

Coastal Zone Management Act Performance Measurement System

2009 Report on Contextual Indicators

Executive Summary

INTRODUCTION

The Coastal Zone Management Act (CZMA) Performance Measurement System includes a suite of “contextual” indicators on the status of coastal societies, economies, environments, and natural hazards. Contextual indicator data supplement performance measurement data collected by state coastal zone management programs and give context to state activities by illustrating the many pressures on coastal areas. New contextual indicator data are collected annually from existing data sets by NOAA’s office of Ocean and Coastal Resource Management (OCRM) and the NOAA Coastal Services Center. Data are provided at the national, regional, and state levels where possible.

CONTEXTUAL INDICATOR DATA SUMMARIZED

Category	Indicator	National 2008 (except where noted) Results
Coastal Society	1. Population in the coastal zone	124,878,862 people
	2. Percentage of the population residing in the coastal zone	41.1%
	3. Five-year change in the population of the coastal zone	2.9%
	4. Population density in the coastal zone	398 people/sq. mi. (excluding AK)
	5. Land cover change in coastal watersheds	See full report
	6. Freshwater use in the coastal zone	62,441 million gallons/day (2000)
Coastal Economy	7. Percentage of the economy attributable to the coastal zone	48.6% (2007)
	8. Value of coastal zone tourism and recreation	\$69,651,089,000 (2004)
	9. Percentage of employment in the coastal zone	42.1% (2007)
	10. Percentage of coastal zone employment dependent on coastal and ocean resources	4.2% (2004)
	11. Number of coastal zone establishments dependent on coastal and ocean resources	125,010 establishments (2004)
Coastal Environment	12. Overall condition of coastal waters a) Water quality index b) Sediment quality index c) Coastal habitat index d) Benthic index e) Fish tissue contaminants index	Overall rating of 2.8 out of 5
	13. Number of invasive marine species reported in coastal states	575
Coastal Hazards	14. Proportion of Federal Disaster Declarations occurring in coastal states and territories	34/75
	15. Proportion of coastal Federal Disaster Declarations directly related to coastal hazards	13/34
	16. Total estimated cost of all billion-dollar weather disasters related to coastal hazards	At least \$33.2 billion

REGIONAL DELINEATIONS

Indicators reported at the regional level are reported according to the below regional delineation as identified by the NOAA OCRM Coastal Programs Division. This applies to indicators 1-11, and 13. For more information on these delineations, see the Contextual Indicator Manual at <http://coastalmanagement.noaa.gov/success/indicators.html>.

West Coast – CA, OR, WA
Gulf Coast – AL, LA, MS, TX
Southeast – FL, GA, NC, SC
Mid-Atlantic – DE, MD, NJ, VA
Northeast – CT, MA, ME, NH, NY, RI
Great Lakes – IL, IN, MI, MN, OH, PA, WI
Alaska – AK
Islands and Territories – AS, CNMI, GU, HI, PR, USVI

Indicator 12 and its components, as reported in the National Coastal Condition Report (NCCR), are reported according to the below regional delineation:

Northeast – ME, NH, MA, RI, CT, NJ, DE, MD, VA
Southeast – NC, SC, GA, FL (east coast)
Gulf Coast – FL (west coast), AL, MS, LA, TX
West Coast – CA, OR, WA
Great Lakes – PA, NY, OH, MI, IN, IL, WI, MN
Puerto Rico – Puerto Rico

THE COASTAL ZONE

For the purposes of this report, the coastal zone includes those counties that are wholly or partially within the boundaries of a state's approved coastal zone management program. For Illinois, which does not have an approved Coastal Zone Management Program at the time of this publication, those counties directly contacting the coast are deemed within the coastal zone. For a complete list of counties included in states' coastal zones, see the Contextual Indicator Manual at <http://coastalmanagement.noaa.gov/success/indicators.html>.

Coastal Zone Management Act Performance Measurement System

2009 Report on Contextual Indicators

September 2009

1. Population in the coastal zone

National: 124,878,862 people

Geographic Area	Estimated 2008 CZ Population
West Coast	31,270,490
CA	25,294,728
OR	1,479,597
WA	4,496,165
Gulf Coast	9,004,011
AL	580,748
LA	2,043,775
MS	349,294
TX	6,030,194
Southeast	21,041,903
FL	18,328,340
GA	595,144
NC	944,038
SC	1,174,381
Mid-Atlantic	16,122,853
DE	873,092
MD	3,765,528
NJ	7,805,297
VA	3,678,936
Northeast	26,122,591
CT	2,170,444
MA	4,897,208
ME	982,967
NH	419,264
NY	16,601,920
RI	1,050,788
Great Lakes	19,452,160
IL	6,007,117
IN	766,869
MI	4,809,640
MN	246,843
OH	2,667,294
PA	2,901,832
WI	2,052,565
Alaska	576,656
Hawaii	1,288,198

