

***Appendix N. Referenced Tables from the
Sacramento River Public Recreation
Access Study (EDAW 2003).***

Table 4.1-1. Study Area Counties

Local Area	Regional Area		
Local Counties	Adjacent Counties	SACOG Area Counties	SF Bay/Delta Area Counties
Butte	Lake	El Dorado	Alameda
Colusa	Mendocino	Placer	Contra Costa
Glenn	Plumas	Sacramento	Marin
Tehama	Shasta		Napa
	Sutter ¹		San Francisco
	Trinity		San Mateo
	Yolo ¹		Santa Clara
	Yuba ¹		Solano
			Sonoma

¹ Represents adjacent counties that are also part of the SACOG region.

Source: EDAW 2003

Table 4.1-2. Demographic Profile of the Study Area Residents

County	Population (2001) ¹	Population (2002) ¹ (% growth)	Median Age (2000) ²	M/F (2000) ²	% White (2000) ^{3,4}	% Hispanic/Latino (2000) ^{3,5}	Median HH Income (1999) ³
Butte	205,400	207,000 (0.8%)	35.8	49.0 / 51.0	84.5	10.5	31,924
Colusa	19,150	19,450 (1.6%)	31.5	50.8 / 49.2	64.3	46.5	35,062
Glenn	26,800	26,800 (0.0%)	33.7	50.5 / 49.5	71.8	29.6	32,107
Tehama	56,100	56,900 (1.4%)	37.8	49.4 / 50.6	84.8	15.8	31,206
Local Sub-Total	307,450	310,150 (0.9%)	--	--	--	--	--
Alameda	1,462,900	1,486,600 (1.6%)	34.5	49.1 / 50.9	48.8	19.0	55,946
Contra Costa	965,100	981,600 (1.7%)	36.4	48.8 / 51.2	65.5	17.7	63,675
El Dorado	161,600	163,600 (1.2%)	39.4	49.9 / 50.1	89.7	9.3	51,484
Lake	59,500	60,300 (1.3%)	42.7	49.4 / 50.6	86.2	11.4	29,627
Marin	248,100	249,900 (0.7%)	41.3	49.5 / 50.5	84.0	11.1	71,306
Mendocino	87,100	87,700 (0.7%)	38.9	49.7 / 50.3	80.8	16.5	35,996
Napa	126,600	128,000 (1.1%)	38.3	49.9 / 50.1	80.0	23.7	51,738
Placer	254,900	264,900 (3.9%)	38.0	49.1 / 50.9	88.6	9.7	57,535
Plumas	20,850	21,000 (0.7%)	44.2	49.9 / 50.1	91.8	5.7	36,351
Sacramento	1,247,800	1,279,900 (2.6%)	33.8	49.0 / 51.0	64.0	16.0	43,816
San Francisco	785,700	793,600 (1.0%)	36.5	50.8 / 49.2	49.7	14.1	55,221
San Mateo	712,400	717,000 (0.6%)	36.8	49.4 / 50.6	59.5	21.9	70,819
Santa Clara	1,697,800	1,719,600 (1.3%)	34.0	50.7 / 49.3	53.8	24.0	74,335
Shasta	166,700	169,200 (1.5%)	38.9	48.7 / 51.3	89.3	5.5	34,335
Solano	398,600	405,800 (1.8%)	33.9	50.4 / 49.6	56.4	17.6	54,099
Sonoma	464,300	471,000 (1.4%)	37.5	49.2 / 50.8	81.6	17.3	53,076
Sutter	80,100	81,900 (2.2%)	34.1	49.5 / 50.5	67.5	22.2	38,375
Trinity	13,000	13,100 (0.8%)	44.6	51.0 / 49.0	88.9	4.0	27,711
Yolo	171,800	176,300 (2.6%)	29.5	48.9 / 51.1	67.7	25.9	40,769
Yuba	60,900	61,000 (0.2%)	31.4	50.4 / 49.6	70.6	17.4	30,460
Regional Sub-Total	9,185,750	9,332,000 (1.6%)	--	--	--	--	--
TOTAL	9,493,200	9,642,150 (1.6%)	--	--	--	--	--

¹ DOF – Table E-1 (rounded); as of January 1, 2001/2002

² DOF – Table E-5a (not rounded); as of January 2002

³ 2000 Census Data, U.S. Census Bureau 2002

⁴ Caucasian of any nationality. Therefore, a Caucasian born in a Latin American country may also be considered Latino and double counted by the Census Bureau in two categories.

