

A photograph of a person walking on a paved path that curves through a field of dry, golden-brown grass. In the background, there is a town with houses and trees, and a blue sky with some light clouds. The overall scene is bright and clear.

Natural Environment Issues

"People have poor habits around their home – putting motor oil on the ground – they need to be encouraged to think more about their day-to-day habits."

A Summary of Santa Cruz County's Natural Environment, 2003

Our 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.

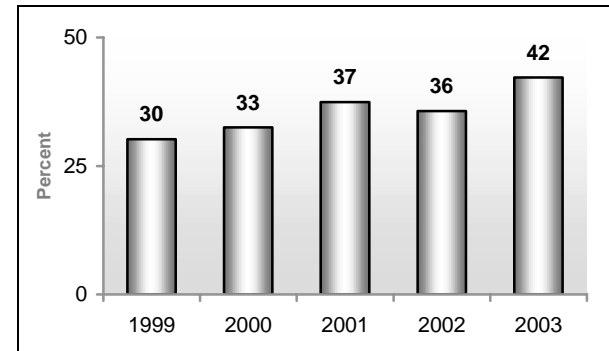
When asked what one thing concerned surveyed residents the most about the natural environment, people once again cited pollution in general most frequently, followed by water pollution and air pollution, specifically. The next most frequent concerns were no preservation of natural environment and wildlife, development of open space and agricultural land, overpopulation, and traffic/too many cars.



In the area of habitat preservation, Santa Cruz County residents gained nearly 800 acres of open space through the actions of public and private agencies. Nearly 27% of the acreage in the County is protected, with over 53 acres of open space per 1,000 residents.

Patterns of neighborhood park use have shifted, with more survey respondents reporting that they use neighborhood parks “frequently,” and fewer respondents indicating that they “never” use them. The age of people indicating that they use neighborhood parks increased slightly, with nearly 57% of respondents ages 25-44 reporting that they use the parks frequently and fewer respondents in the 18-24 age group reporting frequent use of neighborhood parks.

Park Use



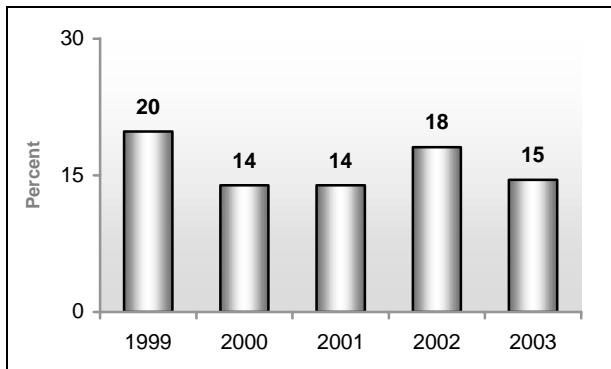
✓ Percent of respondents reporting that they frequently use neighborhood parks

Farmland acreage in the County declined by 23.5% in 2002, the most precipitous drop yet observed in a trend of loss since the CAP high point in 1997. The greatest declines were in field crops and pasture lands, where the county lost more than 60% of its acreage. Pesticide use in 2001 saw an interesting pattern of a small decrease in the amount of pesticides applied along with a nearly 52% reduction in the number of applications, indicating much larger amounts of pesticides delivered in many fewer applications. A similar pattern was observed in neighboring counties, although much less extreme.

Santa Cruz County has the largest number of organic farmers (79) in the tri-county area compared to Monterey (64) and San Benito (39) counties. However, San Benito has two times the number of acres planted with organic produce and Monterey County has three times the number of acres compared to Santa Cruz County.

Overall, the health of County waterways improved, with many local waterways reported to have less impairment than in 2001. The health of Aptos Creek, however, declined significantly, with 84% impairment compared to 2001's 40%. Survey respondents' perceptions of how we are doing as a County to address drinking water quality show an overall decline, with North County residents reporting the greatest decrease in the opinion that we are "getting better." The percentage of Latino respondents reporting "getting better" was 25.2%, down from the 27.5% of last year but still significantly different from Caucasian respondents (11.2%).

Water Quality



✓ Percent of respondents reporting that the County is getting better at addressing drinking water quality

Santa Cruz County residents achieved modest gains in 2002 in their goals to reduce water use. Daily water use per connection in 2002 was approximately 403 gallons, down from 406.4 in 2001 (0.8% improvement).

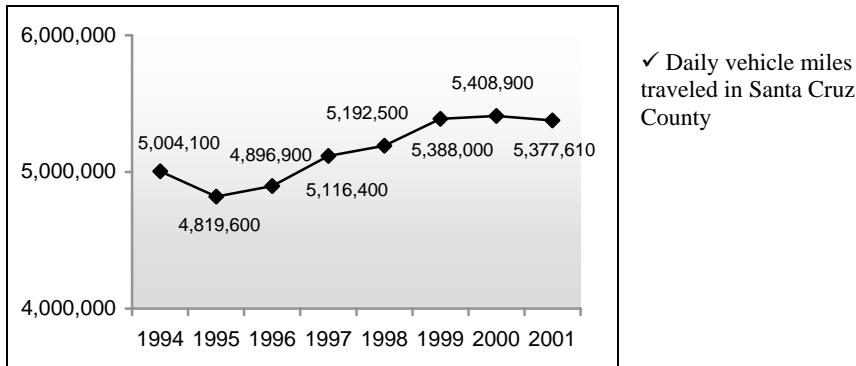
Countywide, Davenport saw 4 days where particulate matter exceeded state air quality standards; there were zero days exceeding state air quality standards for ozone. There was a 2.9% increase in air quality

complaints, which increased in Davenport, Soquel and Aptos, and decreased or remained the same in other County jurisdictions. Complaints about smoke increased while all other types of complaints decreased (e.g., odor, dust, paint, faulty gas nozzles).



The year 2002 saw a 1.6% increase in motor vehicle registrations, compared to a 1.8% increase in population. Vehicles per capita (adults) remained the same as it has been since 2000 (1.13). Statewide, car registrations increased by 3.8%, compared to a 1.7% increase in population. Daily vehicle miles traveled decreased for all jurisdictions except along the state highways and at UCSC, each increasing by 1.2% and 0.1% respectively, with an overall increase of 0.6%. Santa Clara County saw a similar increase in daily vehicle miles traveled, while San Mateo and Monterey Counties saw a decrease of approximately 2.5%.

Roadway Congestion




Annual ridership on alternative transportation (Santa Cruz Metropolitan Transit, Highway 17 Express Bus and Lifeline) declined by approximately 3%. Ridership on the Highway 17 Express Bus declined by over 9%. There was a very slight (1.8%) increase in survey respondents who reported frequent use of transportation other than their own car. When asked what would encourage respondents to use alternative forms of transportation, the most common response

(16.3%) was “nothing”; the second most common response was “convenience/more frequent bus schedule” (15.9%).



Concern for the Environment

The natural environment is one of Santa Cruz County's greatest strengths.

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

| Response | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|-------------|-------------|-------------|-------------|-------------|
| Pollution | 8 | 27.8 | 16.5 | 18.6 | 16.1 |
| Water pollution | 11.2 | 13.2 | 17 | 12.8 | 14.7 |
| Air pollution (primarily car emissions) | 14.8 | 9.8 | 18.9 | 14.6 | 13.0 |
| No preservation of natural environment / Wildlife | 8.3 | 10.5 | 7.7 | 7.0 | 10.2 |
| Development of open space / Agricultural land | 12.7 | 10.1 | 8.7 | 9.9 | 9.3 |
| Overpopulation | 5.2 | 11.6 | 14.7 | 9.3 | 8.5 |
| Traffic / Too many cars | 4.7 | 15 | 13.5 | 9.1 | 6.3 |
| Pesticides / Herbicides | 3.6 | 5.3 | 3.4 | 3.3 | 5.2 |
| Litter | 2.4 | 3.3 | 3.1 | 3.5 | 4.7 |
| Water quality | 7.4 | 12.1 | 5.8 | 4.3 | 4.7 |
| Cutting down trees / Commercial logging | 3.3 | 5.6 | 5.5 | 3.7 | 3.2 |
| Water availability / Salt water intrusion | 1.8 | 2 | 5.6 | 1.5 | 1.5 |

Year 2003: 682 respondents offering 820 responses.

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

QUALITY OF LIFE INDICATOR 108

Habitat Preservation

The County takes special steps to protect acreage from development and reserves some land for special status plant and animal species, recreation, education, and research.

Summary of Protected County Habitat Acres

| | Acres | | | | | Acres per 1,000 People | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------|--------------|--------------|--------------|--------------|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Land Trusts | 7,497.3 | 2,775.3 | 2,792.5 | 4,132.5 | 3,927.3 | 29.4 | 10.8 | 10.7 | 15.9 | 15.2 |
| Coastal Wetlands | 899 | 899 | 899 | 899 | 899 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| County and City Parks | 2,958.6 | 3,012.6 | 3,012.6 | 3,012.6 | 3,012.6 | 11.6 | 11.7 | 11.6 | 11.6 | 11.6 |
| State Parks | 45,568 | 43,903 | 43,912 | 43,912 | 43,912 | 178.7 | 170.2 | 169.0 | 168.8 | 169.0 |
| Open Space Easement Lands | 4,116 | 4,318 | 4,318 | 4,318 | 3,818 | 16.1 | 16.7 | 16.6 | 16.6 | 14.7 |
| Williamson Act Lands | 8,744 | 14,150 | 17,302 | 19,655 | 19,350 | 34.3 | 54.8 | 66.6 | 75.5 | 74.5 |
| Fish and Game Lands ¹ | 1,318 | 1,318 | 1,318 | 1,318 | 1,494 | 5.2 | 5.1 | 5.1 | 5.1 | 5.8 |
| Total Protected Acres in County | 71,100.9 | 70,375.9 | 73,554.1 | 77,247.1 | 76,432.9 | 278.8 | 272.8 | 283.1 | 296.9 | 294.2 |
| Total Acres in County | 286,739 | 286,739 | 286,739 | 286,739 | 286,739 | 1,124.5 | 1,111.4 | 1,103.7 | 1,102.0 | 1103.7 |
| Percent Protected Acres | 24.8 | 24.9 | 25.7 | 26.9 | 26.7 | - | - | - | - | - |

Sources: Land Trust of Santa Cruz County; Midpeninsula Regional Open Space District; Sempervirens Fund; Coastal Commission; County Tax Assessors Office; Department of Fish and Game; State Parks; State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

Annual differences in acreage may be due to rounding and / or variations in estimates by landholders.

Note: Open space easements restrict the use of privately owned property to a particular use (generally, undeveloped) under the Open Space Easement Act of 1974. Property owners receive a property tax reduction as an incentive to preserve their property in an undeveloped condition. The Williamson Act of 1965 offered property tax reductions to private landowners contracting to preserve farmland. Each year, the County is reimbursed by the state for a portion of the tax revenue lost through Williamson Act and Open Space Easement contracts. Totals have been recalculated to reflect the addition of Open Space Easement Lands to this table, this year.

¹ Fish and Game owned 897 acres and administered 421 additional acres during years 1999-2001. In 2002, Fish and Game owned 1,056 acres and administered an additional 438 acres.