Source: U.S. Census Bureau

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2008 data)

2. Percentage of the population residing in the coastal zone

National: 41.1% (124,878,862 out of 304,059,724 people)

Geographic Area	Estimated 2008 CZ Population	Estimated 2008 Total Population	% of Population Residing in CZ
West Coast	31,270,490	47,095,950	66.4%
CA	25,294,728	36,756,666	68.8%
OR	1,479,597	3,790,060	39.0%
WA	4,496,165	6,549,224	68.7%
Gulf Coast	9,004,011	36,338,288	24.8%
AL	580,748	4,661,900	12.5%
LA	2,043,775	4,410,796	46.3%
MS	349,294	2,938,618	11.9%
TX	6,030,194	24,326,974	24.8%
Southeast	21,041,903	41,716,298	50.4%
FL	18,328,340	18,328,340	100.0%
GA	595,144	9,685,744	6.1%
NC	944,038	9,222,414	10.2%
SC	1,174,381	4,479,800	26.2%
Mid-Atlantic	16,122,853	22,958,439	70.2%
DE	873,092	873,092	100.0%
MD	3,765,528	5,633,597	66.8%
NJ	7,805,297	8,682,661	89.9%
VA	3,678,936	7,769,089	47.4%
Northeast	26,122,591	33,172,569	78.7%
CT	2,170,444	3,501,252	62.0%
MA	4,897,208	6,497,967	75.4%
ME	982,967	1,316,456	74.7%
NH	419,264	1,315,809	31.9%
NY	16,601,920	19,490,297	85.2%
RI	1,050,788	1,050,788	100.0%
Great Lakes	19,452,160	64,064,326	30.4%
IL	6,007,117	12,901,563	46.6%
IN	766,869	6,376,792	12.0%
MI	4,809,640	10,003,422	48.1%
MN	246,843	5,220,393	4.7%
OH	2,667,294	11,485,910	23.2%
PA	2,901,832	12,448,279	23.3%
WI	2,052,565	5,627,967	36.5%
Alaska	576,656	686,293	84.0%
Hawaii	1,288,198	1,288,198	100.0%

Source: U.S. Census Bureau

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2008 data)

3. Five-year change in the population of the coastal zone

National: 2.9% Increase (121,351,661 estimated 2003 coastal zone population to 124,878,862 estimated 2008 coastal zone population)

Geographic Area	Estimated 2003 CZ Population	Estimated 2008 CZ Population	Five-year Change
West Coast	30,447,805	31,270,490	2.7%
CA	24,856,699	25,294,728	1.8%
OR	1,379,048	1,479,597	7.3%
WA	4,212,058	4,496,165	6.7%
Gulf Coast	8,647,940	9,004,011	4.1%
AL	548,944	580,748	5.8%
LA	2,178,303	2,043,775	-6.2%
MS	368,467	349,294	-5.2%
TX	5,552,226	6,030,194	8.6%
Southeast	19,390,574	21,041,903	8.5%
FL	16,937,337	18,328,340	8.2%
GA	554,788	595,144	7.3%
NC	862,274	944,038	9.5%
SC	1,036,175	1,174,381	13.3%
Mid-Atlantic	15,717,105	16,122,853	2.6%
DE	814,262	873,092	7.2%
MD	3,700,791	3,765,528	1.7%
NJ	7,724,632	7,805,297	1.0%
VA	3,477,420	3,678,936	5.8%
Northeast	25,792,735	26,122,591	1.3%
CT	2,156,084	2,170,444	0.7%
MA	4,850,745	4,897,208	1.0%
ME	970,923	982,967	1.2%
NH	405,929	419,264	3.3%
NY	16,337,752	16,601,920	1.6%
RI	1,071,302	1,050,788	-1.9%
Great Lakes	19,566,800	19,452,160	-0.6%
IL	6,017,207	6,007,117	-0.2%
IN	744,669	766,869	3.0%
MI	4,879,993	4,809,640	-1.4%
MN	248,121	246,843	-0.5%
OH	2,738,304	2,667,294	-2.6%
PA	2,917,520	2,901,832	-0.5%
WI	2,020,986	2,052,565	1.6%
Alaska	550,369	576,656	4.8%
Hawaii	1,238,333	1,288,198	4.0%

Source: U.S. Census Bureau

Coverage: All coastal states and territories

Last updated by OCRM: 2009 Report (using 2003 and 2008 data)

4. Population density in the coastal zone

National: 398 people/sq. mi., excluding Alaska (124,302,206 people in 312,421 sq. mi.)