⁵ Represents individuals of Hispanic or Latino origin of any race; therefore, can include Caucasians, Asians, etc.

Source: EDAW 2003

Table 4.1-7. Population Projections for the Study Area Counties

County	Year				
	2002 ¹	2005 ²	2010 ²	2015 ²	2020 ²
Butte	207,000 (0.8%)	235,000 (4.3%)	259,800 (2.0%)	281,200 (1.6%)	308,900 (1.9%)
Colusa	19,450 (1.6%)	24,200 (7.5%) ³	29,200 (3.8%) ³	33,900 (3.0%) ³	39,200 (2.9%) ³
Glenn	26,800 (0.0%)	31,800 (5.8%)	36,700 (2.9%)	41,300 (2.4%)	46,500 (2.4%)
Tehama	56,900 (1.4%)	56,700 (-0.1%)	71,500 (4.7%)	78,200 (1.8%)	85,100 (1.7%)
Sub-Total	310,150	347,700 (3.9%)	397,200 (2.7%)	434,600 (1.8%)	479,700 (2.0%)
Alameda	1,486,600	1,580,200 (2.1%)	1,671,200 (1.1%)	1,735,800 (0.8%)	1,811,800 (0.9%)
Contra Costa	981,600	1,021,400 (1.3%)	1,071,400 (1.0%)	1,108,100 (0.7%)	1,152,900 (0.8%)
El Dorado	163,600	187,000 (4.6%)	212,000 (2.5%)	232,900 (1.9%)	252,900 (1.7%)
Lake	60,300	69,200 (4.7%)	77,600 (2.3%)	84,400 (1.7%)	93,000 (2.0%)
Marin	249,900	257,600 (1.0%)	263,500 (0.5%)	267,300 (0.3%)	273,800 (0.5%)
Mendocino	87,700	95,500 (2.9%)	103,200 (1.6%)	109,700 (1.2%)	116,700 (1.2%)
Napa	128,000	135,700 (2.0%)	143,900 (1.2%)	150,500 (0.9%)	158,400 (1.0%)
Placer	264,900	298,500 (4.1%)	339,300 (2.6%)	373,400 (1.9%)	406,900 (1.7%)
Plumas	21,000	21,900 (1.4%)	22,700 (0.7%)	23,100 (0.3%)	23,500 (0.3%)
Sacramento	1,279,900	1,368,500 (2.3%)	1,486,500 (1.7%)	1,591,100 (1.4%)	1,707,600 (1.4%)
San Francisco	793,600	793,500 (0.0%)	787,500 (-0.2%)	765,900 (-0.6%)	755,800 (-0.3%)
San Mateo	717,000	765,800 (2.2%)	794,600 (0.7%)	809,100 (0.4%)	834,500 (0.6%)
Santa Clara	1,719,600	1,867,400 (2.8%)	1,987,800 (1.3%)	2,063,000 (0.7%)	2,163,000 (1.0%)
Shasta	169,200	185,700 (3.2%)	203,500 (1.8%)	217,500 (1.3%)	231,000 (1.2%)
Solano	405,800	444,100 (3.1%)	485,500 (1.8%)	521,200 (1.4%)	559,500 (1.4%)
Sonoma	471,000	514,200 (3.0%)	557,300 (1.6%)	591,900 (1.2%)	628,400 (1.2%)
Sutter	81,900	90,400 (3.3%)	99,600 (2.0%)	107,200 (1.5%)	115,600 (1.5%)
Trinity	13,100	13,800 (1.8%)	14,400 (0.9%)	15,000 (0.8%)	15,400 (0.5%)
Yolo	176,300	188,600 (2.3%)	205,000 (1.7%)	219,500 (1.4%)	236,400 (1.5%)
Yuba	61,000	66,000 (2.7%)	71,400 (1.6%)	76,300 (1.3%)	81,900 (1.4%)
Sub-Total	9,332,000	9,965,000 (2.2%)	10,597,900 (1.2%)	11,062,900 (0.9%)	11,619,000 (1.0%)
TOTAL	9,642,150	10,312,700 (2.3%)	10,995,100 (1.3%)	11,497,500 (0.9%)	12,098,700 (1.0%)

¹ DOF - Table E-1 (rounded); as of January 1, 2001/2002

² DOF; Interim County Population Projections

³ Figures in parenthesis show average annual compound growth rate from the previous period