Open Space – Acreage

Open Space in Santa Cruz County contributes to the community's quality of life.



| Park Name | Steward | 1999 | 2000 | 2001 | 2002 | 2003 |
|--|------------------|-------|-------|-------|-------|---------|
| Anna Jean Cummings Park ¹ | County | 83 | 96.5 | 96.5 | 96.5 | 96.5 |
| Aptos Village County Park | County | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| Arana Gulch | City | 63 | 63 | 63 | 63 | 63 |
| Bert Scott Estate | County | 31.5 | 31.5 | 31.5 | 31.5 | 31.5 |
| Circle P Ranch | Land Trust | - | 684 | 684 | 684 | 684 |
| The Coast Dairies Property | Land Trust | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 |
| Corralitos Mountains / Byrne Forest | Land Trust | 322 | 322 | 322 | 322 | 322 |
| DeLaveaga | City | 565 | 565 | 565 | 565 | 565 |
| Freedom Lake | County | 34 | 34 | 34 | 34 | 34 |
| Greyhound Rock | County | 70 | 70 | 70 | 70 | 70 |
| Harvey West | City | 55 | 55 | 55 | 55 | 55 |
| Highlands Park | County | 26.1 | 26.1 | 26.1 | 26.1 | 26.1 |
| John's Canyon | Land Trust | 60 | 60 | 60 | 60 | 60 |
| Lighthouse Field | State / City | 38 | 38 | 38 | 38 | 38 |
| Lodato Park | City | 49 | 49 | 49 | 49 | 49 |
| Long Ridge | - | 471 | 471 | 471 | 471 | 471 |
| Midpeninsula Regional Open Space District | Land Trust | N/A | N/A | N/A | N/A | 1,337.2 |
| Moore Creek Corridor / Antonelli Pond | Land Trust | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 |
| Moore Creek Preserve (Bombay) ² | City/ Land Trust | 249 | 249 | 249 | 249 | 249 |
| Moran Lake Park | County | 11 | 11 | 11 | 11 | 11 |
| Nearby Lagoon | City | 44 | 44 | 44 | 44 | 44 |

| Park Name | Steward | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pinto Lake City Park | City | 25 | 78 | 78 | 78 | 78 |
| Pinto Lake County Park | County | 113 | 183 | 183 | 183 | 183 |
| Pogonip | City | 640 | 640 | 640 | 640 | 640 |
| Quail Hollow Ranch | County | 300 | 300 | 300 | 300 | 300 |
| Ramsay Park | City | 32 | 32 | 32 | 32 | 32 |
| San Lorenzo Park | City | 13 | 13 | 13 | 13 | 13 |
| San Lorenzo River Redwoods | Land Trust | - | - | - | 1,340 | 1,340 |
| Schwann Lagoon | State | 92 | 92 | 92 | 92 | 92 |
| Scott Creek Beach and Bluffs | County | 39.5 | 39.5 | 39.5 | 39.5 | 39.5 |
| Seascape Park | County | 10 | 10 | 10 | 10 | 10 |
| Skyview Park | City | 22 | 24.5 | 24.5 | 22.5 | 22.5 |
| County and City Parks | - | 2,958.6 | 3,012.6 | 3,012.6 | 3,010.6 | 3,010.6 |
| Total Open Space Acres in County | - | 10,488.8 | 11,311.8 | 11,311.8 | 12,649.8 | 13,987.0 |
| Total Acres in County | - | 286,739 | 286,739 | 286,739 | 286,739 | 286,739 |
| Percent Open Space Acres | - | 3.7 | 3.9 | 3.9 | 4.4 | 4.9 |
| County Population | - | 255,000 | 258,000 | 259,800 | 260,200 | 259,800 |
| Open Space Acres per 1,000 residents | - | 41.1 | 43.8 | 43.5 | 48.6 | 53.8 |

Sources: Land Trust of Santa Cruz County (2002); Midpeninsula Regional Open Space District; Sempervirens Fund; Santa Cruz County Parks and Recreation; City of Santa Cruz Parks and Recreation Department; City of Scotts Valley Parks Department; State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

¹ Formerly O'Neil Ranch

² Land Trust of Santa Cruz has stewardship over 85 of 250 acres of Moore Creek Preserve (Bombay).

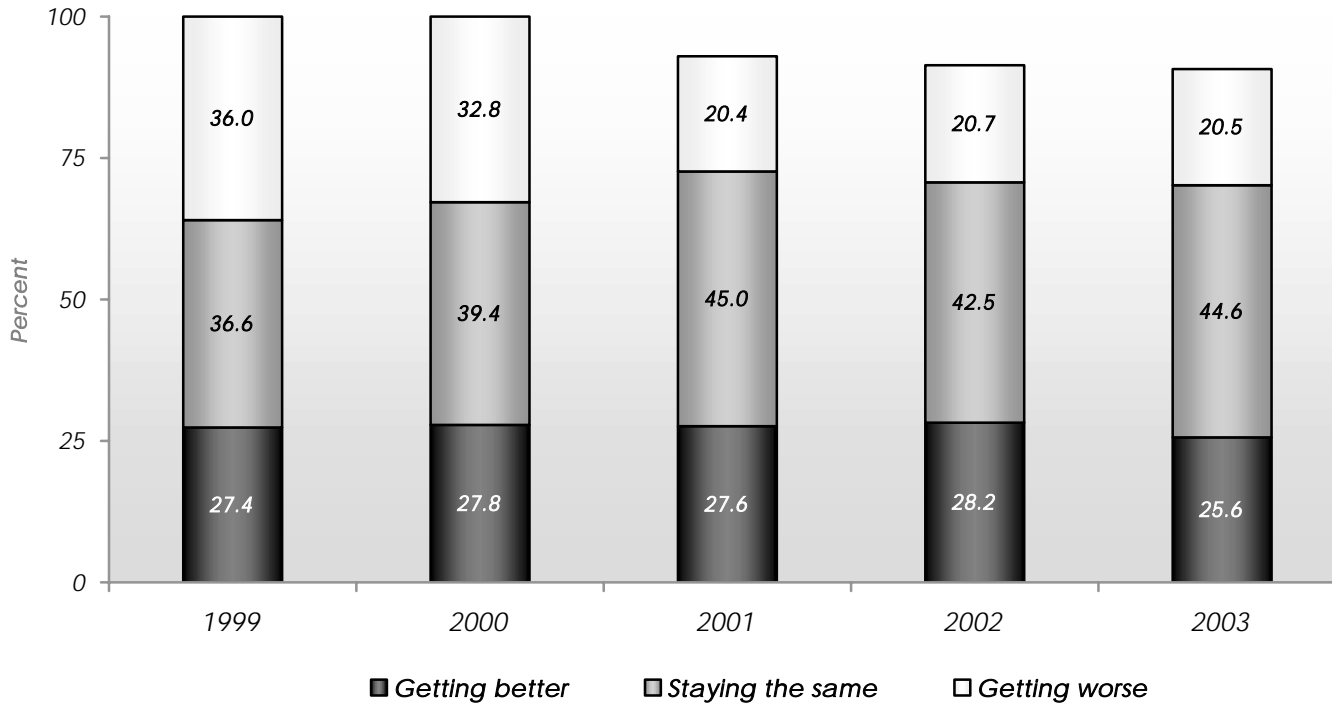
Open Space is defined and measured in this report as “parks and open space that are owned and administered by the local government, or land trust holdings that are ten acres or larger.”

QUALITY OF LIFE INDICATOR 109



Open Space

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



| Total respondents | 1999 | 2000 | 2001 | 2002 | 2003 |
|-------------------|------|------|------|------|------|
| Overall | 541 | 627 | 704 | 680 | 701 |

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

Due to their low numbers, respondents who said “don’t know” are not included in the graph.

See appendix for statistical testing for this question.

Open Space

Community Profile

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

| By Ethnicity | 1999 | 2000 | 2001 | 2002 | *2003 | 2003 N |
|--------------|------|------|------|------|-------|--------|
| Caucasian | 26.0 | 27.4 | 25.2 | 22.4 | 23.5 | 489 |
| Latino | 35.2 | 32.1 | 38.6 | 48.2 | 36.3 | 158 |

| By Region | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------------|------|------|------|------|------|--------|
| North County | 26.6 | 22.1 | 26.9 | 24.7 | 20.7 | 235 |
| South County | 31.7 | 37.3 | 29.9 | 33.5 | 31.6 | 242 |
| San Lorenzo Valley | 22.0 | 28.7 | 26.1 | 26.5 | 27.0 | 224 |

| By Age | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------|------|------|------|------|------|--------|
| 18-24 | 17.7 | 21.1 | 29.1 | 28.5 | 16.9 | 109 |
| 25-44 | 29.1 | 27.7 | 26.8 | 27.6 | 27.3 | 229 |
| 45-64 | 26.7 | 31.8 | 30.6 | 30.4 | 26.9 | 252 |
| 65 and older | 34.2 | 26.7 | 23.2 | 24.9 | 27.6 | 111 |

| By Gender | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|-----------|------|------|------|------|------|--------|
| Male | 29.0 | 32.2 | 27.5 | 28.7 | 26.0 | 348 |
| Female | 25.9 | 24.7 | 27.7 | 27.6 | 25.2 | 354 |

| By Income | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|---------------------------|------|------|------|------|------|--------|
| \$34,999 per year or less | 30.6 | 27.7 | 26.4 | 29.8 | 28.0 | 311 |
| \$35,000 - \$65,499 | 32.4 | 27.3 | 27.2 | 25.3 | 23.8 | 164 |
| \$65,500 and greater | 19.5 | 30.9 | 26.5 | 29.4 | 24.2 | 176 |

* Indicates statistically significant survey responses when reporting differences between sub-groups for the 2003 data. Absence of this symbol indicates no statistical significance difference between sub-groups for the 2003 data.

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

Significance Testing

Ethnicity: *Latinos* were significantly more likely to respond “Getting better” than were *Caucasians*.

QUALITY OF LIFE INDICATOR 110

Land Trust – Acreage

Land trusts work with private parties and public agencies to permanently protect land through purchase and/or donation.



| Location | Year Acquired | 1990 | 2000 | 2001 | 2002 | 2003 |
|---|---------------|--------------|----------------|----------------|----------------|-----------------|
| Alfadel Lane (Soquel) | 1983 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Bear Creek Road (conservation easement) | 1994 | - | 4.4 | 4.4 | 4.4 | 4.4 |
| Buzzard Lagoon | 1991 | - | 3.4 | 3.4 | 3.4 | 3.4 |
| Byrne Forest / Corralitos Mountains | 1984 | 322 | 322 | 322 | 322 | 322 |
| Circle P Ranch (conservation easement) | 2000 | - | 684 | 684 | 684 | 684 |
| Coast Dairies (Trust for Public Land) | 1998 | - | 7,000 | 7,000 | 7,000 | 7,000 |
| Davenport Bluff | 2001 | - | - | 1 | 1 | 1 |
| Fairway Drive | 2000 | - | - | 8.21 | 8.21 | 8.21 |
| Fairway Drive (conservation easement) | 2000 | - | - | 0.74 | .74 | .74 |
| Green Space (neighborhood park- Soquel) | 1985 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| Johns Canyon (conservation easement) | 1999 | - | 60 | 60 | 60 | 60 |
| Midpeninsula Regional Open Space District | Various | - | - | - | - | 1,337.2 |
| Moore Creek Corridor / Antonelli Pond | 1982 / 1989 | 14.3 | 18.2 | 18.2 | 18.2 | 18.2 |
| Moore Creek Preserve (Bombay) | 1998 | - | 85 | 85 | 85 | 85 |
| San Lorenzo River Redwoods | 2001 | - | - | - | 1,340 | 1,365 |
| Swanton Road (conservation easement) | 1986 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| Total Land Trust Acres in County | - | 340.6 | 8,181.4 | 8,191.3 | 9,531.3 | 10,893.5 |
| Total Acres in County | - | 286,739 | 286,739 | 286,739 | 286,739 | 286,739 |
| Percent Land Trust Acres | - | 0.12 | 2.9 | 2.9 | 3.3 | 3.8 |
| County Population | - | 236,015 | 258,000 | 259,800 | 260,200 | 259,800 |
| Land Trust Acres per 1,000 residents | - | 1.4 | 31.7 | 31.5 | 36.6 | 41.9 |

Source: Land Trust of Santa Cruz County (2002); Midpeninsula Regional Open Space District; Sempervirens Fund; Trust for Public Land; State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

All lands except Coast Dairies and San Lorenzo River Redwoods are held by the Land Trust of Santa Cruz County. The Land Trust of Santa Cruz County has stewardship over 85 of 250 acres of Moore Creek Preserve (Bombay), which is a City of Santa Cruz greenbelt. The Trust for Public Land will turn over Coast Dairies to a long-term steward (State Parks / Bureau of Land Management) in the fall of 2003. The San Lorenzo River Redwoods are owned by the Sempervirens Fund and will soon be turned over to Castle Rock State Park.

