



Natural Environment Issues

“I would use alternative forms of transportation if there were better bike paths.”


—Telephone survey respondent


Legend


No. County North County – includes Bonny Doon, Capitola, Davenport, Santa Cruz, Scotts Valley and Soquel


So. County South County – includes Aptos, Corralitos, Freedom, La Selva Beach, Pajaro and Watsonville


SLV San Lorenzo Valley – includes Ben Lomond, Boulder Creek, Brookdale, Felton, Lompico, Mount Hermon and Zayante

 Indicates a question for which percentages do not total 100 because each respondent was allowed to select more than one answer


 Indicates statistically significant survey responses in the 2000 data

 Indicates a key indicator

 Provides a description of what the indicator means or measures. Note: not every indicator has a description

 Indicates no new data for a particular indicator is available

% Change Describes change in value between the current and previous year data

 Denotes a telephone survey question

 Indicates a respondent profile

Community Goals

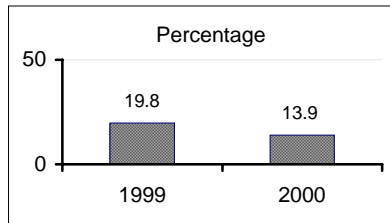
By the Year 2004, the water demand and supply will be in balance (sustainable yield).

By the Year 2004, environmental stewardship will increase within Santa Cruz County.

By the Year 2004, open space, wetlands and protected habitats will be increased and improved.

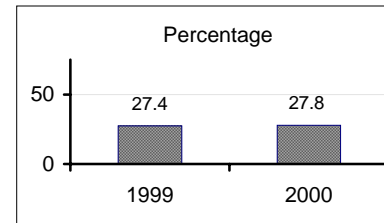
Key Indicators

Water Quality



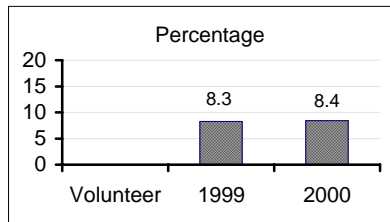
✓ Respondents reporting that the County is getting better at addressing drinking water quality

Open Space



✓ Respondents reporting that the County is getting better at preserving open space

Environmental Stewardship



✓ Percent of respondents who indicate they volunteer in environmental organizations and activities

This data can be found in the Social Environment section

Natural Environment Summary

As in past years, this year has been marked by both encouraging gains and continued environmental degradation in Santa Cruz County. Residents continue to agree that the greatest factor in the attractiveness of the County is its natural beauty. However, the beauty of our area is attracting new residents. The impacts of the resulting population growth will force the County to be ever vigilant in protection of its natural resources. Indeed, respondents are concerned that natural beauty is threatened by the County's population growth: The top environmental concerns expressed were pollution (28%), traffic (15%), water quality/water pollution (25%), and overpopulation (11%).

More than 50% of respondents expressed concern about pollution and traffic as the most pressing environmental issues. Fortunately, measures of ozone and particulate matter do not reveal significant degradation in the past year, even though the number of vehicles in the County increased by nearly 2%. Daily vehicle miles traveled as a measure of roadway congestion increased this year by over 4%, while ridership on mass transit was down slightly.

Water quality and water pollution were seen by survey respondents to have essentially remained the same from previous years and, by most indicators, that impression is relatively accurate. The primary threats to our surface streams in the County continue to be sedimentation and


nutrient loading from non-point sources throughout our watersheds. The biggest threat to groundwater in the County is seawater intrusion into coastal wells in Mid-County and South County. This threat to groundwater quality is held in check only because the increase in non-agricultural water use has been negligible.

There was, however, over 3% growth in water services in all County water agencies in the past year. Use per connection has also increased. These indicators signal a serious problem, one that prompted the Community Goal of balancing water demand and supply by the year 2004. For groundwater agencies, this goal is important because of concerns over seawater intrusion. For surface water agencies, like the City of Santa Cruz, it is important as protection from the impacts of drought for both county residents and wildlife that will compete with humans for limited water supplies in droughts.

One of the indicators of long-term protection of natural resources, protected county habitat acres, indicates the addition of over 5,200 acres of land protected from development. Additionally, parks and open space lands increased modestly, with the addition of over 800 acres of land to the county inventory of open space.

Thank you to Bill Kocher, Water Director, Santa Cruz Water Department, for contributing to this summary.

Concern for the Environment

 *What one thing concerns you the most about the natural environment? (Selected Responses)*

Response	1999	2000
Pollution	8.0	27.8
Traffic / too many cars	4.7	15.0
Water pollution	11.2	13.2
Water quality	7.4	12.1
Overpopulation	5.2	11.6
No preservation of natural environment / wildlife	8.3	10.5
Development of open space / agricultural land	12.7	10.1
Air pollution (primarily car emissions)	14.8	9.8
Cutting down trees / commercial logging	3.3	5.6
Pesticides / herbicides	3.6	5.3
Litter	2.4	3.3
Nothing	4.7	2.5
Water availability / salt water intrusion	1.8	2.0

Year 2000: 645 respondents offering 864 responses.