Source: EDAW 2003

Table 4.1-3. Age Characteristics of Outdoor Recreators in the Study Area

Study Area	Age Group (percent)					
	Less than 26 years	26-30 years	31-40 years	41-50 years	51-64 years	65 + years
Local Area	9.3	5.6	31.5	29.6	18.5	5.6
Regional Area	12.2	11.3	30.1	22.3	16.1	8.0
TOTAL	12.0	10.8	30.3	22.9	16.3	7.8

Source: DPR 1998

Table 4.1-4. Education Level Characteristics of Outdoor Recreators in the Study Area

Study Area	Education Level (percent)				
	Less than high school	High school graduate	Some college/trade school	College/trade school grad	Graduate degree or some graduate level education
Local Area	12.7	15.9	42.9	15.9	12.7
Regional Area	4.8	16.6	30.8	31.8	16.0
TOTAL	5.5	16.5	31.8	30.5	15.8

Source: DPR 1997

Table 4.1-5. Race/Ethnic Background of Outdoor Recreators in the Study Area

Study Area	Ethnicity (percent)							
	Caucasian / White	Mexican-American	Other Hispanic	African-American	Asian	American Indian	Other	Mixed
Local Area	79.4	14.3	1.6	--	--	1.6	--	3.2
Regional Area	68.6	7.0	2.1	4.5	4.3	1.0	3.5	8.9
TOTAL	69.5	7.7	2.0	4.2	3.9	1.1	3.2	8.5

Source: CIC 1997

Table 4.1-6. Household Income Characteristics of Outdoor Recreators in the Study Area

Study Area	Income Level (percent)					
	Under \$20,000	\$20,000 to \$29,999	\$30,000 to \$39,999	\$40,000 to \$49,999	\$50,000 to \$74,999	\$75,000 or more
Local Area	30.2	20.8	18.9	13.2	13.2	3.8
Regional Area	16.5	11.5	13.3	13.1	21.7	24.0
TOTAL	17.6	12.3	13.7	13.1	20.9	22.3

Source: DPR 1997

Table 4.2-1. 1980 Study Participants Activity Participation Reports

Activities Reported in Survey	River Section in 1980 DWR Study			Total %
	Diversion Dam to Hamilton City Bridge %	Hamilton City Bridge to Chico Landing %	Chico Landing to Meridian Bridge %	
Relaxing	53	42	52	49
Fishing	46	45	50	47
Power boating	19	19	63	34
Camping	42	0	48	30
Canoeing	54	3	13	23
Tubing	27	15	24	22
Swimming/beach use	38	0	29	22
Picnicking	14	13	18	15
Special events	13	11	0	8
Sightseeing	0	0	12	4

Source: DWR 1982

Table 4.2-2. 1980 DWR Study Participants' Trip Characteristics

Trip Characteristics	River Section in 1980 DWR Study		
	Diversion Dam to Hamilton City Bridge %	Hamilton City Bridge to Chico Landing %	Chico Landing to Meridian Bridge %
Sacramento River is destination	77	90	81
On trip in route elsewhere	13	4	15
Staying nearby	20	6	4

Source: DWR 1982

Table 4.2-3. 1980 DWR Study – Overnight vs. Day Use

Overnight Stay vs. Day Use	River Section in 1980 DWR Study		
	Diversion Dam to Hamilton City Bridge %	Hamilton City Bridge to Chico Landing %	Chico Landing to Meridian Bridge %
Overnight	48	9	48
Day use	52	91	52

Source: DWR 1982

Table 4.2-4. 1980 DWR Study Participants’ Reports of Length of Stay in Sacramento River Area

Length of Stay	River Section in 1980 DWR Study		
	Diversion Dam to Hamilton City Bridge	Hamilton City Bridge to Chico Landing	Chico Landing to Meridian Bridge
Average overnight stay (days)	3	4	3.7
Average length of day use (hours)	3.9	3.4	4.2

