МРА	Surface	Year Est.			-	Objectives	Economic Outcomes	Ecological Outcomes
(Country)	(km ²)	(Modified)	Planning Process and Prior Management Techniques	Proponents	Opponents	(Ecological & Economic)	(Include info on discount rate and methods used to evaluate)	(Fish abundance, biomass, how these results related to ecological goals and if
								there is any uncertainty in measurements modeled/actual)
			The physical size and number of different ecosystems represented along	Australian	Many commercial	I he main objective of establishing the GBRMP was to "provide for the	With the increase in no take areas the amount and value of fish caught	Increases in the density of coral trout, the primary target of line fishing, were
			the GBR shaped the planning process for its protection. From the beginning,	Government, FAO,	fishers were generaly	long term protection and conservation of the environment,	commercially experienced an initial net reductions of 35% (Fletcher et al 2015).	observed within 1.5-2 years across the majority of no-take areas both
			multi-use zoning was used to protect especially sensitive areas, while	PEW, Majority of	unsupportive of	biodiversity and heritage values of the Great Barrier Reef Region",	This decline was significantly higher than the government's prediction of 10%	inshore and offshore, and spanned the roughly 1000km north-south stretch
			allowing certain commercial and recreational activities in other zones. The	recreational fishers	rezoning 5 years after	while allowing sustainabile use of the reef for recreational, economic	declines, and neither catch nor value generated have shown signs of recovering	of reserves (Russ et al. 2008). Empirical analysis of prey density in fished and
	344400		federal and state governments (predominantly Queensland) led the	(68% thought rezoning	(Ledee 2012).	and cultural activies as other goals of the act as long as they didn't	in the 9 years from implementation to publication of Fletcher et al. 2015. A	un-fished reserves shows high density of prey in fished areas, which suggest
			planning process and share responsibilities for management activities. The	was a good idea)		interfere with the main objective (Great Barrier Reef Marine Park Act	number of external factors, along with the increase in closures led to the decline	that spillover of adult predators may increase over time (Graham et al. 2003).
			major rezoning that took place in 2004 increased no-take areas from 4.5%	(Sutton and Tobin		1975). The major rezoning that took place in 2004 aimed to better	in profitability of fishing and resulted in a dramatic decrease in fishing effort	A number of species of sharks, thought to be in decline prior to rezoning, were
			to around 33% of the GBRMP, and included considerable public input over a	2009).		protect the biodiversity of the MPA which was seen as being degraded	which largely accounts for the decrease in catches (Gunn et al. 2010). The	observed at significantly higher densities in no-entry, and no-take reserves
Great Barrier Reef		1976	multi year process, with over 31,000 formal submissions from individuals			and not fully represented by existing no-take. The plan incorporated a	Australian government compensated fishermen and businesses negatively	than in fished areas (Ayling and Choat 2009).
Marine Park (GBRMP)		(2004)	and stakeholder groups(Jago et al. 2004). Other management strategies in			new network of no-take areas into the Park that represented the	impacted by the loss of fishing effort for their losses, and bought many	
manner an (obrinn)		(2001)	this area of Australia included effort restirctions and location closures for			numerous different ecosystems in this large area (Day et al. 2003;	fishermen out of the fishery, spending around AUS \$205 million on assistance	
			the East Coast Trawl Fishery in 2000, and an individual transferable quota			Olsson et al. 2008).	between 2004 and 2008 (Macintosh et al. 2010). The GBR is estimated to	
			(ITQ) system for the multi-species Queensland coral reef fin-fish fishery				contribute Aus \$5.5 billion annually and support 53,800 jobs, with tourism	
			(CRFFF) on the GBR (Fisheries (East Coast Trawl) Management Plan 2010;				estimated to be worth approximately 36 times more than commercial fishing	
			Innes et al. 2014).				(McCook et al. 2010). These buyouts and assistance to impacted fishing	
							businesses were signifiantly higher than the orignal estimate of AUS \$10 million	
							that would be needed to compensate for losses (Gunn et al 2010).	