Geographic Area	Estimated 2008 CZ Population	Approximate CZ Area (sq. mi.)	Estimated CZ Population Density
West Coast	31,270,490	73,917	423
CA	25,294,728	35,814	706
OR	1,479,597	19,238	77
WA	4,496,165	18,865	238
Gulf Coast	9,004,011	33,861	266
AL	580,748	2,829	205
LA	2,043,775	13,005	157
MS	349,294	1,783	196
TX	6,030,194	16,244	371
Southeast	21,041,903	75,766	278
FL	18,328,340	53,929	340
GA	595,144	5,636	106
NC	944,038	9,364	101
SC	1,174,381	6,837	172
Mid-Atlantic	16,122,853	22,615	713
DE	873,092	1,954	447
MD	3,765,528	6,403	588
NJ	7,805,297	5,695	1,371
VA	3,678,936	8,563	430
Northeast	26,122,591	39,481	662
CT	2,170,444	2,271	956
MA	4,897,208	3,587	1,365
ME	982,967	12,051	82
NH	419,264	1,064	394
NY	16,601,920	19,460	853
RI	1,050,788	1,048	1,003
Great Lakes	19,452,160	60,358	322
IL	6,007,117	1,458	4,120
IN	766,869	1,511	508
MI	4,809,640	30,623	157
MN	246,843	10,634	23
OH	2,667,294	3,767	708
PA	2,901,832	1,825	1,590
WI	2,052,565	10,540	195
Alaska	576,656	519,125	1
Hawaii	1,288,198	6,423	201

Source: U.S. Census Bureau

Coverage: All coastal states and territories

Last updated by OCRM: 2009 Report (using 2008 data)

5. Land cover change in coastal watersheds

National (1996-2001):

Land Cover Category	% Change
High Intensity Developed	5.43%
Medium Intensity Developed	4.79%
Low Intensity Developed	4.24%
Developed Open Space	4.01%
Cultivated	0.22%
Grassland	0.81%
Deciduous Forest	-0.48%
Evergreen Forest	-3.44%
Mixed Forest	-2.17%
Scrub/Shrub	4.91%
Woody Wetland	-1.13%
Emergent Wetland	1.98%
Unconsolidated Shore	2.87%
Barren Land	6.29%
Open Water	-0.08%

West Coast Region (1996-2001):

Land Cover Category	% Change			
	CA	OR	WA	Regional Total
High Intensity Developed	2.20%	5.66%	2.59%	2.69%
Medium Intensity Developed	3.09%	5.79%	2.74%	3.28%
Low Intensity Developed	2.34%	3.37%	3.28%	2.77%
Developed Open Space	2.22%	1.29%	3.49%	2.36%
Cultivated	1.14%	1.26%	1.69%	1.25%
Grassland	-0.65%	-14.17%	-2.64%	-2.43%
Deciduous Forest	1.23%	-5.05%	1.16%	-0.29%
Evergreen Forest	-0.77%	-1.82%	-1.42%	-1.39%
Mixed Forest	0.55%	-2.55%	-5.67%	-1.71%
Scrub/Shrub	-0.21%	14.52%	10.40%	3.60%
Woody Wetland	-0.26%	0.00%	-0.02%	-0.06%
Emergent Wetland	0.08%	0.01%	-0.02%	0.02%
Unconsolidated Shore	1.36%	0.12%	0.09%	0.34%
Barren Land	0.44%	40.03%	-5.58%	1.74%
Open Water	-0.11%	-0.01%	0.00%	-0.08%

Gulf Coast Region (2001-2005):

