National Coral Reef Monitoring Program (NCRMP)

2014 Socioeconomic Monitoring Survey Analysis

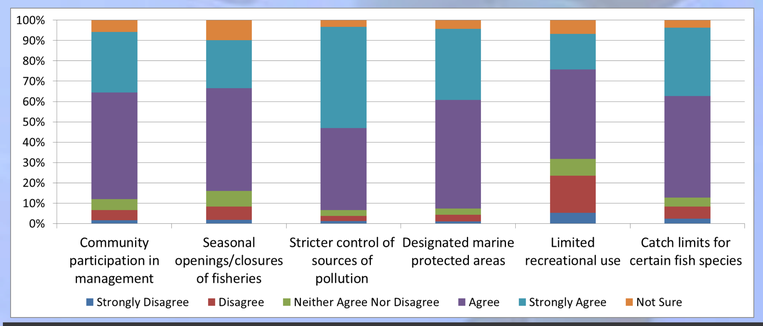
Purpose

Background Photo Credit: NOAA Photo Library

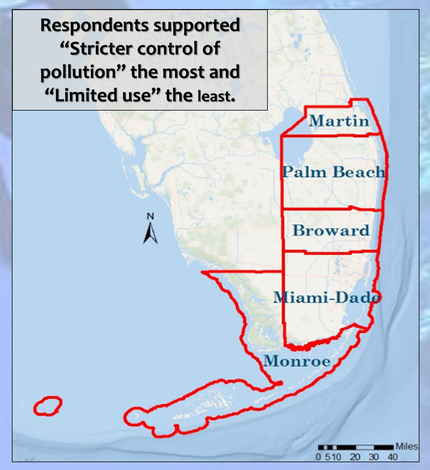
NCRMP gathers information to track the health of coral reefs and dependent human communities to develop effective management plans and actions for coral reef conservation. The socioeconomic monitoring survey effort, to be implemented every 4-7 years in each US coral reef jurisdiction collects information regarding the use of coral reef resources, the knowledge, attitudes, and perceptions of coral reefs, coral reef management, and population demographics.

South Florida

A total of 1,210 South Florida residents from five counties (Monroe, Miami-Dade, Broward, Palm Beach, and Martin) over the age of 18 were surveyed through the Random Digit Dial (RDD) telephone method from January to July of 2014.

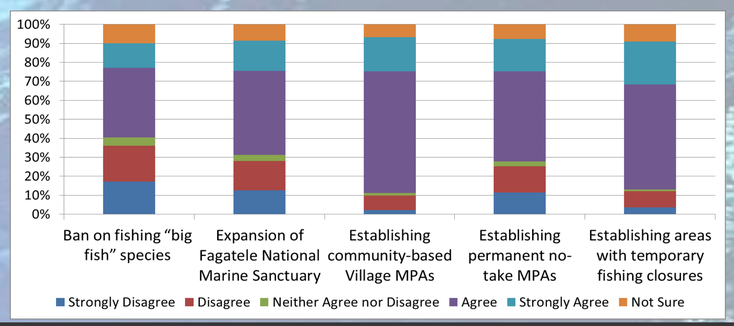


Respondents supported "Stricter control of pollution" the most and "Limited use" the least.

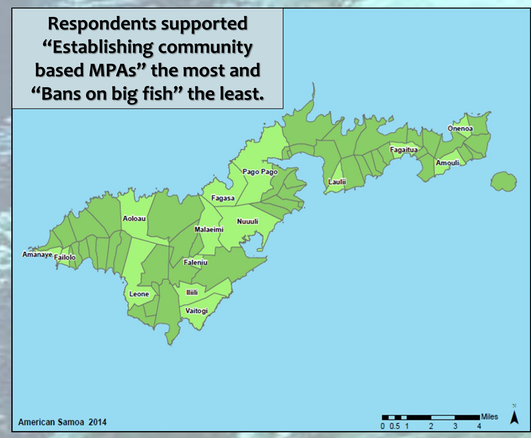


American Samoa

A total of 448 American Samoan residents over the age of 18 were surveyed in-person in February 2014. Fifteen villages on Tutuila were selected for the survey to obtain a random stratified sample of Urban, Semi-urban, and Rural locations from all parts of the island.