State Park Acreage ¹

| Park | 1996 | 2000 | 2001 | 2002 | 2003 |
|--|---------------|---------------|---------------|---------------|---------------|
| Henry Cowell (Fall Creek) | 4,259 | 4,320 | 4,320 | 4,320 | 4,320 |
| Nisene Marks | 10,062 | 10,188 | 10,188 | 10,188 | 10,188 |
| Manresa | 138 | 138 | 138 | 138 | 138 |
| Santa Cruz Mission | 2 | 2 | 2 | 2 | 2 |
| Natural Bridges | 53 | 59 | 59 | 59 | 59 |
| New Brighton | 166 | 163 | 166 | 166 | 166 |
| Seacliff State Beach (Rio) | 87 | 85 | 87 | 87 | 87 |
| Sunset State Beach (Palm) | 302 | 298 | 302 | 302 | 302 |
| Twin Lakes | 94 | 94 | 94 | 94 | 94 |
| Wilder Ranch (Gray Whale) | 6,805 | 6,903 | 6,903 | 6,903 | 6,903 |
| Big Basin (Rancho del Oso) ² | 20,000 | 18,004 | 18,004 | 18,004 | 18,004 |
| Castle Rock ² | 3,600 | 3,611 | 3,611 | 3,611 | 3,611 |
| Lighthouse Field State Park ³ | - | 38 | 38 | 38 | 38 |
| Total State Park Acres in County | 45,658 | 43,903 | 43,912 | 43,912 | 43,912 |
| Total Acres in County | 286,739 | 286,739 | 286,739 | 286,739 | 286,739 |
| Percent Park Acres | 15.9 | 15.3 | 15.3 | 15.3 | 15.3 |
| County Population | 246,200 | 258,000 | 259,800 | 260,200 | 259,800 |
| Park Acres per 1,000 residents | 179.1 | 170.2 | 169.0 | 169.0 | 169.0 |

Source: California State Parks Department, State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

¹ Park land acreage is based on estimates only. Precise acreage data are not available.

² A portion of Big Basin lies in San Mateo County. A portion of Castle Rock lies in San Mateo County and Santa Clara County.

³ Lighthouse Field State Park is owned by the State and maintained by the City of Santa Cruz.

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

QUALITY OF LIFE INDICATOR 112

Miles of Recreation Trails

Recreation mileage has been set aside for non-motorized recreation activities such as hiking, biking, and horseback riding.

Recreation Trails by Location and Length in Miles

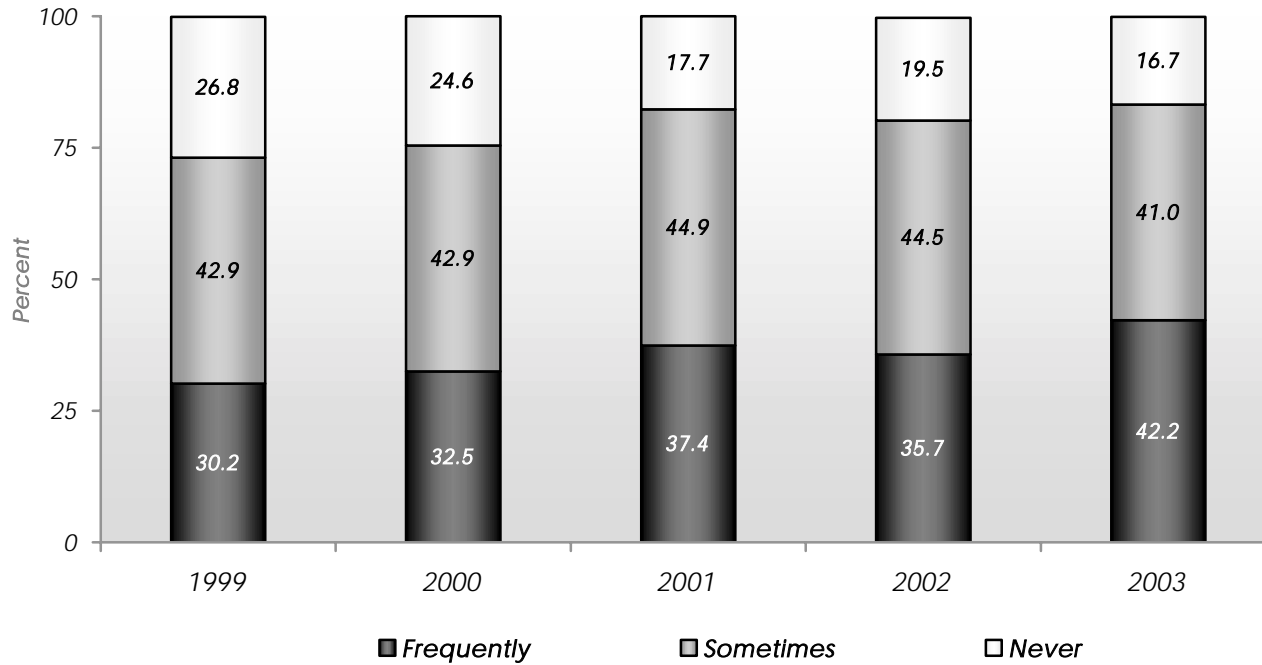
| Park | 1996 | 2000 | 2001 | 2002 | 2003 |
|---|------------|------------|------------|------------|------------|
| Henry Cowell (Fall Creek) | 36 | 36 | 36 | 35 | 35 |
| Nisene Marks | 22 | 27 | 27 | 25 | 25 |
| Manresa | 4 | 2 | 2 | 1 | 1 |
| Santa Cruz Mission | 0.1 | 0.1 | - | - | - |
| Natural Bridges | 1 | 1 | 1 | 1 | 1 |
| New Brighton | 2 | 2 | 2 | 1 | 0.5 |
| Portola Redwoods | - | - | - | 17 | 16.5 |
| Seacliff State Beach (Rio) | 2 | 1 | 1 | 1 | 0.4 |
| Sunset State Beach (Palm) | 2 | 2 | 2 | 1 | 1.45 |
| Twin Lakes | 2 | 2 | 2 | 2 | 2 |
| Wilder Ranch | 25 | 49 | 49 | 36 | 36 |
| Big Basin | 83 | 83 | 83 | 83 | 84 |
| Castle Rock | 35 | 35 | 35 | 27 | 27 |
| Lighthouse Field State Park ¹ | 1 | 1 | 1 | 1 | 1 |
| County Total | 215 | 241 | 241 | 231 | 231 |
| Number of people per mile of recreation trail | 1,097 | 1,070 | 1,078 | 1,127 | 1,125 |

Source: California State Parks; State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

¹ Owned by the State of California but maintained by the City of Santa Cruz.

 **Park Use**

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



| Total respondents | 1999 | 2000 | 2001 | 2002 | 2003 |
|-------------------|------|------|------|------|------|
| Overall | 559 | 658 | 706 | 684 | 700 |

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

Due to their low numbers, respondents who said “don’t know” are not included in the graph.

See appendix for statistical testing for this question.

QUALITY OF LIFE INDICATOR 113

 **Park Use**

 **Community Profile**

Percent of respondents who said they or their family members use neighborhood parks “Frequently”:

| By Ethnicity | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------|------|------|------|------|------|--------|
| Caucasian | 28.1 | 33.3 | 38.4 | 37.7 | 45.4 | 488 |
| Latino | 42.7 | 30.3 | 35.8 | 32.9 | 34.1 | 158 |

| By Region | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------------|------|------|------|------|------|--------|
| North County | 30.4 | 34.4 | 37.7 | 40.1 | 45.3 | 235 |
| South County | 30.1 | 29.7 | 35.2 | 30.2 | 37.3 | 241 |
| San Lorenzo Valley | 30.0 | 31.0 | 43.6 | 33.8 | 44.7 | 225 |

| By Age | 1999 | 2000 | 2001 | 2002 | *2003 | 2003 N |
|--------------|------|------|------|------|-------|--------|
| 18-24 | 25.6 | 27.2 | 41.3 | 49.5 | 41.0 | 109 |
| 25-44 | 40.7 | 38.5 | 50.6 | 42.6 | 56.5 | 229 |
| 45-64 | 26.4 | 32.3 | 35.1 | 33.0 | 37.7 | 251 |
| 65 and older | 14.8 | 21.3 | 20.8 | 20.3 | 24.5 | 111 |

| By Gender | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|-----------|------|------|------|------|------|--------|
| Male | 30.0 | 29.5 | 41.7 | 36.9 | 42.5 | 345 |
| Female | 30.2 | 34.5 | 33.0 | 34.6 | 42.0 | 355 |

| By Income | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|---------------------------|------|------|------|------|------|--------|
| \$34,999 per year or less | 28.7 | 30.3 | 29.9 | 36.1 | 40.8 | 309 |
| \$35,000 - \$65,499 | 33.3 | 30.9 | 39.9 | 37.0 | 44.2 | 164 |
| \$65,500 and greater | 28.9 | 38.7 | 45.5 | 36.9 | 45.3 | 175 |

* Indicates statistically significant survey responses when reporting differences between sub-groups for the 2003 data. Absence of this symbol indicates no statistical significance difference between sub-groups for the 2003 data.

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

Significance Testing

Age: 25-44 year olds were significantly more likely to respond that they “Frequently” used neighborhood parks than were 45-64 year olds or those 65 and older.

Farmland Acreage

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.

Farmland Acreage by Type of Production

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------------------|---------------------------|---------------------------|---------------|--------------|
| Berries | 4,594 | 4,563 | 4,563 | 4,815 | 4,286 | 5,500 ¹ | 5,500 ¹ | 5,527 ¹ | 5,502 | -0.5 |
| Tree and Fruit Vines | 4,028 | 4,077 | 4,077 | 3,842 | 3,654 | 3,522 | 3,541 | 3,664 | 3,381 | -7.7 |
| Vegetables | 11,606 | 11,766 | 12,590 | 12,726 | 10,955 | 9,996 | 9,159 | 9,658 | 8,366 | -13.4 |
| Nursery and Ornamental Crops | 993 | 1,320 | 1,296 | 1,422 | 1,422 | 1,612 | 1,395 | 1,474 | 1,230 | -16.6 |
| Field Crops and Pasture Land | 8,700 | 8,700 | 8,700 | 8,700 | 8,600 | 8,350 | 8,400 ¹ | 7,900 | 3,110 | -60.6 |
| Total Acres | 29,921 | 30,426 | 31,226 | 31,787 | 28,917 | 28,980¹ | 27,995¹ | 28,223¹ | 21,589 | -23.5 |

Source: County Agricultural Commissioner, Santa Cruz County Crop Report, 2003.

¹ Figures revised.

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 114

Farmland Acreage

Farmland in Santa Cruz County provides both revenue and open space for residents.

