recently shifting to Western vessel and fishing technologies, as well as angling for a market economy and global consumption. Intensified fishing competition and growing angling regulations, as well as shrinking fish stocks have led to divisions among American Sāmoan fishers.

Furthermore, as postcolonial ecologist Byron Caminero-Santangelo discussed, there is no singular indigenous identity and culture is not fixed or static. In fact, "the local, the natural, and the indigenous must be seen as emerging and reemerging from specific, messy interrelationships with their supposed opposites."[147] Focusing on the total bioregion can help explain why some American Sāmoans reacted differently from others to the changes in fishing zone parameters. Most alia fishers primarily angle for personal, familial, and cultural reasons. Commercial supply and profit is a huge benefit, but not a requirement for their livelihood as small-scale artisanal fishers. Large-vessel longliners focus on supplying fish for commercial markets and rely on sales of their catch to survive. While functioning at different output and production scales, both groups want to protect their native angling rights and provide for their families in the short and long term. As angling has become more arduous and less profitable in the twenty-first century, desires to protect one's own form of fishing over others become more vocal and strong.

In the final ruling on the extension, the NMFS stated that they were "satisfied that three full Council meetings, the January 15, 2015, public meetings, and the 30-day public comment period on the proposed rule provided the public with adequate notice and opportunity to be heard."[148] NMFS also claimed that they "took particular care to ensure that the views of American Samoa stakeholders, including fishermen, fishing communities, and the American Samoa government, were solicited and taken into account throughout the development of this

action.[149] From the federal government perspective, *vā fealoa'i* was created and maintained in this decision-making process.

During the final public comment period, which ran from August 25 to September 24, 2015, the NMFS "received comments from over 270 individuals, commercial and recreational fishermen, businesses, Territorial government offices (including the Governor of American Samoa and the American Samoa Department of Marine and Wildlife Resources), Federal agencies, and non-governmental organizations."[150] Several comments and most NMFS responses echoed the pro-reduction perspectives of large-vessel long-lining ships, such as the need to provide food, jobs, and support for the local American Sāmoan economy, the equal right of these boats to fish in local waters, the underutilization of the protected zone, as well as the cost savings and safety benefits of having larger vessels in the local area.

In opposition to the reduction, several commenters questioned the impact of large-vessel long-lining on coral reefs, endangered species, gear conflict with other anglers, water pollution, and fish catch competition with alias and recreational fishers. In each case of opposition, the NMFS had a strong response that continued to justify and support the view of the LVPA reduction as a rational, logical, and reasonable policy. Satisfied that they fulfilled federal expectations for public comment and response, the NMFS passed this exemption on January 29, 2016.

As with the expansion of the National Marine Sanctuary, discussed in chapter 3, some members of the American Sāmoan community believed this Western-style, impersonal, English language, written-based, and bureaucratic federal government public comment system and process did not take Sāmoan *vā fealoa'i* into consideration. As discussed in chapter 4, the traditional Sāmoan village consensus-building process involves meeting the different constituents in each impacted village in separate meetings: the village council, women, and untitled men. After these groups are informed of a proposal, the council advises the high chief, who makes a decision for the whole community to follow. This slow and deliberate process can often take many months. Bypassing this process, public comments gathered and submitted to the NMFS mostly came from individuals or organizations. The NMFS made no attempt to go into community villages and work within the customary Sāmoan decision-making process and hierarchy.

On February 3, 2016, the final ruling in the LVPA reduction went into effect. This legislation stated that "this action allows fishing in an additional 16,817 nm [nautical miles] of Federal waters, allowing large longline vessels to

distribute fishing effort over a larger area. This may reduce catch competition among the larger vessels and promote economic efficiency by reducing transit costs. This action is intended to improve the efficiency and economic viability of the American Samoa longline fleet, while ensuring that fishing by the longline and small vessel fleets remains sustainable on an ongoing basis."[151] Despite protests from the American Sāmoa Government and local alia owners, NOAA Fisheries pushed forward with this law, supporting the needs of the larger longline vessel owners.

Just over a month later, on March 4, 2016, the American Sāmoa Government filed a lawsuit to overturn the ruling based on guarantees provided in the Deeds of Cession, the Magnuson-Stevens Act, and other administrative procedure acts. The twenty-one-page complaint claimed that allowing "large long-liners to fish within the ceded areas that were designated as protected properties ignores and violates the U.S. obligation under the Deeds of Cession to safeguard and respect the property rights of the native people of Samoa to their customs and practices including cultural fishing."[152] Overall, the suit claimed that the United States has a "fiduciary duty to protect the lands; preserve the traditions, customs, language and culture; Samoan way of life; and the waters surrounding the islands."[153] This legal approach argued that the federal government cannot make a decision that violates U.S. promises to the people of American Sāmoa, as outlined in the Deeds.