Respondents supported "Establishing community based MPAs" the most and "Bans on big fish" the least.



Cross-Tab of Respondent Tenure and Perceptions of Management Approaches

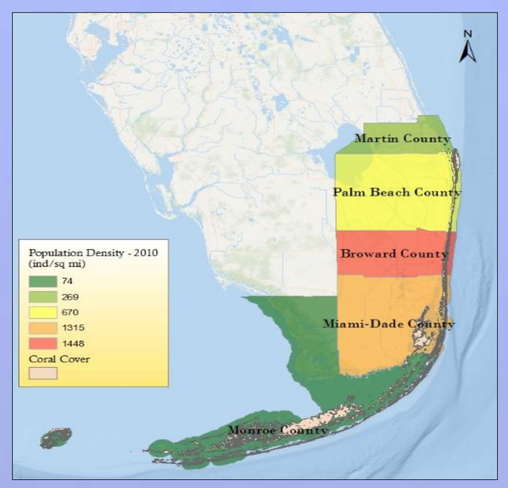
Management Approach	Lived in Florida 10 years or less		Lived in Florida more than 10 years		Statistical test for difference	
	n	Weighted Mean	n	Weighted Mean	t	p value
Law enforcement of existing rules/regulations	126	4.09	972	4.16	-0.92	0.36
Community participation in management	132	4.05	970	4.12	-0.93	0.35
Seasonal openings/closures of fisheries	129	4.05	948	3.95	1.25	0.21
Stricter control of pollution sources	138	4.42	996	4.33	1.24	0.22
Restrictions on coastal development	134	3.91	989	4.11	-2.39**	0.02
Marine zoning	112	3.89	848	3.96	-0.87	0.38
Designated MPAs	131	4.16	993	4.20	-0.59	0.55
Limited recreational use	136	3.59	971	3.58	0.13	0.90
Restricted access	122	3.47	967	3.67	-1.89*	0.06
No-take zones	116	3.80	878	3.99	-2.00**	0.04
More restrictions on construction practices	131	3.96	987	4.22	-3.33***	<0.01
Catch limits for certain fish species	137	3.99	1003	4.10	-1.50	0.14

Cross-Tab of Respondent Education and Condition Perceptions of Marine Resources

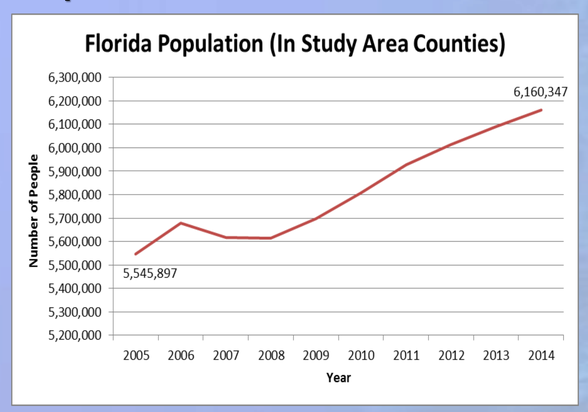
Resource	Did not complete college		Completed college		Statistical test for difference	
	n	Weighted Mean	n	Weighted Mean	t	p value
Current Conditions						
Ocean water quality	430	3.36	640	3.23	1.69*	0.09
Amount of coral	323	2.60	471	2.44	1.79*	0.08
Number of fish	364	3.10	498	2.65	5.33***	<0.01
Beach quality	423	3.47	628	3.38	1.26	0.34
Mangroves	318	3.54	493	3.09	5.23***	<0.01
Change in conditions over last 10 years						
Ocean water quality	433	2.73	626	2.44	3.94***	<0.01
Amount of coral	335	2.27	492	1.99	3.63***	<0.01
Number of fish	385	2.39	518	2.11	4.06***	<0.01
Beach quality	424	2.87	619	2.59	3.68***	<0.01
Mangroves	329	2.83	493	2.50	4.25***	<0.01

- **College educated respondents in Florida had an overall more pessimistic perception of the condition of reef resources.**
- **Respondents who have lived in Florida for more than 10 years tended to respond more favorably to coral reef management initiatives.**