			The Cook Islands Marine Park was first proposed by Kevin Iro to past Demo	Government,	None thus far	The Marea Moana Ocean Policy was developed to "conserve	Implementation time frame 2017-2020.	Implementation time frame 2017-2020. Fishery management objectives of
			Government as a mechanism to improve the tourism industry. It was later	traditional leaders,		biodiversity and natural assets in the oceans, reefs and islands while		the Cook Islands must align with the Marine Resource Act 2005. This act
			proposed to Prime Minister Puna in 2011, with the area encompassing the	Kevin Iro (well known		ensuring sustainable development of economic growth interests"		supports designated fishery that requires management measures. Typically,
			southern portion of the Exclusive Economic Zone. Cabinet endorsed the	rugby player)		(Marae Moana Policy 2016-2020) and forms the basis for Marea		the islands councils manage the fisheries inside 12 nautical miles of the island
			proposition in July 2011 and a steering committee was formed to guide the	0,1,7,7		Moana Marine Park. The objective of Marea Moana Marine Park is to		and are supported by the Ministry of Marine Resources (FAO, 2018).
	1		process (Wright-Koteka, E. 2016). The committee conducted consultation			establish a marine park that will provide a framework to promote		
			with the islanders of Rarotonga in the latter part of 2011 and early part of			sustainable development by balancing economic growth interests		
	1.1 million		2012. Results of the consultation reinforced islanders' idea of having a MPA			such as tourism. fishing and deep-sea mining, with conserving core		
			that balances conservation, sustainable development, economic			biodiversity and natural assets, in the ocean, reefs and islands"		
			development and culture (United Nations, 2017). Thereafter, the committee			(www.sustainabledevelopment.un.org). The Marae Moana act 2017		
Morae Moana: Cook		2017	reviewed existing MPAs and decided on following the multi-use zone model			(No. 10 of 2017) establishes the MMMP and Marae Moana Council "to		
Islands Marine Park			of the Great Barrier Reef in Australia to manage the CIMP. In 2013, the			protect and conserve the ecological, biodiversity, and heritage values		
			steering committee ordered a legal analysis to explore appropriate legal			of the Cook Islands marine environment" (www.maraemoana.gov).		
			framework for CIMP and included boundaries, legislative and policy			(
			considerations and managing authority (Wright-Koteka, 2016)					
			Management techniques for Cook Islands marine resources include the tuna					
			fisheries managed via the Western and Central Pacific Fisheries					
			Commission (WCPEC) the longline fishery managed via the Large Pelagic					
			I ongline Fishery Plan and TAC and the purse seine fishery is managed by					
			the Purse Seine Fishery Plan (FAO, 2018)					
			The Kubulau Resource Management Committee (KRMC) was formed in	From 2004 to 2005,	The Navatu Clan	The main goal of Kubulau's ecosystem-based management plan is	Jupiter and Egli (2011) socioeconomic factors for MPA effectiveness focusses on	Conducted biological monitoring of fish and benthos in Kubulau qoli for
			2005, comprised of representatives of each village that shared the qoliqoli	WCS introduced the	opposed the reserves	"preservation of the functional integrity of Kubulau's ecosystems,		Namena, Namuri and Nasue in 2007, 2008 and 2009. Reef fish biomass
			(traditionally managed fishing areas) and supported by the high council of	concept of MPA	since they have	from ridge-to-reef, through community-based management" (WCS,		varied across MPAs but were high within village-managed closures
	260 Km2 of		chiefs (Clarke and Jupiter, 2010). The MPA network design was based on	network in	traditional fishing	2009). In the initial statge of drafting management plan for Kubulau		(>1000Kg/ha) (Jupiter and Egli, 2011).
			socioeconomic and biological research done by KRMC, Wildlife Conservation	communities and	rights in the reserve	qoliqoli, the main objective was to "ensure food security for		
			Society, World Wildlife Fund, Wetlands International, and Coral Reef Alliance	provided scientific	and were seeking	communities" and "ensuring abundant resources at times of social		
Kubulau District	qoliqoli and		(Clarke and Jupiter, 2010) (Jupiter and Egli, 2011). In 2009, KRMC and	recommendations on	compensation.	- importance (cultural objectives)" (Weeks and Jupiter, 2013).		
(Nassue, Namuri &	120 Km2 of	2005 (2012)	partners developed an intregrated "ridge-to-reef" management plan (WCS,	management to	However, no			
Namena MPAs)	No-take		2009). However, in 2011, the MPAs were reconfigured via WCS scientific	members of the	compensation			
	MPA		input, to maximize compliance (Weeks and Jupiter, 2013). The network of	Kubulau Resource	mechanism was			
			MPAs for Kubulau District went through a nine -year process of adaptive	Management	implemented (Clarke			
			comanagement (Weeks and Jupiter, 2013). Prior management techniques	committee (Weeks and	and Jupiter, 2010).			
			used is the traditional community-level governance of marine resources	Jupiter, 2013).				
			through the goligoli and periodically harvested closures areas called Tabu					
			(Clarke and Jupiter, 2010).					