Santa Cruz County Land Use by Category

| Type of Land | 1990 | 1992 | 1994 | 1996 | 1998 | 2000 | Net Change 1990-2000 |
|---|---------------|---------------|---------------|---------------|---------------|---------------|-------------------------|
| Total Important Farmland: | 25,371 | 25,551 | 25,254 | 25,219 | 25,498 | 25,508 | 137 |
| - Prime Farmland | 17,392 | 17,401 | 17,262 | 17,230 | 17,179 | 17,031 | -361 |
| - Statewide Importance | 3,082 | 3,124 | 3,114 | 3,068 | 3,057 | 3,214 | 132 |
| - Unique | 4,251 | 4,334 | 4,160 | 4,203 | 4,393 | 4,394 | 143 |
| - Local Importance | 646 | 692 | 718 | 718 | 869 | 869 | 223 |
| Grazing Land | 16,818 | 16,791 | 16,615 | 16,187 | 16,718 | 16,587 | -231 |
| Total Acres of Agricultural Land | 42,189 | 42,342 | 41,869 | 41,406 | 42,216 | 42,095 | 94 |
| - Percent Agricultural Land | 14.7 | 14.8 | 14.6 | 14.4 | 14.7 | 14.7 | - |
| Total Acres of Urban and Built up Land | 27,205 | 27,504 | 27,585 | 27,719 | 28,588 | 29,293 | 2,088 |
| - Percent Urban and Built up Land | 9.5 | 9.6 | 9.7 | 9.7 | 10.0 | 10 | - |

Agricultural Land Converted to Urban Use, in Acres

| Type of Land | 1990-1992 | 1992-1994 | 1994-1996 | 1996-1998 | 1998-2000 | Net Conversion 1990-2000 |
|---|-----------|-----------|-----------|-----------|------------|-----------------------------|
| Prime Farmland | 30 | 20 | 56 | 39 | 50 | 195 |
| Statewide Importance | 9 | 0 | 22 | 0 | 25 | 56 |
| Unique | 0 | 0 | 0 | 0 | 29 | 29 |
| Local Importance | 0 | 0 | 0 | 0 | 0 | 0 |
| Grazing | 0 | 0 | 0 | 49 | 45 | 94 |
| Total Agricultural Acres Converted | 39 | 20 | 78 | 88 | 149 | 374 |

Source: Farmland Conversion Reports, California Department of Conservation, 2002. Reports are published biennially (every two years), and are available two years after the data they address. New data will be available in Fall 2004.

County acreage used to calculate percents is that used by the Department of Conservation: 286,739.

California Central Coast Organic Farms

Organic Growers

| County | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-------------------|------------|------------|------------|------------|------------|-------------|
| Monterey | 50 | 54 | 61 | 70 | 64 | -8.6 |
| San Benito | 29 | 33 | 40 | 37 | 39 | 5.4 |
| San Luis Obispo | 59 | 55 | 64 | 61 | 58 | -4.9 |
| Santa Clara | 16 | 18 | 23 | 20 | 16 | -20.0 |
| Santa Cruz | 80 | 85 | 78 | 82 | 79 | -3.7 |
| Total | 234 | 245 | 266 | 265 | 250 | -5.7 |

Organic Acres

| County | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-------------------|---------------|---------------|---------------|---------------|---------------|--------------|
| Monterey | 2,974 | 6,771 | 5,699 | 10,745 | 9,050 | -15.8 |
| San Benito | 3,035 | 3,440 | 3,821 | 8,279 | 6,986 | -15.6 |
| San Luis Obispo | 3,845 | 4,188 | 1,821 | 2,289 | 2,228 | -2.7 |
| Santa Clara | 419 | 493 | 549 | 639 | 525 | -17.8 |
| Santa Cruz | 1,254 | 2,349 | 2,224 | 3,718 | 2,918 | -21.5 |
| Total | 11,528 | 17,241 | 14,144 | 25,669 | 21,706 | -15.4 |

Organic Sales

| County | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------|
| Monterey | \$5,707,134 | \$17,548,693 | \$12,408,110 | \$18,131,542 | \$27,566,532 | 52.0 |
| San Benito | 12,133,852 | 11,918,282 | 12,260,914 | 14,778,100 | 10,916,086 | -26.1 |
| San Luis Obispo | 1,309,085 | 2,748,110 | 1,934,995 | 2,711,066 | 2,716,513 | 0.2 |
| Santa Clara | 1,122,313 | 4,350,473 | 2,062,778 | 2,039,840 | 2,001,865 | -1.9 |
| Santa Cruz | 7,702,761 | 12,221,869 | 12,367,946 | 13,634,922 | 18,350,845 | 34.6 |
| Total | \$27,975,145 | \$48,787,426 | \$41,034,743 | \$51,295,471 | \$61,551,841 | 20.0 |

Source: California Department of Food and Agriculture, 2003.

QUALITY OF LIFE INDICATOR 116

Pesticide Use

County Pesticide Use, Pounds Applied

| County | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|-------------|------------|------|-----------|------------|------------|-----------|-----------|----------|
| Santa Cruz | 1,756,102 | - | 1,727,669 | 1,707,094 | 1,613,475 | 1,620,596 | 1,533,447 | -5.4 |
| Monterey | 12,862,973 | - | 9,102,605 | 10,198,858 | 10,189,162 | 9,044,485 | 7,974,257 | -11.8 |
| Santa Clara | 807,057 | - | 740,533 | 1,391,915 | 1,042,956 | 727,458 | 713,318 | -1.9 |
| San Mateo | 281,382 | - | 421,002 | 424,967 | 327,671 | 225,399 | 221,161 | -1.9 |

County Pesticide Use, Number of Applications

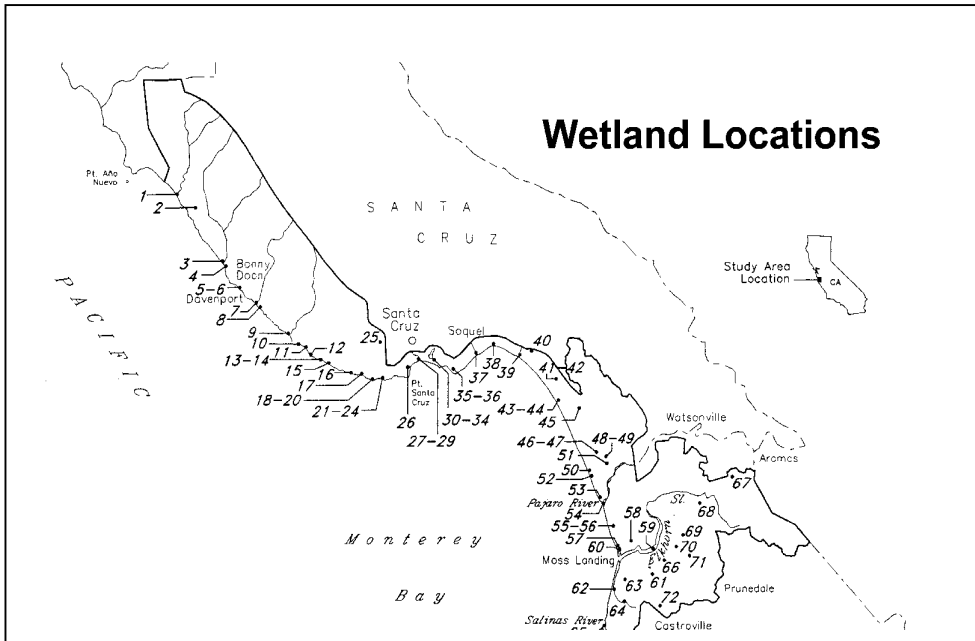
| County | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|-------------|---------|------|---------|---------|---------|---------|---------|----------|
| Santa Cruz | 60,823 | - | 52,490 | 31,552 | 44,045 | 50,595 | 24,315 | -51.9 |
| Monterey | 469,330 | - | 452,461 | 301,346 | 431,569 | 431,317 | 308,411 | -28.5 |
| Santa Clara | 53,674 | - | 28,878 | 26,270 | 33,681 | 30,446 | 22,701 | -25.4 |
| San Mateo | 35,759 | - | 30,402 | 25,495 | 30,905 | 20,482 | 17,686 | -13.7 |

Source: Department of Pesticide Regulation, Annual Pesticide Use Reports, 2003.

Note: County totals not available for 1996.

Coastal Wetlands

Wetlands have a vital role in aquatic and terrestrial ecosystems, flood control, ground water recharge, and the 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 | Galligahn 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 |

1994

| | |
|---|---------|
| Total coastal wetland acres in County | 899.2 |
| Total acres in County | 286,739 |
| Percent of County in coastal wetlands | 0.3 |
| Coastal wetland acres per 1,000 residents | 3.6 |

Source: California Coastal Commission, ReCAP Pilot Project Findings and Recommendations, 1994.

New data not available

QUALITY OF LIFE INDICATOR 118

Health of County Waterways

The California Regional Water Quality Control Board monitors inventories of major County waterways for the degree to which they are impaired by pollutants.

Percent Impairment of County Waterways

| Name | Total Size | % Impairment | | | | | Coho Salmon Habitat? |
|--|------------|--------------|------------------|-------|-------|-------|----------------------|
| | | 1989 | 1994 | 1998 | 2001 | 2002 | |
| Aptos Creek | 10 miles | 12.5 | 50.0 | 40.0 | 40.0 | 84.0 | Yes |
| Carbonera Creek | 10 miles | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | No |
| Lompico Creek | 5 miles | 100.0 | 100.0 | 100.0 | 100.0 | 90.0 | No |
| Pajaro River | 49 miles | 0.0 | 0.0 ¹ | 100.0 | 100.0 | 65.3 | No |
| San Lorenzo River | 25 miles | 20.0 | 60.0 | 100.0 | 100.0 | 100.0 | Yes |
| Schwan Lake | 32 acres | 100.0 | 100.0 | 100.0 | 100.0 | 71.9 | No |
| Shingle Mill Creek | 2 miles | 100.0 | 100.0 | 100.0 | 100.0 | 80.0 | No |
| Soquel Lagoon | 2 acres | 100.0 | 100.0 | 100.0 | 100.0 | 60.0 | No |
| Valencia Creek | 7 miles | 100.0 | 100.0 | 100.0 | 100.0 | 88.6 | No |
| Waddell Creek (East Branch) ¹ | 4 miles | 100.0 | 100.0 | 75.0 | 75.0 | 87.5 | ? |
| Watsonville Slough | 300 acres | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | No |

Source: California Environmental Protection Agency, Regional Water Resources Control Board, Recommended 303 (d) Lists and TMDL Priority Schedule, 2002.

¹ The steep gradient of the East Branch of Waddell Creek may be inhospitable to Coho Salmon; the mainstream and the West Branch do have Coho habitat, however.

Percentages are for those waterways that have a portion or all of their area/length listed as “impaired.” The State uses three categories to assess the waterway health. “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.

“Impaired” waterways do not support designated uses and have moderate to severe impairment of water quality.

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.