Population Density



Population Growth Trends

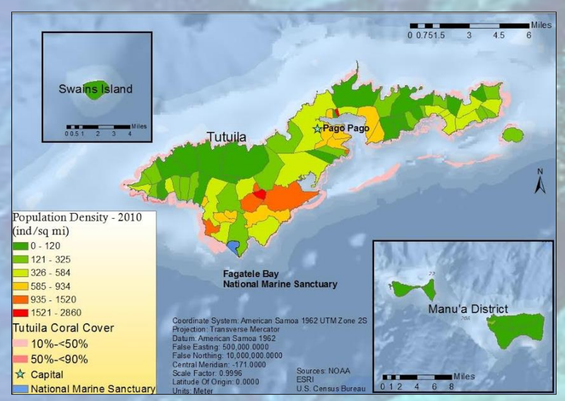


Cross-Tab of Respondent Tenure and Perceptions of MPA Functions

Marine Protected Area (MPA) Preferences	Has not lived in American Samoa their whole life		Has lived in American Samoa their whole life		Statistical test for difference	
	n	Mean	n	Mean	t	p value
MPAs protect coral reefs	133	4.22	158	4.25	-0.42	0.68
MPAs increase the number of fish	130	4.24	156	4.24	0.02	0.99
There should be fewer MPAs in American Samoa	116	2.57	135	2.10	2.84***	<0.01
There should be more MPAs in American Samoa	134	4.01	158	4.11	-0.91	0.37
There has been economic benefit to American Samoa from the establishment of MPAs	131	4.18	155	4.23	0.56	0.58
Fishermen's livelihoods have been negatively impacted from the establishment of MPAs in American Samoa	120	3.03	140	2.56	2.78***	<0.01
MPAs help increase tourism in American Samoa	128	3.99	153	4.02	-0.30	0.77
I would support adding new MPAs in American Samoa if there is evidence that the ones we have are improving American Samoa's marine resources	133	4.20	155	4.22	-0.28	0.78
I generally support the establishment of MPAs	130	4.11	153	4.27	-2.00**	0.05

- **Respondents who have not lived in American Samoa their whole life had a more negative perception concerning MPAs, and respondents who have lived in American Samoa their whole life generally support the establishment of MPAs.**

Population Density

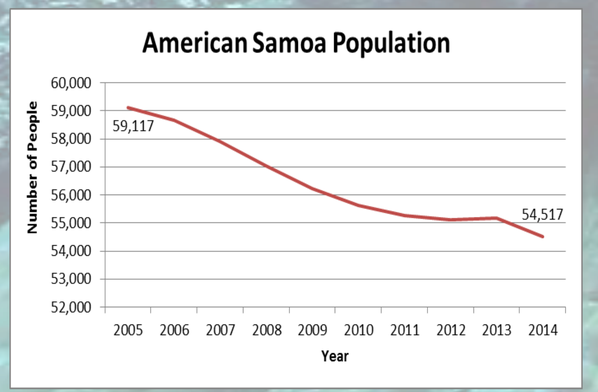


Cross-Tab of Respondent Education and Condition Perceptions of Marine Resources

Resource	Did not complete college		Completed college		Statistical test for difference	
	n	Mean	n	Mean	t	p value
Current Conditions						
Ocean water quality	282	3.22	102	2.69	3.81***	<0.01
Amount of coral	224	2.98	80	2.53	2.91***	<0.01
Number of fish	219	3.28	78	2.74	3.50***	<0.01
Amount of animals for gleaning	222	3.32	79	2.94	2.34**	0.02
Change in conditions over last 10 years						
Ocean water quality	269	3.07	96	2.60	2.87**	<0.01
Amount of coral	241	2.99	83	2.61	2.23*	0.03
Number of fish	225	3.17	77	2.61	3.23***	<0.01
Amount of animals for gleaning	228	3.20	80	2.81	2.24**	0.03

- **College educated respondents in American Samoa had an overall more pessimistic perception of the condition of reef resources.**

Population Growth Trends



The Socioeconomic Component of NCRMP is implemented by the National Centers for Coastal Ocean Science in partnership with the National Coral Reef Conservation Program. For more information, visit http://www.coris.noaa.gov/activities/projects/ncrmp_socio/