Source: Santa Cruz County Community Assessment Project, Telephone Survey.

*Quality of Life Indicator 99***Habitat Preservation**

Summary of Protected County Habitat Acres

	1999	2000	Acres per 1,000 People, 2000
Land Trusts	7,497.3	8,181.3	32.1
Wetlands	899	899	3.5
County and City Parks	3,484.3	4,307.3	16.9
State Parks	45,568	43,903	172.2
Williamson Act Lands	8,744	14,150	55.5
Fish and Game Lands	1,318	1,318	5.2
Total Protected Acres in County	67,510.6	72,758.6	285.3
Total Acres in County	286,739	286,739	1,124.5
Percent Protected Acres	23.5	25.3	-

Source: Santa Cruz Public Land Trust, County Planning Department, Coastal Commission, Department of Fish and Game, University of Santa Cruz, Environmental Studies Department, Department of Finance, 2000.

Differences in acreage between years may be due to rounding and variations in estimates by landholders.

Calculations per 1,000 are based on the California Department of Finance, January 2000, estimated county population of 255,000.

The amount of protected acreage measures how much of the County is protected from development and reserved for special status plant and animal species, recreation, education, and research.

Open Space

Acres of Open Space

✓ Key Indicator

Open Space is defined and measured in this report as “parks and open space that are owned and administered by the local government or land trusts that are ten acres or larger.”

Park Name	Steward	1999	2000
Aptos Village County Park	County	12.5	12.5
Bert Scott Estate	County	31.5	31.5
Freedom Lake	County	34	34
Greyhound Rock	County	70	70
Highlands Park	County	26.1	26.1
O'Neil Ranch	County	83	96.5
Pinto Lake County Park	County	113	183
Quail Hollow Ranch	County	300	300
Schwann Lagoon (State)	-	92	92
Scott Creek Beach and Bluffs	County	39.5	39.5
Seascape Park	County	10	10
Long Ridge	-	471	471
Arana Gulch	City	63	63
DeLaveaga	City	565	565
Harvey West	City	55	55
Moore Creek Preserve (Bombay)	City / Land Trust	249	249
Moran Lake Park	County	11	11
Neary Lagoon	City	44	44
Pogonip	City	640	640
San Lorenzo Park	City	13	13
Lodato Park	City	49	49
Sky Park	City	22	24.5

Park Name	Steward	1999	2000
Pinto Lake City Park	City	25	78
Ramsay Park	City	32	32
Lighthouse Field	State / City	38	38
Moore Creek / Antonelli Pond	Land Trust	13.7	13.7
Corrolitos Mountains / Byrne Forest	Land Trust	322	322
John's Canyon	Land Trust	60	60
Circle P Ranch	Land Trust	-	684
The Coast Dairies Property	Land Trust	7,000	7,000
<hr/>			
County and City Parks	-	3,484.3	4,307.3
Total Open Space Acres in County	-	10,484.3	11,307.3
Total Acres in County	-	286,739	286,739
Percent Open Space Acres	-	1.2	1.5
County Population	-	252,100	255,000
Open Space Acres per 1,000 residents	-	13.8	16.9

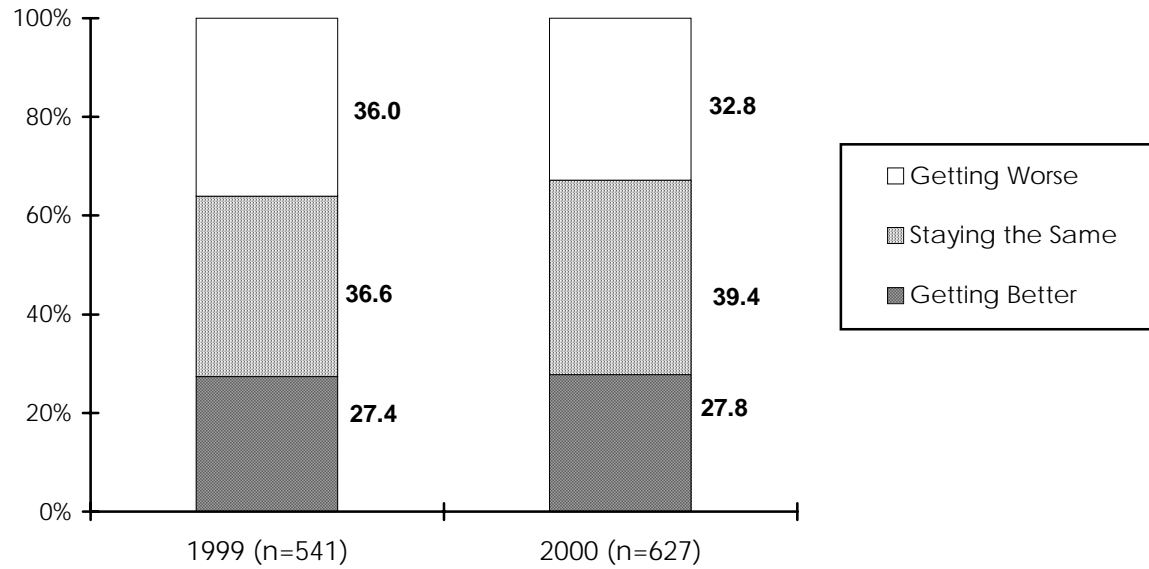
Source: University of California Santa Cruz, Environmental Studies Department, Santa Cruz County Parks, Department of Finance, January population figures, 2000.