Health of County Waterways

Inventory of Impaired County Waterways, 2002

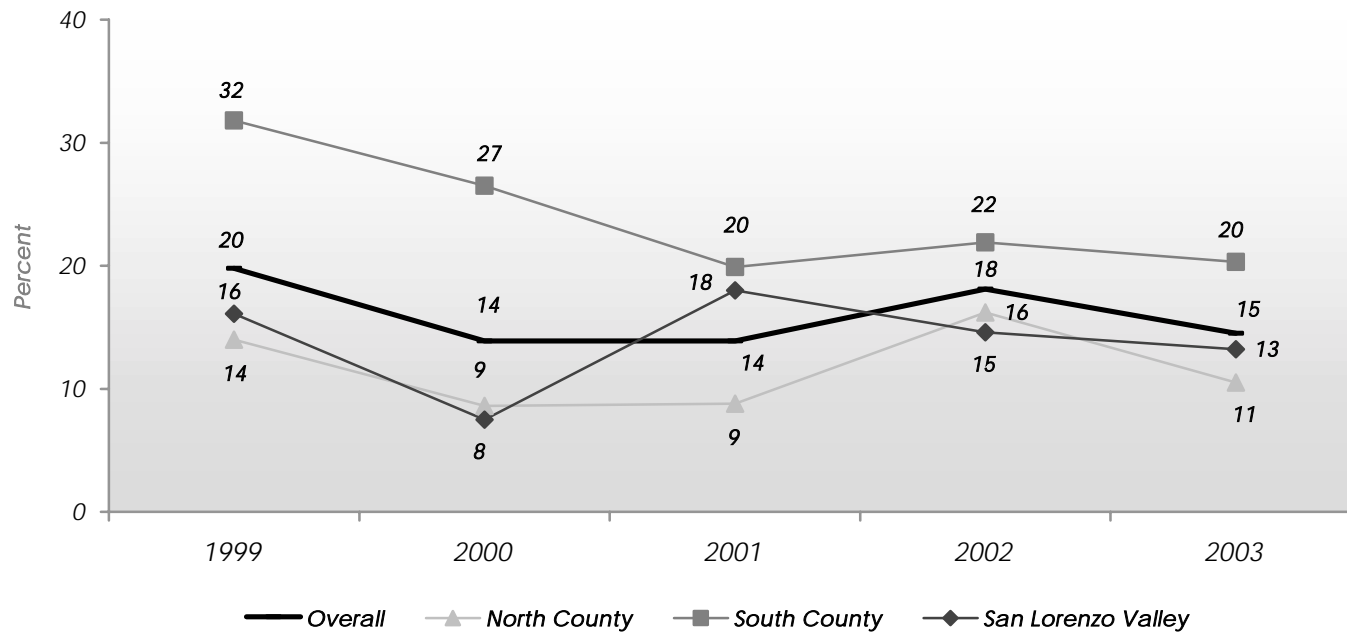
| Waterway | Pollutant | Priority | Source |
|-----------------------------|----------------|----------|--|
| Aptos Creek | Pathogens | Medium | Urban runoff / Storm sewers |
| | Sedimentation | Low | Disturbed sites (land development) / Channel erosion |
| Carbonera Creek | Nutrients | Low | Non-point sources |
| | Pathogens | Medium | Urban runoff / Storm sewers / Non-point sources |
| | Sedimentation | High | Construction / Land development / Non-point sources |
| Lompico Creek | Nutrients | Low | Septage disposal |
| | Pathogens | Medium | Septage disposal / Natural sources / Non-point sources |
| | Sedimentation | High | Construction / Land development / Natural sources |
| Pajaro River | Fecal Coliform | Low | Pasture grazing – Riparian and/or upland / Natural sources / Non-point sources |
| | Nutrients | Medium | Agriculture / Irrigated crop production / Agricultural storm runoff / Agricultural subsurface drainage / Agriculture and irrigation tail water / Agricultural return flows / Urban runoff / Storm sewers / Waste water / Land disposal / Channelization / Removal of riparian vegetation / Non-point sources |
| | Sedimentation | Medium | Agriculture / Irrigated crop production / Range grazing – Riparian and/or Upland / Agricultural storm runoff / Resource extraction / Surface mining / Hydromodification / Channelization / Habitat modification / Removal of riparian vegetation / Streambed modification/destabilization / Channel erosion |
| San Lorenzo River | Nutrients | Low | Septage disposal / Non-point sources |
| | Pathogens | Medium | Urban runoff / Storm sewers / Septage disposal |
| | Sedimentation | High | Silviculture / Construction / Land development / Urban runoff / Storm sewers |
| Schwan Lake | Nutrients | Low | Non-point sources |
| | Pathogens | Medium | Urban runoff / Storm sewers / Natural sources |
| Shingle Mill Creek | Nutrients | Low | Septage disposal |
| | Sedimentation | High | Construction / Land development / Non-point sources |
| Soquel Lagoon | Nutrients | Low | Septage disposal / Non-point sources |
| | Pathogens | Medium | Urban runoff / Storm sewers / Natural sources / Non-point sources |
| | Sedimentation | Low | Construction / Land development |
| Valencia Creek | Pathogens | Medium | Agriculture / Septage disposal |
| | Sedimentation | Low | Agriculture / Construction / Land development |
| Waddell Creek (East Branch) | Nutrients | Low | Municipal point sources |
| Watsonville Slough | Pathogens | Medium | Urban runoff / Storm sewers / Unknown source(s) / Non-point sources |
| | Pesticides | Low | Agriculture / Irrigated crop production / Agricultural storm runoff / Agricultural irrigation tailwater / Non-point sources |
| | Sedimentation | Medium | Agriculture / Irrigated crop production / Agricultural storm runoff / Non-point sources |

Source: California Environmental Protection Agency, Regional Water Resources Control Board, Recommended 303(d) List and TMDL Priority Schedule, 2002.

QUALITY OF LIFE INDICATOR 119

 **Water Quality**

*How are we doing as a County to address drinking water quality?
(Respondents answering “Getting better”)*



| Total respondents | 1999 | 2000 | 2001 | 2002 | 2003 |
|--------------------|------|------|------|------|------|
| Overall | 500 | 584 | 694 | 682 | 691 |
| North County | 278 | 304 | 200 | 233 | 232 |
| South County | 154 | 170 | 286 | 227 | 239 |
| San Lorenzo Valley | 56 | 106 | 211 | 220 | 220 |

Source: Santa Cruz Community Assessment Project, Telephone Survey.

See appendix for statistical testing for this question.

Water Quality

Community Profile

Percent of respondents who think the County is “Getting better” at addressing drinking water quality:

| By Ethnicity | 1999 | 2000 | 2001 | 2002 | *2003 | 2003 N |
|--------------|------|------|------|------|-------|--------|
| Caucasian | 16.3 | 9.7 | 12.7 | 14.9 | 11.2 | 479 |
| Latino | 39.0 | 29.0 | 19.4 | 27.5 | 25.2 | 158 |

| By Region | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------------|------|------|------|------|------|--------|
| North County | 14.0 | 8.6 | 8.8 | 16.2 | 10.5 | 232 |
| South County | 31.8 | 26.5 | 19.9 | 21.9 | 20.3 | 239 |
| San Lorenzo Valley | 16.1 | 7.5 | 18.0 | 14.6 | 13.2 | 220 |

| By Age | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|--------------|------|------|------|------|------|--------|
| 18-24 | 29.3 | 21.2 | 10.9 | 21.3 | 21.9 | 107 |
| 25-44 | 19.1 | 15.5 | 12.7 | 20.6 | 13.7 | 225 |
| 45-64 | 17.9 | 11.0 | 14.3 | 15.6 | 13.5 | 248 |
| 65 and older | 16.2 | 6.0 | 16.3 | 16.9 | 11.5 | 109 |

| By Gender | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|-----------|------|------|------|------|------|--------|
| Male | 17.0 | 13.2 | 11.9 | 17.1 | 15.2 | 339 |
| Female | 21.9 | 14.4 | 15.9 | 19.0 | 13.9 | 352 |

| By Income | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 N |
|---------------------------|------|------|------|------|------|--------|
| \$34,999 per year or less | 26.4 | 18.6 | 14.5 | 19.6 | 15.3 | 303 |
| \$35,000 - \$64,499 | 14.6 | 12.7 | 12.6 | 17.5 | 16.8 | 163 |
| \$65,500 and greater | 14.6 | 8.4 | 11.3 | 18.0 | 11.7 | 172 |

* Indicates statistically significant survey responses when reporting differences between sub-groups for the 2003 data. Absence of this symbol indicates no statistical significance difference between sub-groups for the 2003 data.

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

Significance Testing

Ethnicity: *Latinos* were significantly more likely to respond “Getting better” than were *Caucasians*.

QUALITY OF LIFE INDICATOR 120

Beach Closures

Beaches are often closed in response to elevated bacteria levels triggered by sewage spills, storm drain overflows, animals and waterfowl, and agricultural activities. Rainwater infiltration in the lagoons can cause sewage overflows that cause a beach closure.

Beach Closures - Number of Days Posted or Closed

| Beach Name | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|-----------------------------|-----------|-----------|----------|----------|----------|------------|-----------|-----------|------------|
| Capitola | 24 | - | 4 | - | 3 | - | 17 | 42 | 45 |
| Corcoran | - | - | - | - | 1 | 4 | - | - | - |
| Corcoran Lagoon | - | - | - | - | - | 102 | - | - | - |
| Cowell | - | - | - | - | - | 7 | 15 | 6 | 36 |
| Davenport | - | - | - | - | 1 | - | - | - | - |
| La Selva Beach | - | - | - | - | - | - | - | 3 | - |
| Lighthouse | - | - | - | - | - | - | 2 | - | - |
| Mitchell's Cove | - | - | - | - | - | - | 3 | - | - |
| Moran Lake | - | - | - | - | - | 20 | - | 3 | - |
| Pajaro River Beach / Sunset | - | 14 | - | - | - | - | - | 1 | - |
| Pelton Avenue | - | - | - | - | 2 | - | - | - | - |
| Rio Del Mar | 6 | - | - | - | - | 17 | 14 | 4 | 1 |
| Santa Cruz (Main Beach) | - | - | - | - | - | - | 5 | 2 | 23 |
| Seabright | - | - | - | - | 1 | - | - | 2 | 5 |
| Seacliff State Beach | - | - | - | - | - | - | 14 | - | 1 |
| Twin Lakes Beach | - | - | - | - | - | - | - | 2 | 1 |
| County Total | 30 | 14 | 4 | 0 | 8 | 150 | 70 | 65 | 112 |

Source: County of Santa Cruz Environmental Health Services, 2003; County of Santa Cruz Health Services Agency, 2003.

The increase in closures in 1999 was directly related to a change in State standards for monitoring and posting closures. Additionally, four waterflow deltas (San Lorenzo Rivermouth, Schwan Lagoon, Soquel Creek, and Aptos Creek) have permanent postings, and Neary Lagoon has a seasonal posting during winter.

Non-Agricultural Water Use

Measures the annual use and production of water. These data, provided by the various water districts, are the best proxy for balancing non-agricultural use and need.



Annual Production, in Millions of Gallons

| Water District | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-----------------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|------------|
| Central (rural Aptos) | - | 146 | 147 | 166 | 189 | 175 | 183 | 176 | 191 | 8.5 |
| Lompico | 30 | 30 | 32 | 31 | 32 | 32 | 32 | 31 | 29 | -6.5 |
| San Lorenzo Valley | 600 | 620 | 663 | 674 | 607 | 654 | 661 | 685 | 690 | 0.7 |
| Soquel Creek | 1,751 | 1,717 | 1,763 | 1,917 | 1,665 | 1,762 | 1,756 | 1,769 | 1,829 | 3.4 |
| Santa Cruz | 3,863 | 3,728 | 4,069 | 4,257 | 3,861 | 4,031 | 3,959 | 3,934 | 3,880 | -1.4 |
| Scotts Valley | 530 | 538 | 624 | 682 | 614 | 612 | 631 | 659 | 672 | 2.0 |
| Watsonville | 2,196 | 2,200 | 2,264 | 2,362 | 2,325 | 2,472 | 2,487 | 2,481 | 2,503 | 0.9 |
| County Total | 8,970 | 8,979 | 9,562 | 10,089 | 9,293 | 9,738 | 9,709 | 9,735 | 9,794 | 0.6 |

Annual Usage, in Millions of Gallons

| Water District | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-----------------------------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|-------------|
| Central (rural Aptos) | - | 125 | 148 | 171 | 184 | 175 | 169 | 163 | 171 | 4.9 |
| Lompico | 22 | 23 | 22 | 23 | 24 | 22 | 21 | 22 | 22 | 0.0 |
| San Lorenzo Valley | 509 | 531 | 562 | 600 | 533 | 576 | 581 | 594 | 591 | -0.5 |
| Soquel Creek | 1,563 | 1,581 | 1,638 | 1,740 | 1,571 | 1,641 | 1,695 | 1,668 | 1,719 | 3.1 |
| Santa Cruz | 3,412 | 3,510 | 3,731 | 4,022 | 3,603 | 3,764 | 3,727 | 3,709 | 3,575 | -3.6 |
| Scotts Valley | 532 | 537 | 592 | 680 | 607 | 610 | 628 | 631 | 667 | 5.7 |
| Watsonville | 2,102 | 2,071 | 2,180 | 2,318 | 2,164 | 2,372 | 2,371 | 2,348 | 2,373 | 1.1 |
| Unincorporated areas ¹ | - | - | - | - | 3,019 | 3,308 | 3,386 | N/A | N/A | N/A |
| County Total | 8,140 | 8,378 | 8,873 | 9,554 | 11,705 | 12,468 | 12,578 | 9,135 | 9,118 | -0.2 |

Source: Central Water District; Lompico Water District; San Lorenzo Valley Water District; Soquel Creek Water District; Santa Cruz Water Department; Scotts Valley Water District; City of Watsonville; County Planning Department, 2003.