Source: DWR 1982

Table 4.2-5. Priority Public Uses in DPR 1997 Study

Activity	Percent Partic.	Rank	Activity	Percent Partic.	Rank
Walking (recreational)	90.1	1	Power boating	24.7	22T
Visiting museums, historic sites	81.5	2	Mountain biking (off paved surfaces)	22.4	24
Beach activities	75.5	3	Downhill skiing	21.9	25
Trail hiking	73.1	4	Golf	18.5	26
Driving for pleasure	72.1	5	Saltwater fishing	18.5	27
Picnicking at developed sites	71.5	6	Basketball	18.2	28
Use of open grass or turf areas	71.3	7	Water skiing	17.0	29
Visiting zoos and arboretums	70.7	8	Tennis	16.9	30
Attending outdoor cultural events	62.7	9	Skateboarding and rollerblading	14.8	31
Camping in developed sites (tent or RV)	61.5	10	4-Wheel drive use off paved roads	13.9	32
Swimming in lakes/rivers/ocean	61.0	11	Horseback riding	13.8	33
General nature study, wildlife viewing	59.4	12	Target shooting	13.8	34
Attending outdoor sports events	54.2	13	Mountain climbing	12.0	35
Swimming in outdoor pools	53.5	14	Soccer	11.4	36
Bicycling (on paved surfaces)	49.2	15	Cross-country skiing	9.9	37
Freshwater fishing	39.8	16	Football	8.6	38
Use of play equipment, tot-lots	37.2	17	Hunting	8.0	39
Camping-primitive areas & backpacking	30.7	18	Use of motorcycles, ATV's, off-road	7.7	40
Jogging and running	29.9	19	Sailboating and windsurfing	7.1	41
Softball and baseball	29.0	20	Surfing	4.0	42
Other non-mechanized winter sports	28.5	21	Snowmobiling	3.7	43
Kayaking, rowboating, canoeing	24.7	22T			

Bold type indicates a priority public use or closely associated activity.
T = Tie in ranking

Source: DPR 1998

Table 4.2-6. Level of Participation in Recreation Activities during the Previous 12 Months

Activity	Ave. # of days	Rank	Activity	Ave. # of days	Rank
Walking (recreational)	83.56	1	Attending outdoor cultural events	4.22	23
Driving for pleasure	29.65	2	Visiting zoos and arboretums	3.87	24
Bicycling (on paved surfaces)	23.38	3	Basketball	3.86	25
Use of open grass or turf areas	22.19	4	Horseback riding	3.05	26
Jogging and running	21.15	5	Camping - primitive areas & backpacking	2.90	27
General nature study, wildlife viewing	19.35	6	Soccer	2.78	28
Swimming outdoor pools	15.80	7	4-Wheel drive use off paved roads	2.67	29
Use of play equipment, tot-lots	15.31	8	Water skiing	2.26	30
Trail hiking	14.46	9	Target shooting	2.17	31
Beach activities	13.38	10	Saltwater fishing	2.04	32
Swimming in lakes/rivers/ocean	9.11	11	Downhill skiing	1.85	33
Visiting museums, historic sites	7.76	12	Other non-mechanized winter sports	1.80	34
Picnicking at developed sites	7.57	13	Kayaking, rowboating, canoeing	1.73	35
Camping developed sites	7.28	14	Use of motorcycles, ATVs, off-road	1.68	36
Attending outdoor sports events	7.19	15	Mountain climbing	1.46	37
Softball and baseball	6.59	16	Hunting	1.35	38
Freshwater fishing	6.43	17	Sailboating and windsurfing	0.74	39
Skateboarding and rollerblading	5.12	18	Cross-country skiing	0.63	40
Golf	4.99	19	Surfing	0.55	41
Mountain biking (off paved surfaces)	4.87	20	Football	0.51	42
Power boating	4.51	21	Snowmobiling	0.32	43
Tennis	4.25	22			

Bold type indicates a priority public use or closely associated activity.

Source: DPR 1998

Table 4.2-7. Comparison of Outdoor Recreators' Participation in Recreation Activities Across Geographic Sub-Areas

Recreation Activity	Percent of Participants				
	Local Area	Adjacent Counties	SACOG Region	SF Bay/Delta	Total Study Area
Hunting	17.2	18.7	5.9	3.3	8.0
Freshwater Fishing	48.3	44.4	47.1	34.8	39.8
General Nature Study	62.1	59.7	52.9	60.8	59.4
Power Boating	44.8	30.2	17.6	21.5	24.7
Swimming (lakes/rivers/ocean)	72.4	66.1	58.8	58.0	61.0
Picnicking at Developed Sites	75.9	64.5	58.6	74.0	71.5
Camping at Developed Sites	65.5	61.3	56.9	62.2	61.5
Camping at Primitive Sites	31.0	31.7	33.3	29.4	30.7

Source: DPR 1998

Table 4.2-8. Study Area Survey Respondents Use of Outdoor Recreation Setting Types

