



NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT 2000:



PROJECTED PARTICIPATION IN MARINE RECREATION: 2005 & 2010

EXECUTIVE SUMMARY

The National Survey on Recreation and the Environment (NSRE) is a nationwide survey of outdoor recreation and environmental interest. Data on participation in outdoor recreation from the latest version of this survey, NSRE 2000, was used to develop forecasts of future participation for the years 2005 and 2010. This document summarizes the results of a recent report entitled *Projected Participation in Marine Recreation: 2005 & 2010* (Leeworthy, et al., 2005).

Participation forecasts were developed for 19 marine recreation activities/settings. Marine recreation was defined as occurring in saltwater or saltwater surroundings, including mixed fresh-salt water in tidal portions of rivers and bays. The report provides forecasts of participation rates, number of participants, mean number of days of participation per person, and total number of days, all by activity/setting. Days estimates were produced only for 16 of the 19 marine activities/settings due to insufficient data.



Participation Rates: We see a general trend of falling participation rates in marine recreation. Overall, participation rates in 13 of 19 activities/settings are projected to decline over the forecast period. Participation rates are projected to increase for four (4) activities/settings (visiting watersides besides beaches, scuba diving, hunting waterfowl, and rowing) and to remain constant for two (2) activities/settings (surfing and wind surfing). Visiting beaches was the number one activity in terms of participation rates in the base year 2000 with 30.03% participation. Swimming was second with 25.53% participation.

Number of Participants: Despite the downward trend in participation rates, the number of participants is forecasted to increase for all activities/settings. This is due to the fact that forecasted population growth more than offsets projected declines in participation rates. Visiting beaches was the number one activity in terms of number of participants in 2000 with 63.67 million participants. Swimming was second with 54.13 million participants.

Participation Rates and Number of Participants by Activity/Setting and Year

Activity/Setting	2000		2005		2010	
	Participation Rate (%)	Number of Participants (millions)	Participation Rate (%)	Number of Participants (millions)	Participation Rate (%)	Number of Participants (millions)
Visiting Beaches	30.03	63.67	29.85	67.59	29.59	70.94
Visiting Watersides Besides Beaches	4.50	9.54	4.51	10.22	4.52	10.84
Swimming	25.53	54.13	25.27	57.21	24.88	59.64
Snorkeling	5.07	10.75	5.02	11.38	4.96	11.88
Scuba Diving	1.35	2.86	1.38	3.12	1.39	3.34
Surfing	1.59	3.37	1.60	3.63	1.59	3.81
Wind Surfing	0.39	0.83	0.39	0.89	0.39	0.94
Fishing	10.32	21.88	10.29	23.31	10.24	24.54
Motorboating	7.11	15.08	7.04	15.95	6.97	16.70
Sailing	2.98	6.32	2.95	6.69	2.92	7.00
Personal Watercraft Use	2.57	5.45	2.55	5.77	2.50	5.99
Canoeing	1.05	2.23	1.04	2.35	1.02	2.45
Kayaking	1.33	2.82	1.33	3.01	1.31	3.15
Rowing	0.53	1.12	0.53	1.21	0.54	1.28
Water-Skiing	1.15	2.44	1.14	2.57	1.12	2.69
Viewing or Photographing Scenery	9.19	19.49	9.11	20.62	9.02	21.62
Migratory Bird Hunting	0.33	0.70	0.34	0.77	0.35	0.83
Bird-Watching	7.17	15.20	7.11	16.10	7.03	16.86
Viewing other Wildlife	6.45	13.68	6.37	14.41	6.26	15.01



NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT 2000:



PROJECTED PARTICIPATION IN MARINE RECREATION: 2005 & 2010

EXECUTIVE SUMMARY



Mean Days of Participation per Person: As with participation rates, mean days of participation per person is generally declining for marine recreation. Overall, mean days of participation per person is projected to decline over the forecast period in 13 out of 16 activities/settings for which equations were estimated. Two (2) of the activities/settings (sailing and hunting waterfowl) are projected to have increasing mean days of participation per person, while one (1) activity/setting (visiting watersides besides beaches) is forecasted to have mean days per person fall slightly between 2005 and 2010, after increasing between 2000 and 2005. It is important to make the distinction between mean days per person and mean days per participant. Again, visiting beaches was the number one activity in 2000 with an average of 4.14 days of participation per person. Viewing or photographing scenery was next with 4.01 mean days of participation per person.