¹ Usage data for unincorporated areas includes some large institutional parcels, and is calculated based on the number of parcels in the County with land use codes indicating water use, utilizing an estimated water use factor based on land use. Production data is not available for unincorporated areas since usage is heavily from wells.

QUALITY OF LIFE INDICATOR 121

Non-Agricultural Water Use

Number of Service Connections

| Water District | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------|
| Central (rural Aptos) | - | 760 | 763 | 772 | 787 | 804 | 813 | 818 | 821 | 0.4 |
| Lompico ¹ | 493 | 493 | 493 | 493 | 493 | 493 | 494 | 497 | 497 | 0.0 |
| San Lorenzo Valley | 5,496 | 5,696 | 5,704 | 5,714 | 5,729 | 5,735 | 5,774 | 5,774 | 5,793 | 0.3 |
| Soquel Creek | 13,223 | 13,318 | 13,402 | 13,594 | 13,746 | 14,077 | 14,264 | 14,449 | 14,529 | 0.6 |
| Santa Cruz | 22,214 | 22,433 | 22,557 | 22,694 | 23,024 | 23,061 | 23,148 | 23,310 | 23,590 | 1.2 |
| Scotts Valley | 2,991 | 3,143 | 3,266 | 3,319 | 3,432 | 3,502 | 3,521 | 3,545 | 3,577 | 0.9 |
| Watsonville | 12,354 | 12,445 | 12,529 | 12,614 | 12,706 | 12,907 | 13,108 | 13,197 | 13,177 | -0.2 |
| Unincorporated areas ² | - | - | - | - | 11,184 | 11,066 | 11,328 | N/A | N/A | N/A |
| County Total | 56,771 | 58,288 | 58,714 | 59,200 | 71,101 | 71,645 | 72,450 | 61,590 | 61,984 | 0.6 |

Daily Usage per Connection, in Gallons

| Water District | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Central (rural Aptos) | - | 450.6 | 531.4 | 606.9 | 640.5 | 596.3 | 568.6 | 489 | 503 | 2.9 |
| Lompico | - | - | - | - | 115 | 114 | 133 | 141 | 120 | -14.9 |
| San Lorenzo Valley | 253.7 | 255.4 | 269.9 | 287.7 | 254.9 | 275.2 | 290.7 | 281.9 | 280 | -0.7 |
| Soquel Creek | 323.8 | 325.2 | 334.9 | 350.7 | 313.1 | 319.4 | 325.7 | 316.3 | 324 | 2.4 |
| Santa Cruz | 420.8 | 428.7 | 453.2 | 485.6 | 428.7 | 447.2 | 441.1 | 436 | 415 | -4.8 |
| Scotts Valley | 487.3 | 468.1 | 496.6 | 561.3 | 484.6 | 477.2 | 488.7 | 487.6 | 510 | 4.6 |
| Watsonville | 466.2 | 455.9 | 476.7 | 503.5 | 466.6 | 460.3 | 495.6 | 487 | 493 | 1.2 |
| Unincorporated areas ² | - | - | - | - | 739.6 | 819.0 | 818.9 | N/A | N/A | N/A |
| County Total | 392.8 | 393.8 | 414.0 | 442.2 | 451.0 | 476.8 | 475.6 | 406.4 | 403.0 | -0.8 |

Source: Central Water District; Lompico Water District; San Lorenzo Valley Water District; Soquel Creek Water District; Santa Cruz Water Department; Scotts Valley Water District; City of Watsonville; County Planning Department, 2003.

¹ Connections with extremely low usage (seasonal/weekend homes) were eliminated to prevent erroneously low values.

² For the unincorporated areas, number of service connections is the number of parcels. Usage data includes some large institutional parcels, and is calculated based on the number of parcels in the County with land use codes indicating water use, using an estimated water use factor based on land use.

Air Quality

Exposure to unhealthful levels of ozone can result in chest pain, coughing, nausea, shortness of breath, headaches, congestion, and throat irritation.

Summary: Total Days Exceeding State Air Quality Standards

| Location | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------------------|----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|
| Ozone | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 |
| Particulate Matter (PM10) | 6 | 12 | 13 | 12 | 4 | 6 | 0 | 6 | 4 |
| Total | 6 | 13 | 15 | 12 | 5 | 7 | 1 | 6 | 4 |

Source: California Air Resources Board, 2003.

Number of Days Exceeding Safe Levels of Ozone

| Location | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Davenport | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Scott Valley (Scotts Valley Dr.) | 0 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 0 |
| Scotts Valley (Vine Hill) | 0 | - | - | - | - | - | - | - | - |
| Watsonville (Airport Blvd) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Santa Cruz (Bostwick Lane) | 0 | 0 | 0 | - | - | - | - | - | - |
| Santa Cruz (Soquel Ave.) | - | - | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| County Total | 0 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 |

Source: California Air Resources Board, 2000; Monterey Bay Unified Air Pollution Control District, 2003.

Note: The figures for ozone represent exceedances of the State Ambient Air Quality Standards (one hour average) and do not include exceedances of the National Standard (eight hour average). Two monitoring sites closed and were replaced with a new nearby site; the Scotts Valley Vine Hill site was replaced in 1994 by the Scotts Valley Drive site, and the Santa Cruz Bostwick Lane site was replaced by the Soquel Avenue site.

QUALITY OF LIFE INDICATOR 122

Air Quality

Number of Monitored Days Exceeding Safe Levels of Particulate Matter

| Location | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|----------------------------|----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|
| Davenport | 5 | 12 | 12 | 12 | 4 | 6 | 0 | 6 | 4 |
| Scotts Valley (Vine Hill) | 0 | 0 | - | - | - | - | - | - | - |
| Watsonville (Airport Blvd) | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Santa Cruz (Bostwick Lane) | 0 | 0 | 1 | - | - | - | - | - | - |
| Santa Cruz (Soquel Ave.) | - | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| County Total | 6 | 12 | 13 | 12 | 4 | 6 | 0 | 6 | 4 |

Source: California Air Resources Board, 2000; Monterey Bay Unified Air Pollution Control District, 2003.

Note: The above figures represent monitored exceedances of the State 24-hour Ambient Air Quality Standard for PM₁₀. However, since PM₁₀ monitoring is only conducted once every six days, the actual number of exceedances can be much higher. PM₁₀ monitoring is conducted according to a national monitoring schedule established by the United States Environmental Protection Agency.

Particulate Matter (PM₁₀) refers to the mixture of solid particles and liquid droplets found in the air that are less than 10 microns in size. Studies have linked high levels of particulate matter to aggravated asthma and acute respiratory symptoms, chronic bronchitis, decreased lung function, and premature death. The largest sources of PM₁₀ are dust from vehicles driving on paved roads, grinding operations, fuel combustion, agricultural burning, and wood stoves. In Davenport, high PM₁₀ readings are due to the concentration of sea salt in the air.

Air Quality

Air quality complaints are tallied on the number of irritants reported by County residents.

Air Quality-Related Neighborhood Complaints, by Area

| Location | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Davenport | 9 | 7 | 6 | 6 | 11 | 18 | 23 | 27.8 |
| Bonny Doon | 1 | 2 | 1 | 1 | 2 | 1 | 0 | N/A |
| Ben Lomond / Felton / Boulder Creek | 20 | 24 | 13 | 15 | 13 | 11 | 10 | -9.1 |
| Scotts Valley | 7 | 11 | 4 | 2 | 9 | 0 | 3 | N/A |
| Santa Cruz | 54 | 84 | 111 | 37 | 37 | 72 | 64 | -11.1 |
| Capitola | 4 | 2 | 2 | 2 | 4 | 2 | 2 | 0.0 |
| Soquel | 10 | 9 | 4 | 8 | 8 | 3 | 11 | 266.7 |
| Aptos | 8 | 7 | 4 | 5 | 0 | 3 | 7 | 133.3 |
| Freedom / Corralitos | 3 | 5 | 0 | 2 | 3 | 1 | 1 | 0.0 |
| Watsonville | 26 | 32 | 18 | 23 | 25 | 25 | 19 | -24.0 |
| County Total | 142 | 183 | 163 | 101 | 112 | 136 | 140 | 2.9 |

Air Quality-Related Neighborhood Complaints, by Type

| Irritant | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|-----------------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Smoke / Open burning / Fireplaces | 30 | 51 | 43 | 39 | 31 | 18 | 41 | 127.8 |
| Odor | 36 | 43 | 97 | 24 | 42 | 66 | 63 | -4.5 |
| Dust | 11 | 17 | 16 | 17 | 20 | 30 | 17 | -43.3 |
| Paint | 6 | 10 | 12 | 8 | 3 | 5 | 3 | -40.0 |
| Phase II / Faulty gas nozzles | 8 | 6 | 1 | 2 | 7 | 4 | 4 | 0.0 |
| Other (asbestos, etc) | 8 | 6 | 5 | 11 | 9 | 13 | 12 | -7.7 |
| County Total | 99 | 133 | 174 | 101 | 112 | 136 | 140 | 2.9 |

Source: Monterey Bay Unified Air Pollution Control District, 2003.

A single phone call may refer to more than one irritant, and therefore those irritants are counted separately. Beginning in 1999, smoking vehicle complaints were no longer processed by the MBUAPD, and are referred to other departments.

QUALITY OF LIFE INDICATOR 123

Motor Vehicle Registrations

This is a proxy indicator of traffic congestion in Santa Cruz County. The number of vehicles per person provides an illustrative measure of how overall population increases compare with vehicle increases.

Santa Cruz County

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| Total | 186,348 | 188,612 | 192,444 | 183,966 | 198,230 | 201,982 | 227,345 | 232,580 | 236,390 | 1.6 |
| Population 16 and over | 184,105 | 185,903 | 187,513 | 190,451 | 193,833 | 197,508 | 201,232 | 205,002 | 208,607 | 1.8 |
| Vehicles per Capita | 1.01 | 1.01 | 1.03 | 0.97 | 1.02 | 1.02 | 1.13 | 1.13 | 1.13 | 0.0 |

California

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | % Change |
|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| Total | 22,843,527 | 23,247,363 | 23,724,871 | 22,522,604 | 24,105,233 | 24,753,847 | 26,727,544 | 27,627,105 | 28,686,309 | 3.8 |
| Population 16 and over | 23,816,718 | 23,960,449 | 24,179,607 | 24,595,265 | 24,975,339 | 25,393,255 | 25,824,932 | 26,258,516 | 26,697,667 | 1.7 |
| Vehicles per Capita | 0.96 | 0.97 | 0.98 | 0.92 | 0.97 | 0.97 | 1.03 | 1.05 | 1.07 | 1.9 |

Source: Department of Motor Vehicles, Forecasting Division, 2003; State of California, Department of Finance, E1 Population Estimates, with annual percentage change, Sacramento, CA May 2003.

Roadway Congestion

As an indicator of traffic volume, vehicle miles traveled (VMT) can be used as a proxy indicator of air quality. VMT also helps planners make decisions about transportation management and County growth.