Land Trust of Santa Cruz has stewardship over 85 of 250 acres of Moore Creek Preserve (Bombay). Some differences between 1999 and 2000 figures can be attributed to the addition of land trust data as specified by the definition of open space.

Quality of Life Indicator 100

Open Space

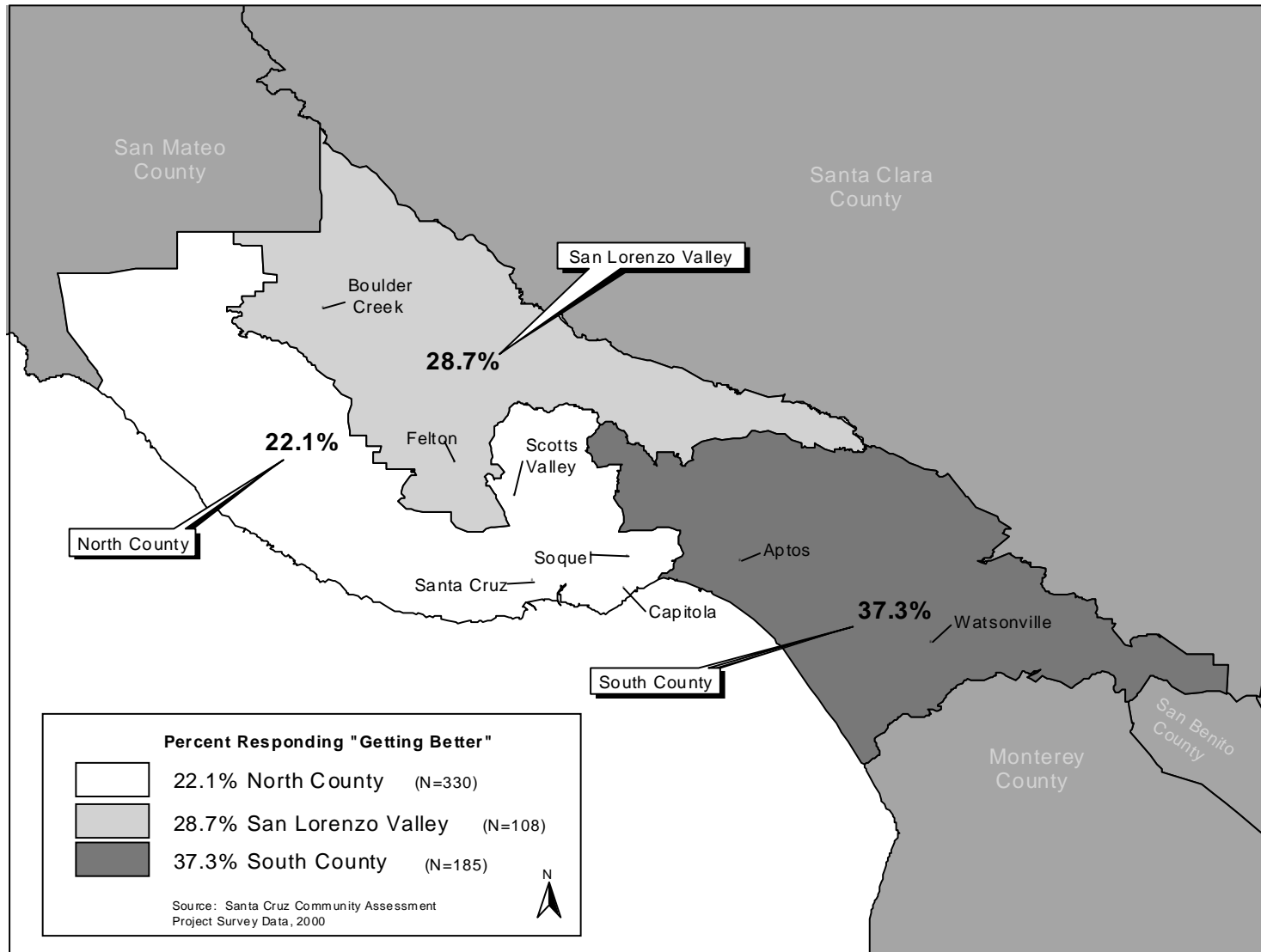
How are we doing as a County to preserve open space?