Land Cover Category	% Change				
	TX	LA	MS	AL	Regional Total
High Intensity Developed	11.99%	22.45%	7.00%	-4.95%	12.69%
Medium Intensity Developed	4.38%	-0.21%	5.61%	-1.87%	3.30%
Low Intensity Developed	0.09%	-1.36%	0.34%	-2.93%	-0.70%
Developed Open Space	0.23%	3.97%	1.72%	-1.73%	0.54%
Cultivated	0.37%	-1.24%	-7.91%	0.29%	-0.40%
Grassland	1.67%	6.60%	46.89%	36.33%	8.00%
Deciduous Forest	-2.55%	-1.60%	-0.41%	-10.13%	-2.65%
Evergreen Forest	-3.26%	-5.56%	-6.92%	-17.81%	-8.88%
Mixed Forest	-4.71%	-7.55%	-5.22%	-11.75%	-7.64%
Scrub/Shrub	0.21%	21.56%	14.13%	33.64%	6.45%
Woody Wetland	-1.92%	-2.05%	-3.72%	-5.79%	-3.07%
Emergent Wetland	-0.26%	-1.32%	1.64%	-1.70%	-0.96%
Unconsolidated Shore	0.61%	2.62%	5.66%	6.50%	1.29%
Barren Land	14.36%	-6.95%	-11.84%	-27.14%	1.67%
Open Water	1.51%	0.67%	0.70%	-0.10%	0.89%

Southeast Region (1996-2001):

Land Cover Category	% Change				
	FL	GA	SC	NC	Regional Total
High Intensity Developed	16.62%	1.79%	2.57%	1.01%	12.54%
Medium Intensity Developed	9.55%	3.11%	5.90%	3.23%	8.58%
Low Intensity Developed	10.09%	5.67%	5.93%	3.20%	7.84%
Developed Open Space	6.41%	4.47%	12.05%	5.66%	6.79%
Cultivated	-0.94%	2.51%	2.13%	1.09%	0.90%
Grassland	-1.23%	5.36%	-0.22%	14.66%	3.21%
Deciduous Forest	6.28%	9.47%	23.14%	10.76%	11.02%
Evergreen Forest	-3.27%	-3.01%	-9.11%	-9.31%	-5.23%
Mixed Forest	3.71%	6.88%	15.58%	8.30%	7.67%
Scrub/Shrub	-0.84%	-4.98%	17.00%	14.05%	3.84%
Woody Wetland	-1.67%	-3.29%	-3.86%	-2.76%	-2.57%
Emergent Wetland	3.02%	12.98%	8.36%	6.60%	5.29%
Unconsolidated Shore	-2.84%	-1.38%	-13.21%	-1.64%	-3.97%
Barren Land	15.62%	29.64%	9.76%	2.28%	14.34%
Open Water	-0.19%	-0.24%	0.72%	0.19%	-0.01%

Mid-Atlantic Region (2001-2005):

Land Cover Category	% Change				
	VA	MD	DE	NJ	Regional Total
High Intensity Developed	13.55%	9.50%	13.77%	4.43%	7.97%
Medium Intensity Developed	5.42%	2.52%	3.79%	2.00%	3.02%
Low Intensity Developed	2.72%	0.70%	3.61%	1.01%	1.54%
Developed Open Space	-0.32%	-0.57%	0.61%	-0.07%	-0.27%
Cultivated	0.92%	0.00%	-0.77%	-0.74%	0.14%
Grassland	116.97%	27.75%	57.04%	9.30%	72.59%
Deciduous Forest	-1.97%	-1.13%	-1.34%	-0.77%	-1.46%
Evergreen Forest	-3.35%	0.62%	1.10%	1.18%	-2.31%
Mixed Forest	-2.95%	-1.45%	-2.21%	-0.64%	-2.00%
Scrub/Shrub	-4.18%	-3.46%	-1.53%	-3.58%	-3.87%
Woody Wetland	-1.37%	-1.27%	-1.34%	-0.44%	-1.11%
Emergent Wetland	-1.48%	0.05%	-0.83%	-0.77%	-0.75%
Unconsolidated Shore	-26.07%	-18.92%	-13.93%	-1.99%	-18.83%
Barren Land	57.38%	45.30%	39.98%	9.45%	33.44%
Open Water	0.32%	0.13%	0.18%	0.05%	0.19%

Northeast Region (2001-2005):