			No	•	1		1	1

		Pristine Seas and Palau Internation Coral Reef Center conducted an	Due to dwindling tuna	Palau National Marine Sanctuary aims to (www.glispa.org):	In 2014, "coastal commercial fisheries production was estimated at US\$3.2	In 2014, fishery divesity and abundance assessment, deep sea habitats
		assessment current MPAs to provide scientific data to the government of	stocks in the Pacific	 Integrate with other Pacific Island Countries in furthering the Mixed 	million" for Palau (CEA, 2016). Fleets working offshore of Palau caught 3.987 mt	exploration and underwater visual surveys for coral and fish inside and
		Palau for the establishment of the Palau National Marine Sancturary	and the value of	Management Approach ('Mixed Plate Approach') envisioned by the	of fish, a value of \$US31 million to fishers (CEA, 2016).	outside eight existing MPAs were conducted in Palau by a team of scientist
		(PNMS) (Friedlander et al., 2014). PNMS will be implemented through a five	Palau's marine	Pacific Islands Forum in its Pacific Oceanscape Vision and		and researchers. In sites surveyed, hard coral made up 50% of total coral
		year process, where 80% of EZZ will be protected and 20% will be designated	environment, President	incorporating appropriate management, transition and set-aside		coverage. There were no signicant difference in coral cover between existing
		domestic fishing area. This will be a period of transition from from foreign	Remengesau	strategies appropriate to Palau's National interests;		MPAs and control sites as well as for the benthic community composition. In
		fleets to domestic fishing. The governement of Palau along with partners	commited to protecting	 Strengthen fish stocks for traditional fishing; 		MPAs, target commercial species accounted for 78% of the total biomass
		will develop a management and implementation plan for PNMS (CEA, 2016).	Palau's ocean through	 Strengthen, reform and modernize Palau's domestic fishing industry. 		(MPA Ngemelis had 3 tons per ha). Biomass of top predators were higher
			a national marine	for the development of Palau's Eco-tourism:		inside MPA than outside, accounting for 30% (biomass inside MPA). Based on
Dalau National Marine			sanctuary (Friedlander	 Re-stock pelagic fish stocks within and beyond the Palau Exclusive 		ordination ananlysis, the biomass results were due to MPA age, size and
Sanctuary	500,000 2015		et al., 2014). In 2015.	Economic Zone (EEZ):		proximity to shore (Friedlander, et al. 2014).
Sanctuary			the Palau Congress	 Re-stock and protect associated by-catch within and beyond the 		······································
			approved the Palau	Palau EEZ:		
			National Marine	Continue to actively partner with our Pacific neighbors, through the		
			Sanctuary Act (CEA	Parties to the Nauru Agreement (PNA) the Forum Fisheries		
			2016)	Association and the Pacific Islands Forum in building a sustainable		
			20.00	regional fisheries in the Pacific		
						TI
		Following years of declines in coral reef fish, contention between dive	Dive charter operators, Some aquarium	The legislature noted in Act 306 that the west Coast of Hawai I Island	Since 2000, one year after the implementation of the fish replenishment areas,	i ne aquarium fishery
West Hawaii Regional		operators and aquarium collectors in the west Hawai region and resource	west Hawai I Reer collectors	has some of the worlds most impressive coral reers which are valued		
Fishery Management		depiction caused by aquarium fish collecters" the Hawaiin government		by dive tourists, recreational, commercial and subsistence fishers. The	by 22% and 45% respectively. The catch from the west Hawa'l region represents	which account for 84.3% and 8.3% of the fish caught in this region respectively.