Source: Santa Cruz County Community Assessment Project, Telephone Survey.

Open Space

How are we doing as a County to preserve open space?




Quality of Life Indicator 100

Open Space

Respondent Profile

Percent of respondents who think the County is “getting better” at preserving open space:

By Ethnicity	1999	2000
Caucasian	26.0	27.4
Latino	35.2	32.1

 By Region		
North County	26.6	22.1
South County	31.7	37.3
San Lorenzo Valley	22.0	28.7

By Age		
18-24	17.7	21.1
25-44	29.1	27.7
45-64	26.7	31.8
65 and older	34.2	26.7

 By Gender	1999	2000
Male	29.0	32.2
Female	25.9	24.7

By Income		
Under \$15,000 per year	31.3	28.7
\$15,000 - \$34,999 per year	30.2	27.0
\$35,000 - \$64,999 per year	32.4	27.3
Over \$65,000 per year	19.5	30.9

Total Respondents	541	627
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Source: Santa Cruz County Community Assessment Project, Telephone Survey.

Land Trust Lands

Acres of Land Trusts in Santa Cruz County

Location	Year Acquired	1990	2000
Alfadel Road (Soquel)	1983	2.5	2.5
Moore Creek / Antonelli Pond	1982 / 1989	7.2 / 6.5	13.7
- Spragens	1981	0.57	0.57
- Ferrari	1994	-	3.9
- Moore Creek Preserve (Bombay)	1998	-	85
Bear Creek Road (conservation easement)	1994	-	4.4
Byrne Forest / Corralitos Mountains	1984	322	322
Green Space (neighborhood park- Soquel)	1985	0.15	0.15
Swanton Road (conservation easement)	1986	0.82 / 0.89	1.7
Buzzard Lagoon	1991	-	3.4
Johns Canyon (conservation easement)	1999	-	60
Circle P Ranch (conservation easement)	2000	-	684
Coast Dairies (Trust for Public Land)*	1998	-	7,000
Total Land Trust Acres in County	-	340.6	8181.3
Total Acres in County	-	286,739	286,739
Percent Land Trust Acres	-	0.12	2.9
County Population	-	229,734	255,000
Land Trust Acres per 1,000 residents	-	1.5	32.1

Source: Land Trust of Santa Cruz County, Trust for Public Land, Department of Finance, January Population Figures, 2000.

*All lands listed are held by Land Trust of Santa Cruz County except Coast Dairies.

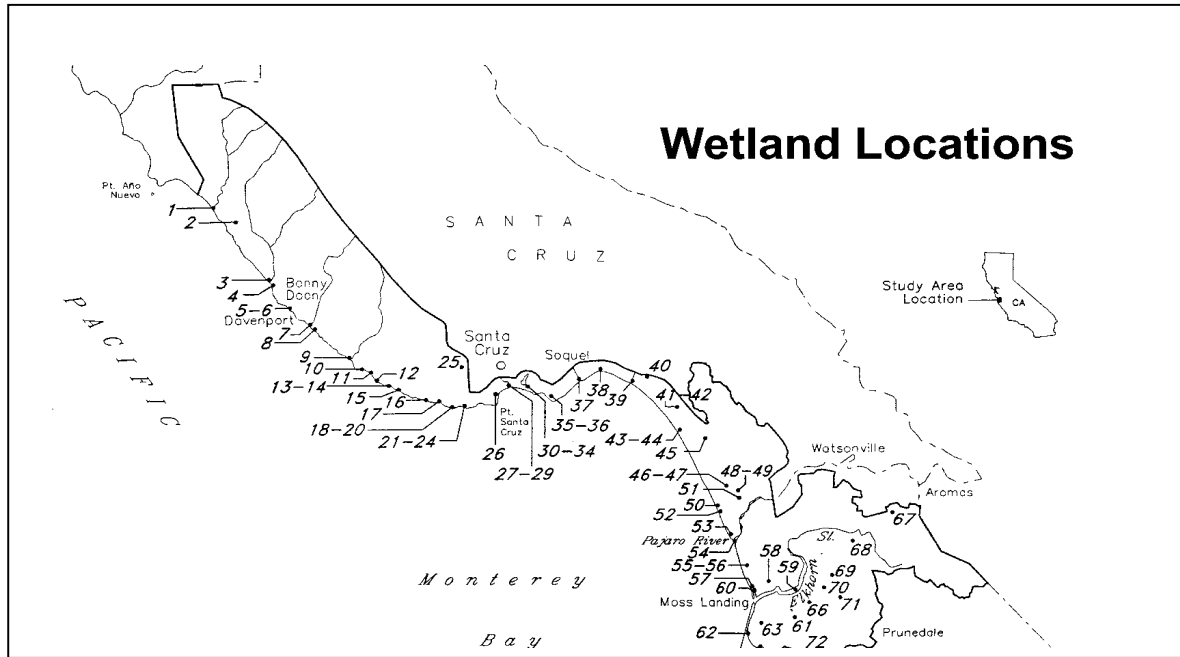
Land Trust of Santa Cruz has stewardship over 85 of 250 acres of Moore Creek Preserve (Bombay), which is City of Santa Cruz greenbelt. Trust for Public Land will turn over Coast Dairies to a long-term steward (State Parks / Bureau of Land Management) in the next few years. Adam's Ranch was removed due to unresolved stewardship.