	% Change						
Land Cover Category	CT	MA	ME	NH	NY	RI	Regional Total
High Intensity Developed	4.89%	4.09%	1.14%	3.18%	1.87%	2.98%	2.75%
Medium Intensity Developed	1.78%	0.73%	0.58%	0.95%	0.39%	0.21%	0.69%
Low Intensity Developed	-0.01%	-0.10%	0.07%	0.08%	0.02%	-0.17%	-0.01%
Developed Open Space	0.57%	0.91%	0.38%	1.37%	1.00%	0.69%	0.86%
Cultivated	0.46%	0.36%	0.21%	1.01%	0.05%	1.27%	0.14%
Grassland	6.09%	2.86%	50.99%	89.08%	2.04%	-3.46%	20.19%
Deciduous Forest	-0.38%	-0.28%	-1.89%	-1.53%	-0.07%	-0.32%	-0.57%
Evergreen Forest	-0.40%	-0.53%	-0.91%	-0.67%	-0.26%	-0.18%	-0.65%
Mixed Forest	-0.39%	-0.45%	-1.37%	-0.72%	-0.18%	-0.35%	-0.95%
Scrub/Shrub	-0.39%	0.93%	6.52%	13.21%	-0.46%	0.50%	4.01%
Woody Wetland	-0.20%	-0.28%	-0.29%	0.18%	-0.03%	-0.12%	-0.14%
Emergent Wetland	2.31%	1.29%	0.09%	-1.51%	1.57%	0.52%	0.80%
Unconsolidated Shore	2.68%	0.02%	-0.02%	-0.75%	2.89%	-0.25%	0.45%
Barren Land	9.42%	4.07%	-0.93%	3.79%	7.10%	-0.72%	2.85%
Open Water	-0.14%	-0.10%	-0.02%	-0.12%	-0.18%	-0.02%	-0.14%

Great Lakes Region (2001-2006):

Land Cover Category	% Change							Regional Total
	IL	IN	MI	MN	OH	PA	WI	
High Intensity Developed	4.25%	3.52%	2.71%	1.10%	5.96%	6.99%	0.74%	4.18%
Medium Intensity Developed	3.11%	2.39%	0.45%	0.56%	3.04%	2.96%	5.57%	2.70%
Low Intensity Developed	0.90%	0.48%	-0.14%	0.08%	0.46%	0.66%	1.81%	1.06%
Developed Open Space	12.37%	2.93%	0.26%	2.99%	1.69%	0.09%	1.84%	4.15%
Cultivated	-4.94%	-0.60%	0.04%	-0.07%	-0.20%	-0.14%	-0.41%	0.76%
Grassland	1.75%	9.66%	5.30%	78.59%	0.36%	1.49%	19.59%	-15.52%
Deciduous Forest	-2.08%	-0.60%	-0.49%	-0.97%	-0.88%	-0.20%	-0.58%	0.34%
Evergreen Forest	-1.31%	-1.58%	-2.83%	-0.93%	-0.48%	-0.28%	-0.77%	-0.95%
Mixed Forest	-2.86%	-2.21%	-0.76%	-1.78%	-0.43%	-0.10%	-0.90%	-0.56%
Scrub/Shrub	-3.28%	-2.72%	5.21%	3.24%	1.00%	-0.38%	5.95%	3.99%
Woody Wetland	-1.09%	-0.34%	-0.14%	-0.35%	-0.76%	-0.06%	-0.38%	0.31%
Emergent Wetland	7.95%	-0.79%	0.91%	1.86%	3.57%	-1.66%	0.87%	1.62%
Unconsolidated Shore	-18.99%	-15.81%	-1.04%	4988.24%	-1.56%	-2.88%	19.73%	4.41%
Barren Land	240.38%	114.43%	1.90%	8.71%	79.45%	9.18%	43.79%	12.68%
Open Water	0.14%	0.04%	-0.10%	-0.56%	-0.44%	0.02%	-0.07%	-61.45%

*Source: NOAA Coastal Services Center, Coastal Change Analysis Program (C-CAP)
 Coverage: 1996, 2001, and in some cases 2005 or 2006 data available for contiguous United States excluding Alaska.
 Last updated by OCRM: 2009 (for available C-CAP data)*

6. Freshwater use in the coastal zone

National: 62,441 million gallons/day

Geographic Area	Freshwater Withdrawals (Mgal/day)
West Coast	8,537
CA	7,548
OR	N/A
WA	990
Gulf Coast	7,965
AL	1,329
LA	6,367
MS	269
TX	N/A
Southeast	9,905
FL	8,137
GA	554
NC	238
SC	976
Mid-Atlantic	5,109
DE	582
MD	523
NJ	1,901
VA	2,103
Northeast	6,045
CT	N/A
MA	459
ME	N/A
NH	50
NY	5,399
RI	138
Great Lakes	23,807
IL	2,490
IN	3,078
MI	9,101
MN	768
OH	2,930
PA	N/A
WI	5,440
Alaska	102
Islands and Territories	971
Hawaii	640
Puerto Rico	331

Source: U.S. Geological Survey

Coverage: All coastal states except CT, ME, OR, PA, TX; PR

*Last updated by OCRM: 2007 Report (using 2000 data).**

**Special note: Although the USGS provides data on estimated use of water in the United States every five years, estimates for 2005 had not yet been released at the time of this publication.*