Areas (network of 9		passed legislation to set up at least 30% of coastal waters in west Hawai'i	members including	legislature states that the purpose of establishing a regional fishery	around 70% of the total fish caught in the state, and 67% of the value (Dept. of	After 15 year sor protection in Fish Replenishment Areas (FRAs) Yellow Tang
MPA - North Kohala,		as "fish replenishment areas" (Act 306 1998). This act also called for	aquarium collectors	management area with 30% closures of coastal waters to aquarium	Land and Natural Resources 2014). Fishermen reported that the cost of fishing	populations increased by 64.5% in FRAs, with no significant change in
Puako-Anaehoomalu,	35% of coast 1999	significant involvement of the community including residents and resource	and charter operators	and reef fish fishing is to "enhance nearshore resources and to	and the distance traveled to fishing grounds increased after MPA	abundance in the adjacent open areas (Dept. of Land and Natural Resources
Kaupulehu, Kaloko-		users in this nearshore management area. In Act 306 the legislature cites	in the area), University	minimize conflicts of use" (Act 306, 1998).	implementation, as they continued to use the same boat launching areas but	2014).
Honokohau, Kailua, Red		the United States, the Great Barrier Reef Marine Park, and scientific	of Hawaii-Hilo, Lost		had to travel further to fish outside of MPAs (Stevenson et al. 2013). However,	
Hill, Honaunau,		research as examples that support establishing 30% of coastal waters as	Fish Coalition		fishermen experienced higher catch revenues and CPUE in these new areas, and	
Hookena, Milolii)		replenishment areas. Along with promoting reserves Act 306 enabled the			reported a significant increase in their economic status after the MPAs. These	
		West Hawaii Fishery Council to limit entry into commercial and aquarium			changes are also likely tied to an increased demand and price paid for live fish in	
		fisheries and ban certain gear.			this area.	
		Apo Island Marine Protected Area was one of	Silliman University,	Apo Island Marine Reserve was established	Initially after implementing the no take reserve fishermen saw a significant	The biomass of surgeonfish and jacks, two families of fish that make up
		the earliest examples of protected areas in the Philippines. Under The	USAID, NGOS,	to protect the biodiveristy of the coral reef ecostystem, and to	Increase in income as they played a role in tourism by transporting tourists and	between 40–75% of Apo Island's fishery yield tripled in the no take reserve
		Marine Conservation and Development Program the Philippines aimed to	Fishermen	enhance fish stocks. Fish harvest had been declining for roughly 15	working with resorts which accounted for around US \$18,000 annually to the	over 18 years from 1983-2001 (Russ et al. 2004). Outside of the protected
		generate community based management of coral reef areas. Marine		years, and the reserve was established with the goal of increasing	fishing community (Vogt 1998). Fishemen and other residents also state that	areas these reet fish biomass did not show a significant change, but after 8
		conservation and education programs were led at the community level by		biomass and the expectation that some of these fish would spillover	the reserve has significantly increased incomes from tourism and SCUBA diving	years of monitoring, fish biomass closer to the reserves was significantly
Apo Reef National Park (Philippines)		Silliman Universityl for 6 years before implementation. Apo Island had		into fished areas and sustain the fishing community's livelihood and	in the reserve (Alcala 1998). After implementation of the reserve effort	higher than areas further away from the reserve, suggesting export of fish
	0.225 1982	seriously degraded fish stocks and fishermen partnered with the university		tood sources (Alcala 1998).	decreased, but an increase in catch per unit effort allowed catch to stay	from the reserve (Russ et al. 2004).
		to develop a protected area with support from both the federal government			relatively stable in the years after the closure (Russ et al. 2004). While CPUE	
		and local stakeholders (Russ and Clcala 1999; White et al. 2010).			increased near the reserve, most of the fishing effort moved further away from	
					the reserve than the expected spillover would reach. Spillover of target species	
					from the reserves likely could only account for a maximum of 10% of the yield	
					from the fishery, with the actual value coming from reserves probably less than	
					that (Abesamis et al. 2006).	