✓ Key Indicator

Land Trusts provide a way for private parties to purchase, acquire through donation, and/ or permanently protect land through conservation easements (although not all Land Trust lands are easements). Placing a conservation easement on a parcel of land entails adding restrictions to the title that restrict the use of the land, for example prohibiting future development.

Quality of Life Indicator 102

Wetlands



✓ **Key Indicator**
 Wetlands have a vital role in aquatic and terrestrial ecosystems, flood control, ground water recharge, and maintenance of water quality.

1 Waddell Creek Marsh And Estuary	15 Lombardi Gulch	28 Jessie St. Marsh	41 Bonita Drive Creek
2 Last Chance Road Marsh	16 Old Dairy Gulch Marsh	29 Seabright Cove Drainage Outlet	42 Seascape Pond
3 Scott Creek Marsh	17 Wilder Creek	30 Arana Gulch Marsh	43 Las Barrancas Drainage Outlet
4 Molino Creek Marsh	18 Younger Lagoon	31 Schwann's Lagoon	44 Manresa Drainage Outlet
5 Davenport Landing Marsh	19 Terrace Point Lower Ponds	32 Black's Pond	45 Ellicot Station Pond
6 Silverking Ponds	20 Terrace Point Upper Pond	33 Bonita Lagoon	46 Gallighan Slough
7 Sa Vicente Creek	21 De Anza Pond	34 Sunny Cove Drainage Outlet	47 Harkin's Slough
8 Liddell Creek	22 Natural Bridges Lagoon	35 Corcoran Lagoon	48 Hanson Slough
9 Laguna Creek	23 Antonelli Pond	36 Moran Lake	49 W. Branch Struve Slough
10 Sand Hill Bluff Marsh And Pond	24 Monarch Pond	37 Soquel Lake	50 Sunset Beach FW Marsh
11 Majors Creek	25 UCSC Inclusion Area 4, Seasonal Wetlands	38 Borregas Creek	51 Upper Watsonville Slough
12 Table Rock Wetland	26 Neary's Lagoon	39 Aptos Creek	52 Shorebird Pond
13 Baldwin Creek Marsh	27 San Lorenzo River	40 Valencia Lagoon	53 Lower Watsonville Slough
14 Four-Mile Beach			54 Pajaro River

Total Wetland Acres in County	899.2
Total Acres in County	286,739
Percent Wetland Acres	0.3
Wetland acres per 1,000 residents	3.6

Source: California Coastal Commission, ReCAP Pilot Project Findings and Recommendations, 1999.

📄 **New data not available**

State Park Lands

Acres of State Park Lands*

Park	1996	2000
Henry Cowell (Fall Creek)	4,259	4,320
Nisene Marks	10,062	10,188
Manresa	138	138
Santa Cruz Mission	2	2
Natural Bridges	53	59
New Brighton	166	163
Seacliff State Beach (Rio)	87	85
Sunset State Beach (Palm)	302	298
Twin Lakes	94	94
Wilder Ranch (Gray Whale)	6,805	6,903
Big Basin (Rancho del Oso)**	20,000	18,004
Castle Rock	3,600	3,611
Lighthouse Field State Park***	-	38
Total Park Acres in County	45,658	43,903
Total Acres in County	286,739	286,739
Percent Park Acres	15.9	15.3
County Population	242,500	255,000
Park acres per 1,000 residents	188.1	172.2

Source: California State Parks, Phone Communication, Department of Finance, January population figures, 2000.

* Park land acreage is based on estimates only. Accurate acreage data is not available.

** A portion of Big Basin lies in San Mateo County. A portion of Castle Rock lies in San Mateo County and Santa Clara County.

*** Lighthouse Field State is owned by the State and maintained by the City of Santa Cruz.

Some differences in acreage between years may be due to rounding and variations in estimates by State Park Administration.

State parks ensure that the biodiversity of County lands is protected through public trust and also allow for regulated recreational use by visitors.