7. Percentage of the economy attributable to the coastal zone

National: 48.6% (\$6,684,804,291,953 coastal zone GDP out of \$13,743,021,000,000 national GDP)

Geographic Area	CZ GDP	Total GDP	% of Total GDP
West Coast	\$1,868,335,440,185	\$2,282,472,000,000	81.9%
CA	\$1,562,118,168,981	\$1,812,969,000,000	86.2%
OR	\$57,455,836,220	\$158,234,000,000	36.3%
WA	\$248,761,434,984	\$311,269,000,000	79.9%
Gulf Coast	\$495,022,724,550	\$1,612,448,000,000	30.7%
AL	\$18,995,929,282	\$165,793,000,000	11.5%
LA	\$96,352,296,841	\$216,145,000,000	44.6%
MS	\$14,565,466,951	\$88,546,000,000	16.4%
TX	\$365,109,031,476	\$1,141,964,000,000	32.0%
Southeast	\$825,542,931,593	\$1,683,303,000,000	49.0%
FL	\$734,521,000,002	\$734,521,000,000	100.0%
GA	\$20,024,891,153	\$396,504,000,000	5.1%
NC	\$28,861,878,924	\$399,446,000,000	7.2%
SC	\$42,135,161,514	\$152,832,000,000	27.6%
Mid-Atlantic	\$926,363,637,194	\$1,177,253,000,000	78.7%
DE	\$60,117,000,000	\$60,117,000,000	100.0%
MD	\$165,598,906,283	\$268,688,000,000	61.6%
NJ	\$408,576,995,817	\$465,483,000,000	87.8%
VA	\$292,070,735,094	\$382,965,000,000	76.3%
Northeast	\$1,555,891,114,028	\$1,823,151,000,000	85.3%
CT	\$136,415,124,082	\$216,264,000,000	63.1%
MA	\$299,848,651,591	\$351,514,000,000	85.3%
ME	\$39,349,216,470	\$48,106,000,000	81.8%
NH	\$17,054,524,132	\$57,340,000,000	29.7%
NY	\$1,016,320,597,753	\$1,103,024,000,000	92.1%
RI	\$46,903,000,000	\$46,903,000,000	100.0%
Great Lakes	\$912,979,202,194	\$2,722,652,000,000	33.5%
IL	\$360,920,894,968	\$609,569,000,000	59.2%
IN	\$24,297,090,818	\$246,439,000,000	9.9%
MI	\$170,650,500,912	\$381,963,000,000	44.7%
MN	\$9,704,215,426	\$254,969,000,000	3.8%
OH	\$126,720,461,765	\$466,310,000,000	27.2%
PA	\$131,187,026,043	\$531,109,000,000	24.7%
WI	\$89,499,012,262	\$232,293,000,000	38.5%
Alaska	\$39,136,242,209	\$44,517,000,000	87.9%
Hawaii	\$61,533,000,000	\$61,533,000,000	100.0%

Source: National Ocean Economics Program

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2007 data)

8. Value of coastal zone tourism and recreation

National: \$69,651,089,000

Geographic Area	GDP for CZ Tourism and Recreation Sector
West Coast	\$16,419,781,400
CA	\$11,992,128,300
OR	\$297,446,400
WA	\$4,130,206,700
Gulf Coast	\$4,642,122,600
AL	\$354,485,500
LA	\$2,164,629,100
MS	\$209,650,800
TX	\$1,913,357,200
Southeast	\$13,780,170,400
FL	\$10,721,166,200
GA	\$690,828,500
NC	\$868,232,500
SC	\$1,499,943,200
Mid-Atlantic	\$5,124,819,400
DE	\$373,863,400
MD	\$1,119,400,700
NJ	\$2,198,637,500
VA	\$1,432,917,800
Northeast	\$17,691,228,200
CT	\$1,323,004,100
MA	\$2,080,336,200
ME	\$966,728,600
NH	\$253,422,100
NY	\$12,197,767,500
RI	\$869,969,700
Great Lakes	\$6,389,482,200
IL	\$2,862,983,900
IN	\$107,193,000
MI	\$1,263,938,600
MN	\$97,112,900
OH	\$786,439,000
PA	\$625,916,500
WI	\$645,898,300
Alaska	\$783,604,200
Hawaii	\$4,819,880,600

Source: National Ocean Economics Program

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2004 data)

9. Percentage of employment in the coastal zone

National: 42.1% (57,011,077 occupational employees in the coastal zone out of 135,366,106 occupational employees in U.S.)