				Cabo Pulmo was esthalished via a presidential decree in 1995 due to the	The residents of Cabo	NA	According to Arispe and Covarrubias (2010) several management	Fronomic benefits due to the transition into small-scale tourism resulted in	Aburto-Oroneza et al. 2011 conducted biological study on reefs inside and
				detoriation of the reef from commercial and recreational fiching diving and			goals to declare Cabo Pulmo as a national nark included: (1) To	US\$538, 800 generated in 2006 or US\$18,000 /2) per capita (Aburto-Oroneza	outside CDND in 1999 and 2009. Results of fish biomass and diversity
				tourism (Decrecto, 1995) Zoning? Community decide to protect all even	protect Cabo Pulmo's		preserve the coral reaf its components associated babitats and biotic		indicate significant increase inside CPCP in comparison to other MPAs and
				though there was zoning	roof whore fishing		communities: (2) To preserve ecological processes and life support		and a constant increase inside of California, CDND fich sporios richnoss
		71 Km2 (25 Km2 is no- take zone)		triougn there was zoning.	would be banned		communities, (2) To preserve ecological processes and me support		increased from 15 species per transact to 25 species per transact from 1999
					(Starks 2017) Josus		(/) To promote concernation compatible users and (5) Promote		to 2000, respectively. CDND fick total biomass increased from 0.75 to 4.24 t
					Castro was one of the		(4) To promote conservation compatible uses, and (5) Promote		to 2009, respectively. CPNP fish total biomass increased from 0.75 to 4.24 t
					founding mombars of		initiativos. Objectivos to achieve the geals were (1) To implement		ha- I for 1999 to 2009, respectively. For each troping group and top
					Calla Dulara		initiatives. Objectives to achieve the goals were: (1) to implement		predators, biomass increased significantly at CPNP since 1999 to 2009.
					Cabo Pulmo		To proceed the visibility of the cost community by systemed		
Cabo Pulmo National	no National		1005		(www.guirprogram.ucs		To preserve the viability of the coral community by sustained		
Park , Mex	ico		1995		a.eau).		environmental conditions to favour coral development; (3) To restore		
							and preserve target populations of game and artisanal fish; (4) 10		
							promote economic alternatives for local residents; and (5) To		
							Implement an environmental education program at several levels,		
							starting with the local residents. CPNP declared to protect its coral		
							communities (Aburto-Oropeza et a., 2011). The purpose of CPNP		
							decree is to "conserve the coral reef, turtles, oceanographic and		
							ecological processes, fish species of commercial importance. Promote		
							and support sustainable tourisms practices by local community.		
							Promote environmental education" (NAWPA Committee Fact Sheet??)		
						T I () ,	(CONANP, 2006).		
				Since the 1990's, tourism has been growing, increasing the number of	The proponents of	There were conflicts	The main management objective of GMRMP is to "protect and	I ourism has always been an integral sector for Galapagos economy, providing 1	In 2000 to 2001, surveys were conducted to obtain ecological baseline data.
				visitors to the islands while fisheries resources has been dwindling,	GMR was the	among fishers and	conserve the coastal and marine ecosystems of the archipelago and	out of every three jobs (Goldstein et al., 2016). In 2014, tourism generated \$258	Results indicated "(1) the mean sea cucumber density in the western sector of
				especially for lucrative species such as sea cucumber and lobster. The	Ecuadorian	tour operators.	its biological diversity for the benefit of humanity, the local population,	million in revenue for GMR and attracting over 215,000 visitors (Goldstein et al.	Galapagos, the most productive sector of this species, was three times higher
				Ecuadorian government developed law to limit migration to the islands,	government whom		science and education". The objectives of GMR marine zoning plan is	2016). While tourism emply 40% of Galapagos population, artisanal fishing	in zones open to fishing; (2) in comparison with conservation zones; (2) the
				policies to regulate tourism and established GMR (Toral-Granada, 2008).	legislated the "Special		to "(1) contribute to the sustainability of Galapagos fisheries by	support 5% of residents. The lobster fishery is the most important commercial	mean density of spiny lobster and Galapagos grouper was not different
		e 138000		The declaration of GMR included extension of reserve boundaries to 40	Law for the		providing potential areas from which fishery stocks can recover and	species to fishers in Galapagos, generating \$1.77 million in revenue in 2014.	between management zones; (3) the mean shark density was five times
				miles offshore from the baseline, creation of exclusive fishing rights for the	Conservation and		spill-over over fishing ground; (2) reduce conflicts among users as a	Since the collapse of the sea cucumber fishery, fishers have been focussing in	higher in tourism zones incomparison with conservation and fishing zones"
				local artisanal fishing sector and banning of industrial fishing, moratorium	Sustainable		result of incompatible demands for ocean space (e.g.,tourism vs.	the whitefish fishery (wahoo, tuna, and swordfish) but revenue estimates have	(Edgar et al., 2008 in Castrejon and Charles, 2013). These results were the
				on the registration of new local artisanal fishermen, jurisdictional	Development of the		fishing; small-scale vs. large-scale fishing); and (3) mitigate the impact	t been difficult to quantify since data is limited (Goldstein, 2016).	basis for finalizing a zoning design for GMR and the development of a long-
				responsibility for management of the GMR to the Galapagos National Park	Province of Galapagos"		of uses on sensitive ecological areas of the archipelago, which are		term ecological subtidal monitoring program (Castrejon and Charles, 2013).