*Quality of Life Indicator 104***Miles of Recreation Trails****Recreation Trails by Location and Length in Miles**

Park	1996	2000
Henry Cowell (Fall Creek)	36	35.4
Nisene Marks	22	26.5
Manresa	4	1.5
Santa Cruz Mission	0.1	0.1
Natural Bridges	1	1.2
New Brighton	2	1.7
Seacliff State Beach (Rio)	2	1
Sunset State Beach (Palm)	2	1.5
Twin Lakes	2	2
Wilder Ranch	25	48.6
Big Basin	83	82.9
Castle Rock	35	35
Lighthouse Field State Park	1.0	1.0
County Total	213	238.4

Source: California State Parks, Phone Communication, 2000.

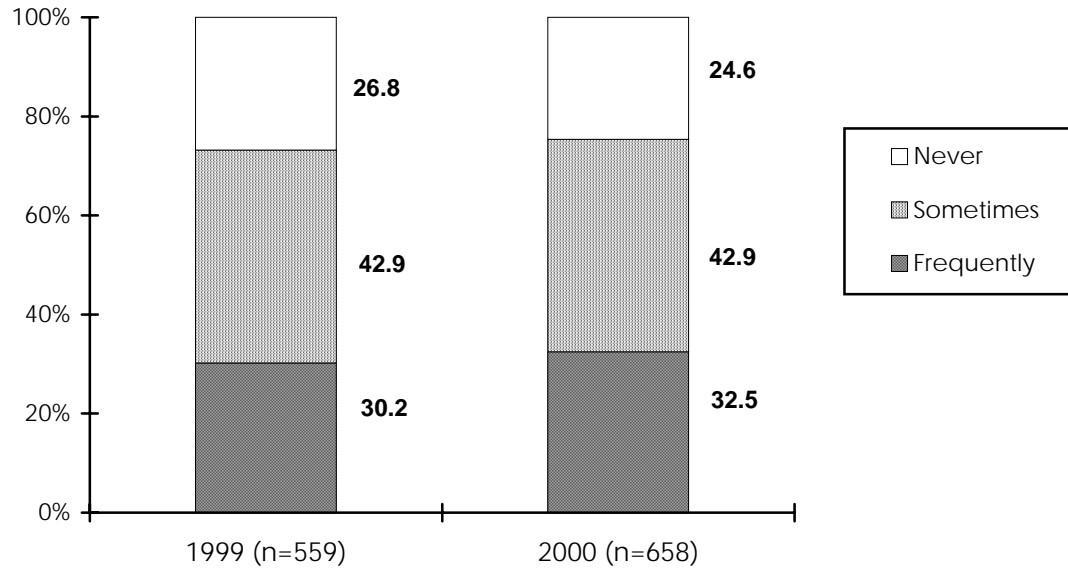
Recreational Trails are those for hiking, biking, horse, etc. Totals may not add due to independent rounding.

Lighthouse Field State Park is owned by the State and maintained by the City of Santa Cruz.

A measure of the available mileage in the County that has been set aside for non-motorized outdoor recreation activities.

Park Use

How often do you or your family members use neighborhood parks?



Source: Santa Cruz County Community Assessment Project, Telephone Survey.

Quality of Life Indicator 105


 **Park Use**

 **Respondent Profile**

Percent of respondents (or respondent’s family) that use neighborhood parks “frequently”:

By Ethnicity	1999	2000
Caucasian	28.1	33.3
Latino	42.7	30.3

By Region	1999	2000
North County	30.4	34.4
South County	30.1	29.7
San Lorenzo Valley	30.0	31.0

 By Age	1999	2000
18-24	25.6	27.2
25-44	40.7	38.5
45-64	26.4	32.3
65 and older	14.8	21.3

By Gender	1999	2000
Male	30.0	29.5
Female	30.2	34.5

By Income	1999	2000
Under \$15,000 per year	30.4	25.9
\$15,000 - \$34,999 per year	27.7	33.1
\$35,000 - \$64,999 per year	33.3	30.9
Over \$65,000 per year	28.9	38.7

Total Respondents	559	658
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Source: Santa Cruz County Community Assessment Project, Telephone Survey.

Farmland Acreage

Farmland Acreage by Type of Production

	1994	1995	1996	1997	1998	1999	% Change
Berries	4,594	4,563	4,563	4,815	4,286	4,755	10.9
Tree and Fruit Vines	4,028	4,077	4,077	3,842	3,654	3,522	-3.6
Vegetables	11,606	11,766	12,590	12,726	10,955	9,996	-8.8
Nursery and Ornamental Crops	993	1,320	1,296	1,422	1,422	1,541	8.4
Field Crops	8,700	8,700	8,700	8,700	8,600	8,350	-2.9
Total Acres	29,921	30,426	31,226	31,787	28,917	28,164	-2.6

Source: County Agricultural Commissioner, Santa Cruz County Crop Report, 1999.