Geographic Area	CZ Employment	Total Employment	Percentage of Total Employment
West Coast	15,022,400	19,975,567	75.2%
CA	12,293,816	15,350,900	80.1%
OR	612,356	1,707,225	35.9%
WA	2,116,228	2,917,442	72.5%
Gulf Coast	3,865,899	14,970,412	25.8%
AL	236,774	1,907,794	12.4%
LA	746,369	1,862,171	40.1%
MS	149,167	1,092,967	13.6%
TX	2,733,589	10,107,480	27.0%
Southeast	8,748,156	17,463,418	50.1%
FL	7,650,070	7,650,070	100.0%
GA	241,581	3,981,432	6.1%
NC	353,452	4,010,504	8.8%
SC	503,053	1,821,412	27.6%
Mid-Atlantic	7,933,192	10,399,071	76.3%
DE	417,151	417,151	100.0%
MD	1,629,448	2,495,734	65.3%
NJ	3,463,405	3,877,166	89.3%
VA	2,423,188	3,609,020	67.1%
Northeast	11,850,336	14,942,738	79.3%
CT	989,478	1,635,700	60.5%
MA	2,526,624	3,194,727	79.1%
ME	461,191	594,144	77.6%
NH	183,956	617,033	29.8%
NY	7,215,707	8,427,754	85.6%
RI	473,380	473,380	100.0%
Great Lakes	8,701,655	28,861,154	30.2%
IL	2,862,418	5,750,149	49.8%
IN	296,793	2,835,777	10.5%
MI	1,858,049	4,066,596	45.7%
MN	117,124	2,649,277	4.4%
OH	1,337,785	5,258,088	25.4%
PA	1,236,215	5,558,760	22.2%
WI	993,271	2,742,507	36.2%
Alaska	264,361	308,475	85.7%
Hawaii	625,078	625,078	100.0%

Source: National Ocean Economics Program

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2007 data)

10. Percentage of coastal zone employment dependent on coastal and ocean resources

National: 4.2% (2,323,903 occupational employees out of 54,821,344 occupational employees in the coastal zone)

Geographic Area	CZ Employment Dependent	CZ Employment	% Dependent
West Coast	536,094	14,322,088	3.7%
CA	369,444	11,818,729	3.1%
OR	16,909	562,415	3.0%
WA	149,741	1,940,944	7.7%
Gulf Coast	277,891	3,680,893	7.5%
AL	22,091	215,209	10.3%
LA	112,680	811,531	13.9%
MS	30,235	150,066	20.1%
TX	112,885	2,504,087	4.5%
Southeast	423,130	8,140,828	5.2%
FL	312,190	7,135,584	4.4%
GA	26,496	223,380	11.9%
NC	40,353	322,655	12.5%
SC	44,091	459,209	9.6%
Mid-Atlantic	248,351	7,690,892	3.2%
DE	15,714	406,166	3.9%
MD	52,647	1,584,962	3.3%
NJ	88,457	3,386,253	2.6%
VA	91,533	2,313,511	4.0%
Northeast	460,107	11,456,501	4.0%
CT	48,703	966,240	5.0%
MA	70,669	2,440,423	2.9%
ME	45,686	456,203	10.0%
NH	14,006	177,154	7.9%
NY	251,378	6,948,225	3.6%
RI	29,665	468,256	6.3%
Great Lakes	242,165	8,692,532	2.8%
IL	65,696	2,819,615	2.3%
IN	11,773	288,685	4.1%
MI	57,589	1,923,398	3.0%
MN	10,326	113,008	9.1%
OH	32,764	1,353,050	2.4%
PA	32,670	1,218,205	2.7%
WI	31,347	976,571	3.2%
Alaska	37,672	252,946	14.9%
Hawaii	98,493	584,664	16.8%

Source: National Ocean Economics Program

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2004 data)

11. Number of coastal zone establishments dependent on coastal and ocean resources

National: 125,010 establishments

Geographic Area	Establishments
West Coast	27,401
CA	17,315
OR	1,379
WA	8,707
Gulf Coast	11,598
AL	1,159
LA	4,465
MS	827
TX	5,147
Southeast	23,316
FL	17,714
GA	1,224
NC	2,369
SC	2,009
Mid-Atlantic	13,090
DE	924
MD	2,716
NJ	6,392
VA	3,058
Northeast	31,354
CT	2,917
MA	5,484
ME	2,946
NH	646
NY	17,558
RI	1,803
Great Lakes	12,201
IL	2,351
IN	374
MI	3,733
MN	364
OH	1,924
PA	1,897
WI	1,558
Alaska	2,210
Hawaii	3,840