Area Type	Level of Use by % of Respondents					
	Not At All	Once or Twice/Year	Several Times/Year	Once or Twice/Month	Once Per Week	At Least 2-3 Times/Week
Natural and undeveloped areas (large areas in a natural or nearly natural condition, with few developments)	7.4	27.9	37.4	13.8	7.4	6.1
Developed nature-oriented parks and recreation areas (with picnic areas, trails, information centers)	4.3	18.4	45.4	18.7	8.3	4.9
Highly developed parks and recreation areas in or near urban areas	7.6	20.8	27.5	21.7	14.4	8.0
Historical or cultural buildings, sites, or areas	8.6	37.1	39.6	11.3	1.2	2.1
Private outdoor recreation areas and facilities	20.9	29.8	24.5	9.8	8.0	7.1

Source: DPR 1998

Table 4.2-9. Factors Influencing Enjoyment of Most Important Activity

Factor	Percent of Responses		
	Not Important	Somewhat Important	Very Important
Being in the outdoors	2.5	10.1	87.4
Relaxing	2.8	19.9	77.3
Beauty of the area	2.5	20.8	76.7
Quality of the natural setting	3.2	21.5	75.4
Releasing or reducing tension	2.2	26.1	71.7
Being with family and friends	11.7	18.6	69.7
Having a change from the daily routine	6.6	25.6	67.7
Getting away from crowded situations	5.1	28.5	66.5
Keeping fit and healthy	9.5	25.7	64.8
Feeling in harmony with nature	10.2	26.0	63.8
Availability of facilities	8.2	29.7	62.0
Doing something your youth enjoyed	27.5	17.6	54.9
Achieving spiritual fulfillment	25.8	32.5	41.7
Experiencing challenge and excitement	25.1	33.6	41.4
Meeting new people	52.7	31.3	16.0

Source: DPR 1998

Table 4.2-10. Changes in Time Spent on Outdoor Activities by Study Area Residents (5 years ago)

Study Area	Amount of Time			
	More	Same	Less	Don't Know
Local Area	39.1	25.0	35.9	0.0
Regional Area	36.7	31.5	31.8	0.0
TOTAL	36.9	30.9	32.1	0.0

Source: DPR 1998

Table 4.2-11. Estimates of Participation and Projected Indexes of Change for Wildlife Related Activities, 1995-2040

Activity	Baseline	Projected Index of Change by Year				
	1995	2000	2010	2020	2030	2040
Fishing						
Days	119.10 ¹	1.05	1.16	1.25	1.33	1.40
Participation	7.50 ²	1.05	1.12	1.20	1.23	1.30
Hunting						
Days	36.00 ¹	0.94	0.95	0.96	0.95	0.88
Participation	1.70 ²	0.94	0.85	0.79	0.73	0.67
Nature Observation						
Days	838.50 ¹	1.10	1.33	1.58	1.82	2.01
Participation	16.70 ²	1.08	1.23	1.37	1.52	1.65

¹ Millions of participant days.

² Millions of participating persons.

Source: Cordell, et al., 1999.

Table 4.3-1. Management Interview Categories

Category	Number of interviews
Federal land management agency	3
State land management agency	6
Non-profit land trust	2
Total	11