Two motions and a counter-motion, as well as two replies, were filed for this case between June 2016 and January 2017. A U.S. District Court hearing was held in Honolulu, Hawai'i on February 13, 2017. On March 20, 2017, more than a year after the first filing of the suit, U.S. District Court Judge Leslie E. Kobayashi supported the American Sāmoa Government, ruling that "in light of the long-standing significance of fishing to the fa'a Samoa, Plaintiff has a quasi-sovereign interest in protecting the American Samoan's cultural fishing rights to preserve their culture for the benefit of the American Samoan people as a whole."[154] Based on these fundamental indigenous rights to cultural preservation guaranteed by the Deeds of Cession, the 2016 LVPA rule was deemed "arbitrary and capricious" as well as "invalid."[155]

Governor Moliga praised the ruling, expressing how "I hope this case serves as a reminder to the federal government that we have rights and they should not be easily dismissed."[156] Attorney General Talauega Eleasalo Ale, who participated in the February hearing, also emphasized how "this decision is the first federal case law to articulate the meaning of the deeds as it relates to our direct dealings with the federal government. . . . It establishes a critical pathway towards

clarifying our relationship with the federal government, as well as our status as a people and culture within the American family."[157] This ruling provides an important precedent for future questions over the rights of American Sāmoans within the U.S. colonial system and structure.

On May 10, 2017, NOAA filed a motion for reconsideration to question "the legal standing for American Samoa to bring this claim" and whether "the appropriate remedy for the court" was applied to this case.[158] NOAA legal counsel Frederick W. Tucher believed the court should have asked for supplemental briefings to justify its ruling instead of overruling NOAA's authority to create regulations in these waters.[159] NOAA Fisheries hopes the reconsideration will "remand it [the LVPA] back to NMFS to address customary fishing in accordance with the Deeds of Cession. . . . NMFS expects that it can complete a new rulemaking to correct its error within fifteen months."[160] This continuation of litigation demonstrated the strong desire of NOAA to maintain its ultimate authority and policy-making control over the waters surrounding American Sāmoa.

According to Tosatto, in the year since the reduction went into effect, the smaller Large Vessel Prohibited Area "provided benefits to American Samoan longliners while producing no adverse impacts on catch rates for other American Samoan fishery participants"[161] The NMFS also presented data showing how catch rates "were higher not only for longline vessels, but also for other pelagic troll vessels."[162] Additionally, "NMFS has not received any complaints or reports from pelagic trollers, bottomfish fishermen, alias, or recreational fishermen of gear conflict or catch competition with longliners."[163] In the context of these positive statistics, NOAA Fisheries believed it could justify the appropriateness of the 2016 Large Vessel Prohibited Area rule change and maintain their position as the wise and deserving decision makers over the waters in the South Pacific.

Tautai o Sāmoa also appealed to Judge Kobayashi on June 2, 2017, to reconsider her ruling. This large-vessel longliner association petitioned the U.S. Interior Department, the American Sāmoa Government, and the federal court "to restore our rights to fish in these waters that you [Kobayashi] have all agreed should be accessible to indigenous peoples of American Samoa."[164] In their letter, the group asked why the court "would deny that we have the same rights as other American Samoans, and why are we discriminated against while favoring others?. . . . A truly impartial decision from you would be to allow anyone with American Samoa heritage to fish in American Samoa waters during this ordeal until it is decided who the supreme owner of these waters is, as it looks like this fight will continue until it reaches the U.S. Supreme Court."[165] While the March

2017 ruling provided a legal victory for general American Sāmoan indigenous rights in the U.S. colonial system, the LVPA rule continues to be beleaguered by the fact that different members of the indigenous group stand on opposite sides of this issue.

While *Territory of American Samoa v. National Marine Fisheries Service* effectively secured native fishing rights and guaranteed the prioritization of indigenous protections in all U.S. actions in the region, a more nuanced understanding of who is native and what they want is needed. This specific federal ocean-use policy requires finding a balanced compromise among the needs of small-scale and medium-sized local fishing vessels in American Sāmoa while guaranteeing native rights to fish local waters for both groups, all part of maintaining *vā* (social relations) in Sāmoan society.

The battle over the restricted zone size has the potential to continue for many years. In March 2018, the case went into mediation. In June 2018, Wespac recommended another four-year exemption and "annual monitoring of the American Samoa longline and troll catch rates, small vessel participation and local fisheries development initiatives."[166] The American Sāmoan government continued to oppose the exemption to the Large Vessel Prohibited Area.

Regardless of the ultimate resolution to this lawsuit, historic and current U.S. colonial status has directly impacted both indigenous American Sāmoans and NOAA policies. This native group, composed of multiple views and perspectives, boldly challenges the federal system on a regular basis to defend their rights to fish local waters. However, American Sāmoans are also looking to the federal government to address and resolve these issues within existing colonial structures of Wespac and the U.S. judicial system. The U.S. government bureaucracy strongly believes in its guardian responsibilities to control and manage this region and its resources, discussed more in chapter 3. In the end, the major question is "how to continue fishing in a depleted ocean while also conserving it."[167]

In American Sāmoa, "fishing has transformed over the years into a commercial endeavor while still preserving traditional elements that contribute to the perpetuation of the local culture."[168] In addition to addressing native rights, some scholars view small-scale fisheries as one way to address issues of poverty, economic development, and food security.[169]

Internationally, small-scale fisheries account for over 50 percent of the world's catch and employ 90 percent of people engaged in fisheries.[170] Because artisanal

fishing can be a key to long-term food security, the issues facing these anglers should be taken seriously both at local and global levels.

The next chapter explores another invisible aspect of accessing the resource-rich fishing waters surrounding American Sāmoa and the complications of indigenous desires versus federal control in the unique combination of large-scale fisheries, commercial tuna canneries, continental U.S. politics and consumption, the local native economy, and the *vā fealoaʻi* of Sāmoan laborers in the context of *faʻa Sāmoa*.