Source: National Ocean Economics Program

Coverage: All coastal states

Last updated by OCRM: 2009 Report (using 2004 data)

12. Overall Condition of Coastal Waters

- a) Water Quality Index
- b) Sediment Quality Index
- c) Coastal Habitat Index
- d) Benthic Index
- e) Fish Tissue Contaminants Index

National: Fair condition (2.8/5.0 score)

	Overall	a) Water Quality	b) Sediment Quality	c) Coastal Habitat	d) Benthic	e) Fish Tissue Contaminants
National						
2008	2.8	3.9	2.8	1.7	2.1	3.4
2008	2.3	3.3	1.6	1.7	2.1	2.9
2004	2.3	3.2	2.1	1.7	2.0	2.7
2001	2.0	1.5	2.3	1.6	1.5	3.1
Gulf						
2008	2.2	3	1	1	1	5
2004	2.4	3	3	1	2	3
2001	1.8	1	3	1	1	3
Southeast						
2008	3.6	3	3	3	5	4
2004	3.8	4	4	3	3	5
2001	3.6	4	4	2	3	5
Northeast						
2008	2.4	4	2	4	1	1
2004	1.8	2	1	4	1	1
2001	1.8	1	2	3	1	2
Alaska						
2008	5.0	5	5	N/A	N/A	5
2004	N/A	N/A	N/A	N/A	N/A	N/A
2001	N/A	N/A	N/A	N/A	N/A	N/A
Hawaii						
2008	4.5	5	4	N/A	N/A	N/A
2004	N/A	N/A	N/A	N/A	N/A	N/A
2001	N/A	N/A	N/A	N/A	N/A	N/A
West Coast						
2008	2.4	3	2	1	5	1
2004	2.0	3	2	1	3	1
2001	2.0	1	2	1	3	3
Great Lakes						
2008	2.2	3	1	2	2	3
2004	2.2	3	1	2	2	3
2001	1.4	1	1	1	1	3
Puerto Rico						
2008	1.7	3	1	N/A	1	N/A
2004	1.7	3	1	N/A	1	N/A
2001	N/A	N/A	N/A	N/A	N/A	N/A

* Includes data on Hawaii and Alaska, unlike previous reports

Key:

Poor = <2

Fair to Poor = 2 to <2.3

Fair = 2.3 to 3.7

Fair to Good = >3.7 to 4.0

Good = >4.0

Source: National Coastal Condition Report III

Coverage: All coastal states; Puerto Rico

Last updated by OCRM: 2009 Report (using 2008 NCCRIII)

13. Number of invasive marine species reported in coastal states

National: 575

Geographic Area	Number of Species Reported
West Coast	247
Gulf Coast	28
Southeast	87
Mid-Atlantic	26
Northeast	25
Great Lakes	299*
Alaska	6
Islands and Territories	262

**The Great Lakes total includes freshwater invasive species within Hydrologic Unit Code (HUC) 4, which includes Great Lakes watersheds.*

Source: U.S. Geological Survey

Coverage: All coastal states except IL; PR, USVI

Last updated by OCRM: 2009 Report (using current data)

Special Note: Administrators of the USGS Nonindigenous Aquatic Species database indicate that this data likely significantly underestimates the quantity of invasive marine species in coastal states.

14. Proportion of Federal Disaster Declarations occurring in coastal states and territories

Year	Proportion
2008	34/75
2007	33/63
2006	34/52
2005	30/48

Source: Federal Emergency Management Agency (FEMA)

Coverage: All coastal states and territories

Last updated by OCRM: 2009 Report (using 2008 data)

15. Proportion of coastal Federal Disaster Declarations directly related to coastal hazards

Year	Proportion
2008	13/34
2007	1/33
2006	2/34
2005	15/30

Source: Federal Emergency Management Agency (FEMA)

Coverage: All coastal states and territories

Last updated by OCRM: 2009 Report (using 2008 data)

16. Total estimated cost of all billion-dollar weather disasters related to coastal hazards

Year	Estimated Cost
2008	At least \$33.2 billion
2007	N/A: no billion dollar disasters
2006	N/A: no billion dollar disasters
2005	At least \$170.1 billion

Source: NOAA National Climatic Data Center (NCDC)

Coverage: All coastal states and territories

Last updated by OCRM: 2009 Report (using 2008 data)