Farmland in Santa Cruz County provides both revenue and open space for residents. Changes to agricultural land, including conversion to urban uses, is monitored by the California Department of Conservation.

Definitions of Farmland

Prime Farmland is land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods.

Farmland of Statewide Importance is land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops.

Unique Farmland is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, and that has been used for the production of specific high economic value crops.

Farmland of Local Importance is either currently producing crops or has the capability of production. This is land other than the three definitions above.

Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. The minimum mapping unit is 40 acres.

Quality of Life Indicator 106

Farmland Acreage

Santa Cruz County Land Use by Category

Type of Land	1990	1992	1994	1996	1998	Net Change 1990-98
Total Important Farmland:	25,371	25,551	25,254	25,219	25,498	127
- Prime Farmland	17,392	17,401	17,262	17,230	17,179	-213
- Statewide Importance	3,082	3,124	3,114	3,068	3,057	-25
- Unique	4,251	4,334	4,160	4,203	4,393	142
- Local Importance	646	692	718	718	869	223
Grazing Land	16,818	16,791	16,615	16,187	16,718	-100
Total Acres of Agricultural Land	42,189	42,342	41,869	41,406	42,216	27
- Percent Agricultural Land	14.7	14.8	14.6	14.4	14.7	-
Total Acres of Urban and Built up Land	27,205	27,504	27,585	27,719	28,588	1,383
- Percent Urban and Built up Land	9.5	9.6	9.7	9.7	10.0	-

Farmland in Santa Cruz County provides both revenue and open space for residents. Changes to agricultural land, including conversion to urban uses, is monitored by the California Department of Conservation. About 16% of land converted to urban uses was formerly agricultural land.

Agricultural Land Converted to Urban Use, in Acres

Type of Land	1990-1992	1992-1994	1994-1996	1996-1998	Net Change 1990-98
Prime Farmland	30	20	56	39	145
Statewide Importance	9	0	22	0	31
Unique	0	0	0	0	0
Local Importance	0	0	0	0	0
Grazing	0	0	0	49	49
Total Agricultural Acres Converted	39	20	78	88	225

Source: Farmland Conversion Reports, California Department of Conservation, 1998.

County acreage used to calculate percents is that used by the Department of Conservation: 289,739.

Organic Farm Acreage

Organic Farm Acreage in Santa Cruz County

	1997-1998
Number of Growers	66
Acreage	1,414
Gross Sales	\$5,082,000

Comparison by County, Organic Farm Acreage

	1997-1998
Santa Cruz	1,414
Monterey	2,862
Santa Clara	401

Source: Department of Agriculture and Resource Economics, Agriculture Issues Center, University of California, Davis.

 **New data not available**

*Quality of Life Indicator 108***Pesticide Use**

County Pesticide Use, Pounds Applied

County	1995	1996	1997	1998	% Change
Santa Cruz	1,756,102	-	1,727,669	1,707,094	-1.2
Monterey	12,862,973	-	9,102,605	10,198,858	12.0
Santa Clara	807,057	-	740,533	1,391,915	88.0
San Mateo	281,382	-	421,002	424,967	0.9

County Pesticide Use, Number of Applications

County	1995	1996	1997	1998	% Change
Santa Cruz	60,823	-	52,490	31,552	39.9
Monterey	469,330	-	452,461	301,346	33.4
Santa Clara	53,674	-	28,878	26,270	-9.0
San Mateo	35,759	-	30,402	25,495	-16.1

Source: Department of Pesticide Regulation, Annual Pesticide Use Report, 1998.

Health of County Waterways

San Lorenzo - Soquel Watershed

	1997
Average Precipitation per year in inches	39.9
Naturally Occurring Waterways in miles	508
Percentage of Free-Flowing River Miles	82%
Number of Dams	11
Near-stream roads in miles	358
Number of Stream Crossings	622
Total Watershed acres	234,839
Percent of Protected lands in Watershed	17%
Percentage of River Miles in Protected Lands	16%
Number of Special Status Species	26

Watershed profiles provide an indication of the amount of human activity occurring within the watershed, and the implicit health of the system. Human activity such as roads and crossings within watersheds can have detrimental effects on water quality.

Pajaro Watershed

	1997
Average Precipitation per year in inches	19.8
Naturally Occurring Waterways in miles	1,970
Percentage of Free-Flowing River Miles	92%
Number of Dams	16
Near-stream roads, in miles	790
Number of Stream Crossings	1,787
Total Watershed acres	838,326
Percent of Protected lands in Watershed	3%
Percentage of River Miles in Protected Lands	4%
Number of Special Status Species	29

Source: California Resources Agency, 1997 California Rivers Assessment

The two primary watersheds in the county extend into other neighboring counties.