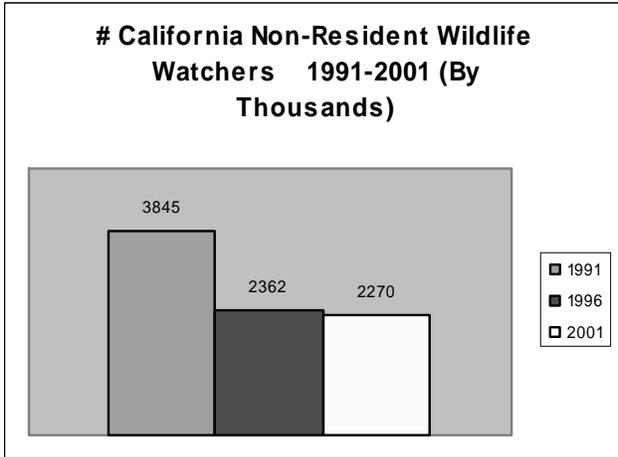
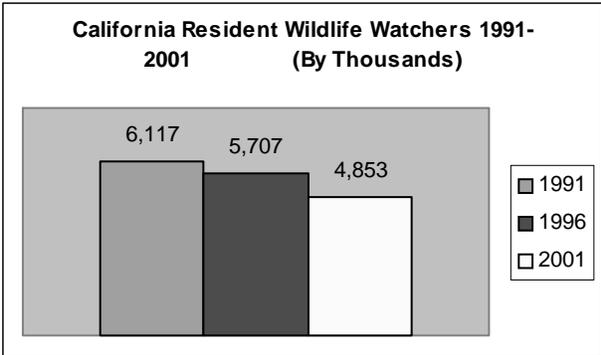
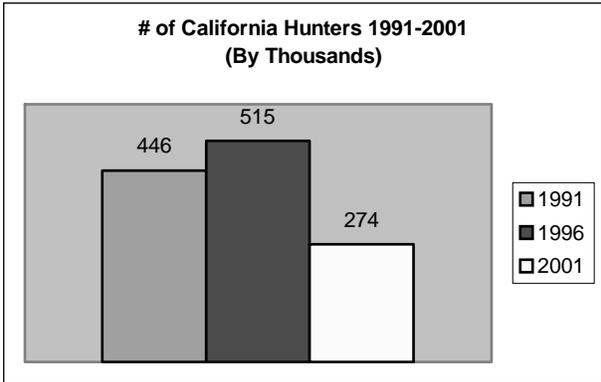
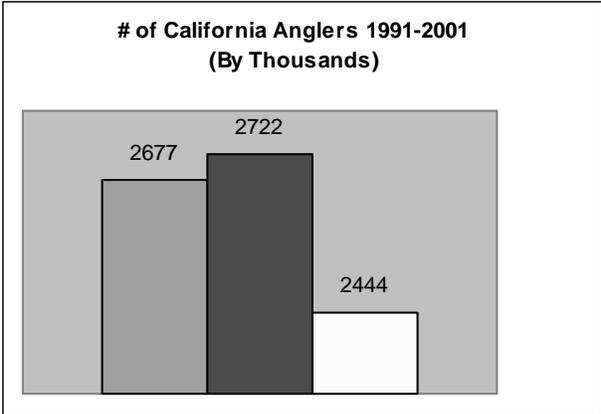
Source: EDAW 2003

1991-2001 Survey Comparisons

California 1991 and 2001 Comparison

	1991	2001	Percent change
Fishing			
(Numbers in thousands)			
Anglers in-state	2,67	2,444 *	
Days in-state	23,994	27,663 *	
In-state trip-related expenditures	\$1,078,873	\$1,116,707 *	
State resident anglers	2,707	2,389	-12
Total expenditures by state residents	\$2,334,734	\$2,149,634 *	
Hunting			
(Numbers in thousands)			
Hunters in-	446	274	-39
Days in-state	5,211	3,426	-34
In-state trip-related expenditures	\$140,249	\$154,412 *	
State resident hunters	537	278	-48
Total expenditures by state residents	\$836,095	\$364,008	-56
Nonresidential Wildlife Watching			
(Numbers in thousands)			
Participants in-state	3,845	2,270	-41
Days in-state	42,353	23,807	-44
State resident participants	3,408	2,191	-36
Residential Wildlife Watching			
(Numbers in thousands)			
Total participants	6,117	4,853	-21
Observers	4,531	3,072	-32
Feeders	4,899	3,763	-23
Wildlife-Watching Expenditures			
(Numbers in thousands)			
Trip-related expenditures by state residents	\$1,429,681	\$832,531 *	
Total expenditures by state residents	\$3,311,245	\$2,234,350 *	

*No significant difference at the 0.10 level of significance.



California 1996 and 2001 Comparison

U.S. Fish & Wildlife Service—California

	1996	2001	Percent change
Fishing			
(Numbers in thousands)			
Anglers in-	2,722	2,444 *	
Days in-state	36,914	27,663	-25
In-state trip-related expenditures	\$1,632,823	\$1,116,707	-32
State resident anglers	2,721	2,389 *	
Total expenditures by state residents	\$4,189,242	\$2,149,634	-49
Hunting			
(Numbers in thousands)			
Hunters in-	515	274	-47
Days in-state	7,452	3,426	-54
In-state trip-related expenditures	\$301,217	\$154,412	-49
State resident hunters	578	278	-52
Total expenditures by state residents	\$1,144,663	\$364,008	-68
Nonresidential Wildlife Watching			
(Numbers in thousands)			
Participants in-state	2,362	2,270 *	
Days in-state	24,587	23,807 *	
State resident participants	2,391	2,191 *	
Residential Wildlife Watching			
(Numbers in thousands)			
Total participants	5,707	4,853	-15
Observers	4,306	3,072	-29
Feeders	4,336	3,763 *	
Wildlife-Watching Expenditures			
(Numbers in thousands)			
Trip-related expenditures by state residents	\$1,529,728	\$832,531	-46
Total expenditures by state residents	\$2,880,151	\$2,234,350 *	

*No significant difference at the .10 level of significance.