Galapagos	s Marine		1998 (2016	6) Service, and establishment of Inter-institutional Management Authority	in 1998 (Goldstein et		critical to the functioning of marine ecosystems and the conservation		
Reserve				(IMA) & Participatory Management Board (PMB). Through a "consensus-	al. 2016).		of threatened species" (Castrejon and Charles, 2013).		
				based particpatory process" (Castrejon and Charlse, 2013), a zoning scheme					
				was developed for the reserve by representatives from the fishing sector,					
				tourism industries, non-governmental organizations and the Galapagos					
				National Park Services (GNPS) ((Goldstein et al 2016). The proposed					
				zonation included multiple use zone, limited use zone and port zone.					
				However, in 1999, the zonining plan became a provisional coastal zoning					
				and the GMR Management Plan was approved as is. It was until 2000 that					
				the zones were developed and approved by the Participatory Management					
				Board and consisted of 130 management zones (Castrejon and Charles,					
				2013).					
Georges Bank MPAs (United States)				These five MPA's were established progressively in 1994, 1996 and 1998 in	National M arine	New England's fishers	The objectives of the year round closures were to protect and	In the first years of implementation the Northeast Multispecies Sector Program,	The all-year round closures significantly replenished the scallop stock after 5
				areas heavily fished by trawlers for groundfish. Georges Bank uses year-	Fisheries Association;	(appr. 20,000)	recuperate overfished groundfish resources. In addition, seasonal	the National Marine Fisheries Service spent \$47.2 million on the program. By	years (Gell and Roberts, 2002). However, when the regulations were initially
				round closures for ground fish protection and excludes all gear that could	National Marine	(www.csmonitor.com).	closures were implemented in the Gulf of Maine and Georges Bank to	2013, it was declared as a commercial fishery failure	implemented to protect the groundfish fisheries, it interfered with fishers'
	22000	100/	catch groundfish. However, the MPAs are open to gear such as lobster	Fisheries Service;		reduce mortality of the groundfish stocks. The objectives of the	(http://www.catchshareindicators.org). Muraswki et al., 2005 noted that fishing	ability to reach TAC for species. In Georges Bank, between 2006 and 2009,	
		1994	traps, midwater trawls and limited dredge fishing. The MPAs include Closed	Commerce Department		seasonal closures are to "limit exploitation on populations of Atlantic	effort closer to the boundaries of the MPA resulted in an average of \$470 h-1	fishers caught 6% of their 322 thousand metric ton of GB haddock. In 2009,	
			Areas 1, Closed Areas II, Nantucket Lightship, Western Gulf of Maine closure	(www.csmonitor.com).		cod, Gadus morhua, and harbour porpoise, Phocoena phocoena, which	(per fishing hour) within proximity 0 to 3 Km to closure and \$273 h-1 (per	the Northeast Multispecies Sector Program was implemented, reducing	
				and an area in the central part of the Gulf of Maine. After these closures,			are taken as bycatch in demersal gillnet fisheries in the Gulf of Maine"	fishing hour) at greater distance from closure.	harvest limits of key species in the Northeast groundfish fishery
			fishers had to report catch and effort of the groundfish species (Muraswski			(Muraswski et al., 2015).		(http://www.catchshareindicators.org). Link et al., 2015 reports groundfish	

			Planning for the sanctuary and the reserve took place over a number of	Federal	Commercial	The primarmy objective of the National Marine Sanctuaries is resource	In the two years following implementation of no-take zones, the majority of	There was no significant difference in species richness between areas inside
			years, with the designation of the sanctuary predating the first	government, NOAA,	and recreational	protection. After years of declines in sensitive habitats, outbreaks of	commercial fishermen reported no change in landings, effort, or income	and outside of the no-take areas (Ault et al. 2006a). Trends in abundance
			management plan by seven years. Prior management of fisheries in	Environmental NGOs	fishers	coral disease, and three major ship groundings in the keys, one of the	(Dobrzynksi and Nicholson 2000). Both commercial and charter fishermen	varied by species, with four of eight targeted species either decreaing or
			particular were largely managed in open access, which had led to the			specific goals of the reserves was to curb habitat loss and degredation	believed they had to spend more time on the water to catch their desired level	increasing signficaintly, with the remaining four species not changing