Total Days of Participation: Total days of participation by activity/setting was calculated by multiplying the forecasts of mean days per person by the population forecasts. As with number of participants, population growth more than compensates for declines in mean days of participation per person, and total days of participation is projected to increase for all of the 16 activities/settings for which equations were estimated. Visiting beaches had higher total days of participation than any other activity/setting in 2000 with 878.7 million days. Viewing or photographing scenery was second with 849.6 million days of participation.



Mean Participation per Person and Total Days by Activity/Setting and Year

Activity/Setting	Mean Number of Days per Person 2000	Mean Number of Days per Person 2005	Mean Number of Days per Person 2010	Total Days 2000	Total Days 2005	Total Days 2010
Visiting Beaches	4.14414	4.09694	4.04450	878,698,001	927,663,095	969,569,540
Visiting Watersides Besides Beaches	0.76950	0.77307	0.76855	163,160,055	175,045,921	184,241,244
Swimming	3.62526	3.53210	3.42972	768,677,871	799,766,868	822,191,278
Snorkeling	0.44616	0.43461	0.41945	94,601,027	98,408,038	100,553,153
Scuba Diving	0.11070	0.10660	0.10210	23,472,148	24,137,506	24,475,294
Surfing	0.35457	0.35089	0.34172	75,180,846	79,452,285	81,919,806
Wind Surfing	0.02808	0.02800	0.02732	5,953,911	6,340,801	6,550,432
Fishing	1.25904	1.24796	1.23688	266,959,111	282,574,704	296,510,275
Motorboating	0.98118	0.95628	0.93000	208,043,383	216,527,849	222,945,140
Sailing	0.23542	0.23801	0.23807	49,917,011	53,892,966	57,071,826
Personal Watercraft Use	0.21331	0.21108	0.20609	45,228,943	47,793,554	49,404,811
Canoeing						
Kayaking						
Rowing						
Water-Skiing	0.13685	0.13272	0.12700	29,016,834	30,050,790	30,445,011
Viewing or Photographing Scenery	4.00684	4.01869	3.98978	849,585,752	909,945,854	956,451,695
Hunting Waterfowl	0.03069	0.03078	0.03083	6,507,319	6,968,602	7,390,000
Bird-Watching	3.05442	2.99471	2.92019	647,640,463	678,087,198	700,042,977
Viewing other Wildlife	1.65120	1.58392	1.51255	350,110,310	358,643,751	362,596,586



NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT 2000:



PROJECTED PARTICIPATION IN MARINE RECREATION: 2005 & 2010

EXECUTIVE SUMMARY

Percent Growth in Participants and Total Days: Using our projections of number of participants and total days of participation, we estimated percent growth over the periods 2000-2005 and 2000-2010. In terms of percent growth in participants, hunting waterfowl (+9.76% for 2000-2005 and +19.32% for 2000-2010) and scuba diving (+8.96% for 2000-2005 and +16.63% for 2000-2010) were projected to increase the fastest. In terms of percent growth in total days of participation, the number one activity/setting was sailing (+7.97% for 2000-2005 and +14.33% for 2000-2010). Sailing was followed by visiting watersides besides beaches, which had the next highest percent growth for the period 2000-2005 (+7.28% for 2000-2005 and +12.92% for 2000-2010), and by hunting waterfowl, which had the next highest percent growth for the period 2000-2010 (+7.09% for 2000-2005 and +13.56% for 2000-2010).

Percent Growth and Participants and Total Days by Activity/Setting and Year

Activity/Setting	% Change Participants		% Change Total Days	
	2000-2005	2000-2010	2000-2005	2000-2010
Visiting Beaches	6.15	11.42	5.57	10.34
Visiting Watersides Besides Beaches	7.14	13.62	7.28	12.92
Swimming	5.69	10.17	4.04	6.96
Snorkeling	5.84	10.53	4.02	6.29
Scuba Diving	8.96	16.63	2.83	4.27
Surfing	7.61	13.12	5.68	8.96
Wind Surfing	7.48	13.36	6.50	10.02
Fishing	6.51	12.14	5.85	11.07
Motorboating	5.77	10.77	4.08	7.16
Sailing	5.82	10.84	7.97	14.33
Personal Watercraft Use	5.94	9.97	5.67	9.23
Canoeing	5.62	9.96		
Kayaking	6.65	11.70		
Rowing	7.61	14.13		
Water-Skiing	5.56	10.28	3.56	4.92
Viewing or Photographing Scenery	5.84	10.96	7.10	12.58
Hunting Waterfowl	9.76	19.32	7.09	13.56
Bird-Watching	5.88	10.90	4.70	8.09
Viewing other Wildlife	5.39	9.76	2.44	3.57

Highest % Growth in Participants

Activity	% Growth	
	2000-2005	2000-2010
Hunting Waterfowl	9.76%	19.32%
Scuba Diving	8.96%	16.63%

Highest % Growth in Total Days

Activity	% Growth	
	2000-2005	2000-2010
Hunting Waterfowl	7.97%	14.33%
Scuba Diving	7.28%	12.92%



Population Growth: We see growth in the number of participants and total days of participation, despite declining participation rates and mean days per person due to population growth. The numbers reported here are for the civilian noninstitutionalized population aged 16 and over.