Daily Vehicle Miles Traveled, by Jurisdiction

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------|
| Capitola | 120,200 | 108,900 | 129,200 | 132,200 | 124,000 | 148,000 | 147,300 | 135,360 | -8.1 |
| Santa Cruz | 605,400 | 574,000 | 576,500 | 599,500 | 598,900 | 597,800 | 596,500 | 595,900 | -0.1 |
| Scotts Valley | 115,500 | 106,000 | 110,200 | 114,600 | 119,800 | 126,700 | 126,600 | 121,350 | -4.1 |
| Watsonville | 291,000 | 284,000 | 290,200 | 297,300 | 312,500 | 342,700 | 335,700 | 328,790 | -2.1 |
| County— Unincorporated | 1,269,700 | 1,235,500 | 1,251,800 | 1,285,500 | 1,328,900 | 1,376,200 | 1,362,700 | 1,326,030 | -2.7 |
| State Highways | 2,589,000 | 2,500,100 | 2,529,500 | 2,675,300 | 2,694,400 | 2,749,100 | 2,794,000 | 2,826,790 | 1.2 |
| State Parks and Recreation | 13,300 | 11,100 | 9,500 | 12,000 | 14,000 | 16,300 | 14,300 | 11,570 | -19.1 |
| University of California | - | - | - | - | - | 31,200 | 31,800 | 31,830 | 0.1 |
| County Total | 5,004,100 | 4,819,600 | 4,896,900 | 5,116,400 | 5,192,500 | 5,388,000 | 5,408,900 | 5,377,610 | 0.6 |

Daily Vehicle Miles Traveled, County Comparison

| Other Local Counties | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|----------------------|----------|----------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------|
| Monterey | - | - | 8,694,900 | 9,217,300 | 9,331,900 | 9,841,500 | 9,930,100 | 9,685,050 | -2.5 |
| San Mateo | - | - | 17,414,500 | 18,280,800 | 18,593,900 | 19,336,100 | 19,383,400 | 18,885,220 | -2.6 |
| Santa Clara | - | - | 37,945,100 | 38,410,600 | 39,940,100 | 40,979,600 | 41,135,900 | 41,444,740 | 0.8 |
| Total | - | - | 64,054,500 | 65,908,700 | 67,865,900 | 70,157,200 | 70,449,400 | 70,015,010 | -0.6 |

Source: California Department of Transportation (CalTrans), 2003.

CalTrans calculates Vehicle Miles Traveled (VMT) by multiplying the length of each given road segment by its traffic volume in a day.

QUALITY OF LIFE INDICATOR 125

Alternative Transportation

Ridership statistics measure to what extent residents rely on alternative forms of transportation.

Annual Alternative Transportation Ridership by Selected Types

| Type of Transport | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 | 2001-02 | 2002-03 | % Change |
|--|------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------|------------------|-------------|
| Santa Cruz Metropolitan Transit District (SCMTD) | 6,631,042 | 6,457,610 ¹ | 6,457,610 ¹ | 6,155,004 ¹ | 6,155,004 ¹ | 6,155,004 ¹ | 6,140,571 ¹ | 6,105,478 | 5,939,048 | -2.7 |
| Hwy 17 Express Bus | 175,964 | 168,386 ¹ | 181,465 | 174,581 | 179,353 | 178,445 | 189,014 | 165,062 | 149,948 | -9.2 |
| Lifeline (Paratransit) | 28,516 | 37,814 | 51,457 | 66,578 | 83,754 | 103,074 | 101,541 | 108,089 | 105,989 | -1.9 |
| Total | 6,835,522 | 6,663,810¹ | 6,690,532¹ | 6,396,163¹ | 6,418,111¹ | 6,436,523¹ | 6,431,126¹ | 6,378,629 | 6,194,985 | -2.9 |

Source: Santa Cruz Metropolitan Transit District, 2003.

Ridership refers to the number of trips taken in a specified time frame. There is currently no data available on the number of people who commute to work using carpool services or bicycles. See Census 2000 data in the Demographics section of this report for related commuting data.

¹ Figure revised.

Bikeway Miles

| Jurisdiction | 1994 | 1997 | 1999 | 2002 | 2003 |
|---------------------|-------------|-------------|-------------|-------------|-----------|
| Capitola | 5.8 | 6.2 | 6.4 | 6.4 | 6.4 |
| Santa Cruz | 28.8 | 30.9 | 31.8 | 31.8 | 31.8 |
| Scotts Valley | 2.8 | 4.4 | 4.8 | 8.5 | 9.3 |
| Watsonville | 5.8 | 5.8 | 6.0 | 9.2 | 9.2 |
| Unincorporated | 24.7 | 26.4 | 26.7 | 28.1 | NA |
| County Total | 69.7 | 73.3 | 75.7 | 84.0 | NA |

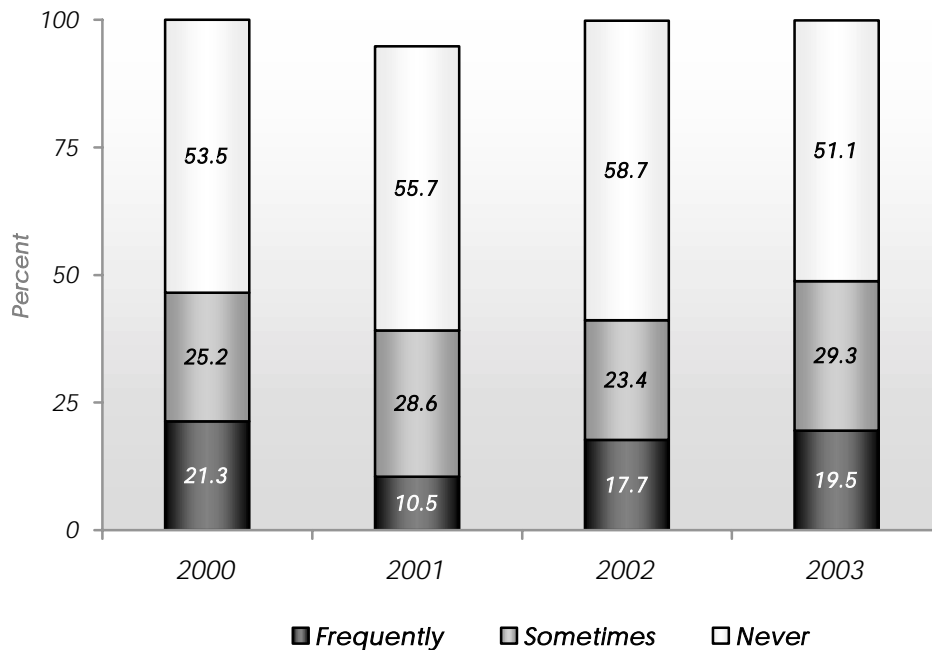
Source: Santa Cruz County Regional Transportation Commission, 2003. San Mateo City/County Association of Governments, 2000. Valley Transportation Authority, 2000.

Totals include only Class I bike paths and Class II bike lanes.

Alternative Transportation

Interest in using alternative transportation is important for planning new transit routes and alternate possibilities for transit.

How often do you use transportation other than your own car?



| Total respondents | 2000 | 2001 | 2002 | 2003 |
|-------------------|------|------|------|------|
| Overall | 530 | 698 | 684 | 702 |

Due to their low numbers, respondents who said "don't know" are not included in the graph.

See appendix for results of statistical testing for these questions.

What would encourage you to use alternative forms of transportation? (Selected responses)

| Response | 2000 | 2001 | 2002 | 2003 |
|---|------|------|------|------|
| Nothing / Wouldn't use it / Not now / Have children | 45.4 | 16.5 | 19.9 | 16.3 |
| More frequent bus schedule / Convenience | 9.2 | 15.1 | 15.6 | 15.9 |
| Already use it | 12.7 | 5.2 | 10.8 | 13.5 |
| Easier access | 2.8 | 6.3 | 5.0 | 5.9 |
| If car broke down | 4.4 | 8.9 | 9.7 | 4.5 |
| Expense of gasoline | 2.1 | 4.0 | 1.5 | 3.4 |
| More / Safer / Better bike paths | 2.3 | 4.3 | 2.0 | 3.0 |
| Light rail / Train | 2.3 | 2.8 | 3.1 | 2.3 |
| Free transit | 2.3 | 1.9 | 0.9 | 1.0 |
| Rapid transit | 2.1 | 2.3 | 1.2 | 0.5 |
| Total Respondents | 566 | 681 | 661 | 691 |

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

QUALITY OF LIFE INDICATOR 126

Endangered Species - Plants

Biodiversity is a proxy for habitat health, and loss of species indicates the extent to which natural ecosystems are changing or being changed. The listed plant and animal species found within Santa Cruz County appear on State and Federal lists of threatened or endangered species or on the Federal "watch list."

| Common Name | State Status | Enlist Date | Federal Status | Enlist Date |
|-----------------------------|--------------|-------------|--------------------|-------------|
| Ben Lomond Buckwheat | - | - | Species of Concern | - |
| Ben Lomond Spineflower | - | - | Endangered | 1994 |
| Bent Flowered Fiddleneck | - | - | Species of Concern | - |
| Blasdale's Bent Grass | - | - | Species of Concern | - |
| Bonny Doon Manzanita | - | - | Species of Concern | - |
| Bristly Sedge | - | - | Species of Concern | - |
| Caper-Fruited Tropicocarpum | - | - | Species of Concern | - |
| Coast Wallflower | - | - | Species of Concern | - |
| Congdon's Tarplant | - | - | Species of Concern | - |
| Deceiving Sedge | - | - | Species of Concern | - |
| Dudley's Lousewort | Rare | 1979 | Species of Concern | - |
| Hooker's Manzanita | - | - | Species of Concern | - |
| Kellogg's Horkelia | - | - | Species of Concern | - |
| Loma Prieta Hoita | - | - | Species of Concern | - |
| Maple-Leaved Checkerbloom | - | - | Species of Concern | - |
| Marsh Sandwort | Endangered | 1990 | Endangered | 1993 |
| Monterey Pine | - | - | Species of Concern | - |
| Monterey Spineflower | - | - | Threatened | 1994 |
| Pajaro Manzanita | - | - | Species of Concern | - |
| Pine Rose | - | - | Species of Concern | - |

| Common Name | State Status | Enlist Date | Federal Status | Enlist Date |
|----------------------------------|--------------|-------------|---------------------|-------------|
| Robust Spineflower | - | - | Endangered | 1994 |
| San Francisco Champion | - | - | Species of Concern | - |
| San Francisco Popcorn-Flower | Endangered | 1979 | Species of Concern | - |
| Sand Gilla | Threatened | 1987 | Endangered | 1992 |
| Santa Cruz Clover | - | - | Species of Concern | - |
| Santa Cruz Cypress | Endangered | 1979 | Endangered | 1987 |
| Santa Cruz Manzanita | - | - | Species of Concern | - |
| Santa Cruz Microseris | - | - | Species of Concern | - |
| Santa Cruz Mountains Beardtongue | - | - | Species of Concern | - |
| Santa Cruz Tarplant | Endangered | 1979 | Threatened | 2000 |
| Santa Cruz Wallflower | Endangered | 1981 | Endangered | 1994 |
| Schreiber's Manzanita | - | - | Species of Concern | - |
| Scott's Valley Polygonum | - | - | Proposed Endangered | 2000 |
| Scotts Valley Spineflower | - | - | Endangered | 1994 |
| Swamp Harebell | - | - | Species of Concern | - |
| White-Rayed Pentachaeta | Endangered | 1992 | Endangered | 1995 |

Source: California Department of Fish and Game, Natural Diversity Database, 2003.