 **New data not available**

Quality of Life Indicator 109

Health of County Waterways

Percent Impairment of County Waterways

Name	Total Size	% Impairment			Coho Salmon Habitat?
		1989	1994	1998	
Aptos Creek	10 miles	12.5	50.0	40.0	Yes
Carbonera Creek	10 miles	100.0	100.0	100.0	No
Lompico Creek	5 miles	100.0	100.0	100.0	Yes
Pajaro River	49 miles	0.0	* 0.0	100.0	No
San Lorenzo River	25 miles	20.0	60.0	100.0	Yes
San Lorenzo River Estuary	20 acres	100.0	100.0	100.0	No
Shingle Mill Creek	2 miles	100.0	100.0	100.0	No
Schwan Lake	32 acres	100.0	100.0	100.0	No
Soquel Lagoon	2 acres	100.0	100.0	100.0	No
Valencia Creek	7 miles	100.0	100.0	100.0	No
Waddell Creek (East Branch)	4 miles	100.0	100.0	75.0	Yes
Watsonville Slough	300 acres	100.0	100.0	100.0	No

Inventories of major county waterways are monitored by the California Regional Water Quality Control Board. They monitor the degree to which they are impaired by pollutants.

Source: California Environmental Protection Agency, State Water Resources Control Board, California 303 (d) Lists, 1990 and 1994, California 303 (d) List and TMDL Priority Schedule, 1998.

The State has used three categories to assess the health of local waterways: good, intermediate, and impaired. “Good” waterways support and enhance designated use with minor or no known impairment of water quality. “Intermediate” waterways support designated use with minor or moderate impairment of water quality. “Impaired” waterways do not support designated uses with moderate to severe impairment of water quality. Percentages above are for those waterways that have a portion or all of its area/length listed as impaired”.

In 1994, the entire Pajaro River had signs of increasing pollution; water quality was listed as “intermediate”, but not yet “impaired.” By 1998, 100% of the Pajaro River was officially impaired.

 **New data not available**

Health of County Waterways

Inventory of Impaired County Waterways, 1998

Waterway	Pollutant	Priority	Source
Aptos Creek	Sedimentation	Medium	Disturbed sites (land development), channel erosion
	Pathogens	Low	Urban runoff, storm sewers
Carbonera Creek	Nutrients	High	Nonpoint sources
	Sedimentation	High	Construction/ land development
	Pathogens	Medium	Urban runoff, storm sewers, nonpoint source
Lompico Creek	Nutrients	High	Septage disposal
	Sedimentation	High	Construction/ land development, natural sources
	Pathogens	Medium	Septage disposal, natural sources, nonpoint source
Pajaro River	Nutrients	High	Agricultural runoff, removal of riparian vegetation, urban runoff/storm sewers, waste water/ land disposal, etc
	Sedimentation	Medium	Agricultural runoff, removal of riparian vegetation, streambed modification, surface mining, range land, etc.
San Lorenzo River	Nutrients	High	Septage disposal, nonpoint source
	Pathogens	High	Urban runoff, storm sewers, nonpoint source
	Sedimentation	High	Silviculture, construction / land development, urban runoff and sewers
San Lorenzo River Estuary	Sedimentation	High	Hydromodification
	Pathogens	Medium	Urban runoff/ storm sewers, natural sources
Schwan Lake	Nutrients	Low	Nonpoint source
	Pathogens	Low	Urban run-off, storm sewers, natural sources
Shingle Mill Creek	Nutrients	High	Septage disposal,
	Sedimentation	High	Agriculture, construction, development.

Source: California Environmental Protection Agency, State Water Resources Control Board, California 303 (d) List and TMDL Priority Schedule, 1998.


 **New data not available.**

*Quality of Life Indicator 109***Health of County Waterways**

Inventory of Impaired County Waterways, 1998

Waterway	Pollutant	Priority	Source
Soquel Lagoon	Nutrients	Low	Septage disposal, nonpoint source
	Pathogens	Low	Urban runoff, storm sewers, nonpoint source, natural sources
	Sedimentation	Low	Construction, land development
Valencia Creek	Sedimentation	Medium	Agriculture, land development and construction
	Pathogens	Low	Agriculture, septage disposal
Waddell Creek (East Branch)	Nutrients	Medium	Municipal point source
Watsonville Slough	Metals	Medium	Agriculture, urban runoff, storm sewers
	Oils and grease	Medium	Urban runoff, storm sewers, nonpoint source
	Pathogens	Medium	Urban runoff, storm sewers, nonpoint source, unknown source
	Pesticides	Medium	Agriculture/ runoff, irrigated crop production, nonpoint source
	Sedimentation	Medium	Agriculture/ runoff, irrigated crop production, nonpoint source

Source: California Environmental Protection Agency, State Water Resources Control Board, California 303 (d) List and TMDL Priority Schedule, 1998.

 **New data not available.**