Projected Population and % Population Growth by Year

Year	2000	2005	2010
Population	212,033,860	226,428,406	239,725,247
% Growth		6.79%	13.06%



NATIONAL SURVEY ON RECREATION AND THE ENVIRONMENT 2000:



PROJECTED PARTICIPATION IN MARINE RECREATION: 2005 & 2010

EXECUTIVE SUMMARY

The Big Number – Small Number Problem:

Absolute Growth in Participants and Total Days:

Looking only at percent growth can be misleading, as high participation activities/settings may have very large increases in the number of participants but have relatively low percent growth. Low participation variables, on the other hand, may have relatively small changes (on the order of just a few hundred thousand), but these may amount to high growth in percentage terms. When we consider absolute changes in number of participants and total days, higher participation activities/settings tend to dominate. Visiting beaches had the largest absolute growth in number of participants (+3.9 million for 2000-2005 and +7.3 million for 2000-2010) and was closely followed by swimming (+3.1 million for 2000-2005 and +5.5 million for 2000-2010). For total days, viewing or photographing scenery had the largest absolute growth (+60.4 million for 2000-2005 and +106.9 million for 2000-2010), followed by visiting beaches (+49.0 million for 2000-2005 and +90.9 million for 2000-2010).

Implications for Marine Recreation: Based on data from NSRE 2000, we project increasing numbers of participants and total days of participation for all marine recreation activities/settings despite general downward trends in participation rates and mean days of participation per person. Across the board, population growth more than offsets any declines in per capita variables. The result will be increasing pressure on our nation's marine recreation resources as well as increasing values associated with these increasingly scarce resources.

Absolute Growth and Participants and Total Days by Activity/Setting and Year

Activity/Setting	Absolute Change Participants		Absolute Change Total Days	
	2000-2005	2000-2010	2000-2005	2000-2010
Visiting Beaches	3,916,747	7,269,448	48,965,095	90,871,539
Visiting Watersides Besides Beaches	681,106	1,299,510	11,885,866	21,081,189
Swimming	3,079,046	5,505,755	31,088,997	53,513,407
Snorkeling	627,643	1,131,661	3,807,012	5,952,126
Scuba Diving	256,469	476,149	665,358	1,003,146
Surfing	256,482	442,278	4,271,439	6,738,960
Wind Surfing	61,888	110,439	386,890	596,522
Fishing	1,424,625	2,655,994	15,615,592	29,551,164
Motorboating	869,722	1,623,573	8,484,466	14,901,757
Sailing	367,733	684,976	3,975,955	7,154,815
Personal Watercraft Use	323,661	543,063	2,564,611	4,175,869
Canoeing	125,111	221,761		
Kayaking	187,493	329,832		
Rowing	85,511	158,766		
Water-Skiing	135,618	250,588	1,033,956	1,428,177
Viewing or Photographing Scenery	1,138,011	2,136,606	60,360,103	106,865,943
Hunting Waterfowl	68,292	135,196	461,282	882,681
Bird-Watching	893,587	1,657,856	30,446,735	52,402,514
Viewing other Wildlife	736,848	1,334,612	8,533,442	12,486,276

Highest Absolute Growth in Participants

Activity	Absolute Growth	
	2000-2005	2000-2010
Visiting Beaches	3.9 million	7.3 million
Swimming	3.1 million	5.5 million

Highest Absolute Growth in Total Days

Activity	Absolute Growth	
	2000-2005	2000-2010
Viewing Scenery	60.4 million	106.9 million
Visiting Beaches	49.0 million	90.9 million

The full report *Projecting Participation in Marine Recreation: 2005 & 2010* is available on the web at the following link:

<http://marineeconomics.noaa.gov/NSRE/NSREForecast.pdf>

For further information, please contact:

Dr. Vernon R. (Bob) Leeworthy
 Special Projects Office,
 NOAA, National Ocean Service
 1305 East West Highway
 SSMC IV, 9th Floor
 Silver Spring, MD 20910
 (301)-713-3000 ext. 138
 Bob.Leeworthy@noaa.gov