Endangered Species - Animals

| Type | Common Name | State Status | Enlist Date | Federal Status | Enlist Date |
|---------------|-------------------------------------|--------------|-------------|--------------------|-------------|
| Invertebrates | California Brackishwater Snail | - | - | Species of Concern | - |
| Arachnids | Doloff Cave Spider | - | - | Species of Concern | - |
| | Empire Cave Pseudoscorpion | - | - | Species of Concern | - |
| Crustaceans | Mackenzie's Cave Amphipod | - | - | Species of Concern | - |
| Insects | Globose Dune Beetle | - | - | Species of Concern | - |
| | Monarch Butterfly | - | - | Species of Concern | - |
| | Mount Hermon (=Barbate) June Beetle | - | - | Endangered | 1997 |
| | Ohlone Tiger Beetle | - | - | Endangered | 2001 |
| | Smith's Blue Butterfly | - | - | Endangered | 1976 |
| | Unfiltered Fritillary Butterfly | - | - | Species of Concern | - |
| | Zayante Band-Winged Grasshopper | - | - | Endangered | 1997 |
| Fishes | Coho Salmon | Endangered | 1995 | Threatened | 1996 |
| | Steelhead | - | - | Threatened | 1997 |
| | Tidewater Goby ¹ | - | - | Endangered | 1994 |
| Amphibians | California Red-Legged Frog | - | - | Threatened | 1996 |
| | California Tiger Salamander | - | - | Species of Concern | 2000 |
| | Foothill Yellow-Legged Frog | - | - | Species of Concern | - |
| | Santa Cruz Long-Toed Salamander | Endangered | 1971 | Endangered | 1967 |
| Reptiles | Black Legless Lizard | - | - | Species of Concern | 2000 |
| | San Francisco Garter Snake | Endangered | 1971 | Endangered | 1967 |
| | Southwestern Pond Turtle | - | - | Species of Concern | - |
| | Western Pond Turtle | - | - | Species of Concern | - |
| Birds | Bank Swallow | Threatened | 1989 | - | - |
| | Black Swift | - | - | Species of Concern | - |
| | Burrowing Owl | - | - | Species of Concern | - |
| | California Black Rail | Threatened | 1971 | - | - |
| | Cooper's Hawk | - | - | Species of Concern | - |
| | Marbled Murrelet | Endangered | 1992 | Threatened | 1992 |
| | Saltmarsh Common Yellowthroat | - | - | Species of Concern | - |
| | Tricolored Blackbird | - | - | Species of Concern | - |
| | Western Snowy Plover | - | - | Threatened | 1993 |
| Mammals | Townsend's Western Big-Eared Bat | - | - | Species of Concern | - |

Source: California Department of Fish and Game Natural Diversity Database, 2003.

¹ Populations of Tidewater Goby north of Orange County, California, were proposed for delisting in 1999.

QUALITY OF LIFE INDICATOR 127

Ecological Restoration

Projects to assess, repair, or restore at-risk habitats – listed here by locations and purpose – are a proxy both for environmental protection activities and for additional project funding.

| Location | Project Description |
|--|---|
| Aptos Creek Clean Streams Program | To provide data that pertain to the water quality objectives set by the State Water Quality Control Board and to the anadromous fisheries present in Aptos and Valencia Creeks |
| Aptos Creek Watershed Assessment and Enhancement Plan | Provide current information and analysis for conditions within the watershed. The plan will result in recommendations for site specific habitat protection and restoration prescriptions for steelhead and Coho salmon. |
| Arana Gulch Clean Streams Pilot Project | To train and utilize volunteers to participate in monitoring the health of the Arana Gulch Watershed through water quality sampling, habitat assessment and participation in restoration activities |
| Bates Creek Dam Reservoir Assessment and Restoration Plan | Perform essential geotechnical and hydrologic analysis of sediment-filled reservoir associated with a 30 feet high concrete dam. Use the information to design and permit a modification of the dam that will restore upstream fish migration to approximately 4 miles of blue-line stream. |
| Biodiversity in the Santa Cruz Mountains | Inventory, identify, and describe the elements of biodiversity in the Santa Cruz Mtns. (species, communities, and ecosystems) and assess the threats to those elements. |
| Bonny Doon Road Arch Culvert | Improve passage conditions for adult and juvenile steelhead trout. The project will also improve bedload transport through the road crossing, and reduce sedimentation from road failure or erosion. |
| Central Coast Sustainable Landscapes Project | Define quantifiable techniques for measuring the sustainability of oak woodlands in the central coast region. |
| Coho and Steelhead Recovery in a Coastal California Stream | Provide recommendations for the sustainable natural production of Coho and steelhead in the Scott Creek drainage through the study of deterministic biotic and abiotic factors. |
| County of Santa Cruz Road Crossing and Salmonid Passage Assessment | Complete an initial assessment of all County road crossings on salmonid streams. Evaluate passage conditions at up to 70 stream crossings that may be passage impediments for salmonids. |
| Ellicott Slough National Wildlife Refuge Upland Habitat Restoration Project - Weed Control | To restore upland habitat for the endangered Santa Cruz long-toed salamander |
| Gazos Creek Watershed Assessment and Enhancement Program | Conduct a watershed assessment including the following: sediment yield study, hydrologic assessment, large woody debris recruitment analysis, channel stability analysis. Following this, restoration habitat enhancement recommendations will be made. |
| Hanson Aggregates - Felton Plant Re-vegetation Program | To revegetate completed mining areas, including the establishment of special status plant species |
| Kings Creek Concrete Removal | Removal of large concrete debris in creek, which is causing significant streambank erosion and downstream siltation. Disturbed banks will be revegetated with native riparian species. |
| Lower Scotts and Queseria Creeks Riparian Restoration Project in Southern Coho Stream | Restore natural hydrologic functioning to lower Scotts Creek and Queseria Creek by removing channelization devices and creating a riparian corridor for Queseria Creek. |
| Mill Creek Sediment Reduction Project | This is a habitat restoration and bank stabilization project along a total of 440 linear feet on Mill Creek. |
| Pajaro River Watershed Council CRMP | Environmental preservation of the Pajaro River through the development and management of flood control plans. |

| Location | Project Description |
|---|---|
| Perched Culvert Fish Barrier Removal/Bridge Replacement | Restore fish passage by removing perched Arana Gulch culvert and replacing it with a flatcar bridge. |
| Poison Hemlock Eradication / Coastal Scrub Restoration at Younger Lagoon | To eradicate non-native, invasive plants. |
| San Lorenzo River Caretakers CRMP | Watershed enhancement for the purpose of improving water quality, fisheries, land management, erosion and flood control. |
| San Lorenzo River Watershed – Implementation of Erosion and Sedimentation Control (7-090-253-0) | This project will assist in the implementation of Santa Cruz County's up-dated San Lorenzo River Watershed Management Plan. |
| San Lorenzo River Watershed – Management Plan (4-133-250) | Update the 1979 San Lorenzo River Management Plan and implement coordinated measures to protect and improve water quality. |
| Santa Cruz Urban Watch Storm Drain Monitoring Program | To use trained volunteers to monitor dry weather storm drain activity in selected outflow areas from July through October, and to identify common pollutants/contaminants within the storm drains in the study area. |
| Scotts Creek Watershed Council Support and Assistance | To fulfill the mission of the Scotts Creek Watershed Council by providing organizational development, project coordination and environmental education services to the members of the Council, residents and other stakeholders in the watershed. |
| Soquel Creek Lagoon Enhancement | Improvement and maintenance of the flume structure, which is an integral part of the juvenile freshwater habitat for steelhead and Coho salmon. Enhancement of the habitat of anadromous salmonid species in the Soquel Creek Lagoon by reduction of non-point source pollutants, increased shading and improved cover for juveniles, and reduction of sedimentation. |
| Soquel Watershed Group (CRMP) - Clear Streams Project | To train and utilize volunteers to participate in monitoring the health of the Soquel Creek watershed through water quality sampling, habitat assessment, and restoration activities |
| Southern Coho Salmon Recovery Plan | To fill an essential role in the restoration of sustainable Coho salmon runs which occur south of San Francisco through effective implementation of the Southern Coho Salmon Restoration Plan. |
| Watsonville Slough Watershed | To reduce annual rate of erosion to "T" as defined by NRCS, with associated benefits including enhanced water quality, enhanced wetland, and endangered species habitat. |
| Wilder Creek Restoration Project | Halt ongoing stream and habitat destruction by removing sediment detention basin and earthen dam. Increase and improve the anadromous fish habitat throughout Wilder Creek by restoring stream channel and removing concrete spillway. |
| Wilder Ranch State Park, Gray Whale Ranch Property, Exotic Plants Removal (0464) | The property contains three unique plant communities: northern interior cypress forest, northern maritime chaparral, and maritime coast range ponderosa pine forest, three listed species, and six special interest animal species. Remove exotic plants such as French broom acacia, pampas grass, eucalyptus and catoneaster from the Gray Whale Ranch Property. |

Source: California Resources Agency, Natural Resource Projects Inventory- CERPI, 2003.

QUALITY OF LIFE INDICATOR 128

Waste Reduction

Waste disposal tables monitor average landfill disposal per person and the amount of waste that is diverted from landfills.

Total Annual Tons of Waste Disposal

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| Capitola | 14,801 | 12,325 | 12,018 | 11,554 | 12,304 | 11,753 | 11,031 | -6.1 |
| Santa Cruz | 72,076 | 72,546 | 75,604 | 71,549 | 69,477 | 81,106 | 70,770 | -12.7 |
| Scotts Valley | 14,033 | 12,284 | 11,549 | 14,609 | 13,764 | 12,691 | 11,536 | -9.1 |
| Watsonville | 33,648 | 33,756 | 34,068 | 39,642 | 40,269 | 42,423 | 36,761 | -13.3 |
| Unincorporated Areas | 101,799 | 105,544 | 106,945 | 112,603 | 113,109 | 121,726 | 116,836 | -4.0 |
| County Total | 236,357 | 236,455 | 240,184 | 249,957 | 248,923 | 269,699 | 246,934 | -8.4 |

Estimated Pounds of Waste Disposed Per Person, Per Day (Residential Disposal Rate)

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | % Change |
|----------------------|------------|------------|------------|------------|------------|------------|------------|----------|
| Capitola | 3.2 | 2.6 | 2.5 | 2.4 | 2.6 | 2.7 | 2.5 | -7.4 |
| Santa Cruz | 3.9 | 3.9 | 4.1 | 3.8 | 3.6 | 4.2 | 3.7 | -11.9 |
| Scotts Valley | 1.2 | 1.0 | 0.9 | 1.1 | 1.1 | 0.9 | 0.8 | -11.1 |
| Watsonville | 3.0 | 3.0 | 2.8 | 3.2 | 3.2 | 2.9 | 2.3 | -20.7 |
| Unincorporated Areas | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.9 | 1.8 | -5.3 |
| State Total | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | - |

Source: California Integrated Waste Management Board, 2001.

The residential disposal rate is calculated by taking the total annual waste disposal (in tons) multiplied by the annual residential generation rate and then divided by the population. That number is then converted from tons to pounds.

“Tons Per Person” figures reflect disposal trends that are adjusted for population growth and are for illustrative purposes only.

 **New data not available**

Waste Reduction

Waste Diversion Rates

| Jurisdiction | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 ¹ |
|----------------------|------------|------------|------------|------------|------------|------------|-------------------|
| Capitola | - | - | - | - | .44 | .48 | .51 |
| Santa Cruz | .35 | .36 | .36 | .41 | .47 | .48 | .47 |
| Scotts Valley | .59 | .62 | .64 | .55 | .59 | .64 | .67 |
| Watsonville | .25 | .26 | .35 | .32 | .67 | .66 | .72 |
| Unincorporated Areas | .21 | .20 | .21 | .19 | .46 | .50 | .47 |
| County Total | .33 | .35 | .36 | .35 | .37 | N/A | N/A |
| Statewide Total | .28 | .31 | .32 | .33 | .37 | .42 | .42 |

Source: California Integrated Waste Management Board, 2002.

¹ Indicates preliminary data.

Official Board-approved diversion rates are not available for the city of Capitola prior to 1999, nor are they available for Santa Cruz County overall after 1999.

In 1989 the California Integrated Waste Management Board mandated that California cities reduce their generated waste by 25% by 1995, and 50% by 2000.

 **New data not available**