			overcapitalization of the numerous and diverse fisheries throughout the			within the sanctuary (NOAA 1996). Making sure management	of fish, and attributed this change to the network of reserves. In the two years	significantly (Ault et al. 2006b). This may be because recovery is expected to
			Keys (NOAA 1996). In 1997 around 5% of the sanctuary was designated as			strategies allow for economic use that is sustainable is another stated	after creating no-take reserves the displaced commercial fishermen's net	take longer than the time that has passed with some estimates suggesting it
			larger Replenishment Reserves and multiple small Sanctuary Preservation			objective of the sanctuary and reserves but is clearly marked as a	earnings grew at rates similiar or slightly higher than fishermen who did	may take decades to see significant impacts from reserves (Russ et al. 2004)
			Areas where there was no take permitted. The reserve system was also			secondary goal.	previously fish in the reserves, contradicting claims that displacement would	Within the reserves though, there were no significant declines of species that
			supplemented by other fisheries management techniques, like efforts to				cost fishermen in the short term (Leeworthy 2001). It is important to note that	are targeted by fishing outside of the reserves (Ault et al. 2007). There is also
			reduce lobster traps in the area by 50%, in an attempt to address the				these short term trends came in the wake of Hurricane George, which may	considerable environmental differences year to year and some uncertainty
Florida Keys National	9515		overcapitalization and increase the efficiency of fisheries (Harper 1995). In				overstate the growth in net earnigns, and also coincicded with a lobster trap	that is aknowledged when analyzing these coral reef ecosystems (Jeffrey et
Marine Sanctuary		1990	the planning process the cost of managing reserve areas was estimated to				removal program that had demonstrated it's ability to increase CPUE. These	al. 2012).
(United States)			be \$1.65 million annualy (NOAA 1996, Appendix M). When predicting costs				caveats are important, but would likely impact fishermen that were displaced	
			to fishermen, planning documents state that fishermen may incur				and were not displaced similarly.	
			relocation costs and would be negatively impacted in the short term, but					
			didn't believe these negative impacts would be sustained and significant					
			long term (NOAA 1996, Appendix M).					
			The Sggann Ringhlas-Bowle (SR-B) Seamount MPA was planned as a	Haida Nation, World		The SR-B MPA was established under Canada's Ocean Act. The stated	In planning documents, the predicted outcomes of the reserve counted	The protected areas have remained relatively stable, without increased
			partnership between the Canadian Federal government and the Haida	Wildlife Fund, Canadia	n	goal in planning documents is to "conserve and protect the	preventing species loss, the international recognition for conservation efforts,	pressure from fisheries. Concern over sablefish traps that drag along the
			People. They designiated 3 zones, with the most protected zone 1	Federal Government		biodiversity and biological productivity of the area's marine	and meeting the national goals of protecting a set percent of the ocean as	bottom, negatively impacting sensitive benthic habitat, led to an agreement
Sggann Kinghlas-Bowie	6000		consisting of only 44 km². Commercial fishing was allowed in zone 2 with			ecosystem" (Science Advisory Report 36 2011). These goals were	expected benefits from protection. Costs for monitoring and research were	between the Haida Nation and Canadian government to close the previously
Seamount (SK-B) MPA (Canada)		2008	similiar restrictions to how the sable fishery was managed elsewhere			broad, and the planning documents justify a general approach to goal	expected to be between CAD \$200,000-360,000 annually (Regulatory Impact	fished Zone 2 to fishing of any kind where gear touches the bottom (Haida
			(traps only). Recreational fishing was also permitted, as there is very little			setting because of the diversity of the area represented in the MPA	Analysis Statement 2008). Little empirical analysis has been performed on the	Nation 2018).
			fishing in the area due to its distance from shore (180km). In planning			with seamounts spanning thousands of meters through the water	economic impacts of designating the seamount as a preserve as fishing was no	t
			documents regulators rejected status quo protection of the area because of			column.	displaced, however recent legislation prohibiting bottom fishing gear in the	
			the expected increase interest of commercial fishing, and the damage it				reserve could impact the sablefish fishery in this area.	
			could do.					