

environment

Environmental trends are predominantly positive.

Water consumption is down, solid waste disposal dropped for the fourth year, and there were fewer days of unhealthy air. The number of people bringing their household hazardous waste to collection centers rose. One red flag: there were more reports of illegal dumping into the Santa Ana River Basin.

Apple Valley Multi-Species Habitat Conservation Plan

Like many San Bernardino County communities, the Town of Apple Valley is rich in natural resources. Seven state and/or federal listed species and 26 sensitive species live within the town or its environs – the most well known being the Desert Tortoise. Protecting its natural resources is critical to preserving Apple Valley’s quality of life and its desert environment. Consequently, the town has embarked on the process of creating a Multi-Species Habitat Conservation Plan, engaging residents and stakeholders in defining conservation goals. The desired outcome will be multi-faceted:

- Safeguard species and resources that warrant protection,*
- Assure that future development complies with the Endangered Species Act,*
- Streamline the environmental permitting process, and*
- Maintain Apple Valley’s high desert character.*

Air Quality Continues to Improve

Description of Indicator

This indicator measures air quality in San Bernardino County and comparison regions using the Air Quality Index (AQI).

Why is it Important?

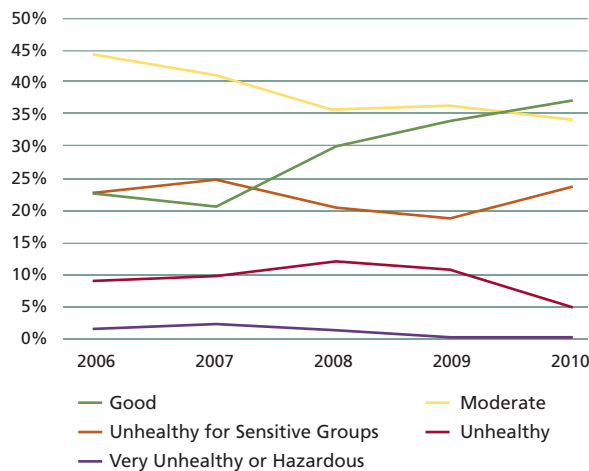
Poor air quality can aggravate the symptoms of heart or lung ailments, including asthma. It can also cause irritation and illness in the healthy population. Long-term exposure increases risks for many health conditions including lung cancer and cardiovascular disease. Poor air quality can put children's lung development at risk.

How is San Bernardino County Doing?

San Bernardino County's air quality improved significantly:

- During 2010 most days were in the "good" range (135), followed by 124 days in the "moderate" range.
- There were 84 days considered "unhealthy for sensitive groups" such as asthmatics (see Chronic Disease), 20 days in the "unhealthy" range, and two in the "very unhealthy" range.
- Among the eight regions compared, San Bernardino County has the 5th highest percent of days with good air, with Miami experiencing the best air quality and Phoenix experiencing the worst.

Air Quality Index
San Bernardino County, 2006-2010



Source: U.S. Environmental Protection Agency, Air Explorer (www.epa.gov/air-explorer/index.htm)

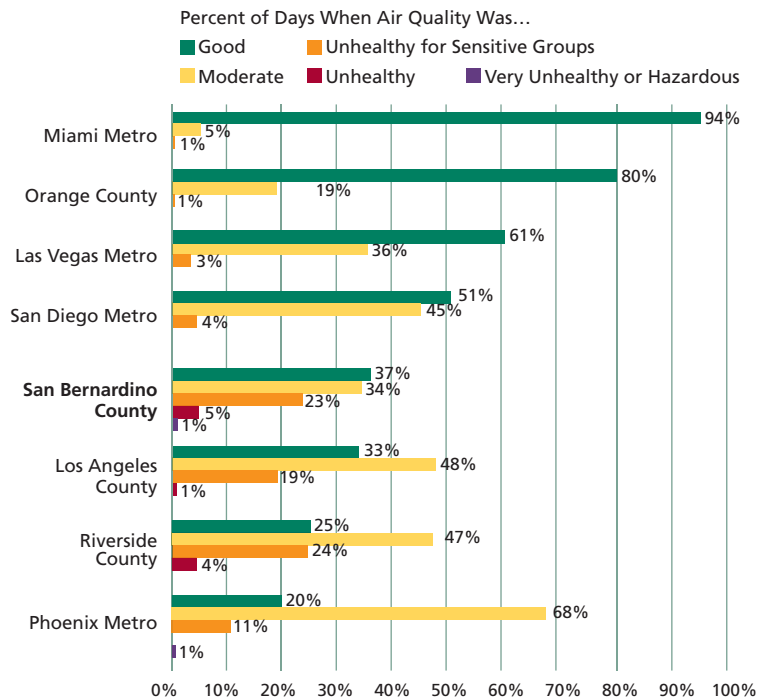
Air Quality Index

The Air Quality Index is calculated for ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The number 100 corresponds to the national air quality standard for the pollutant.

AQI Values	Health Categories
0 - 50	Good
51 - 100	Moderate
101 - 150	Unhealthy for Sensitive Groups
151 - 200	Unhealthy
201 - 300	Very Unhealthy
301 - 500	Hazardous

Source: U.S. Environmental Protection Agency (<http://airnow.gov/>)

Air Quality Index
Regional Comparison, 2010



Source: U.S. Environmental Protection Agency, Air Explorer (www.epa.gov/air-explorer/index.htm)

Connecting the Dots

Air Quality can be enhanced by an effective, energy efficient Transit system.



Solid Waste Disposal Drops 17% in One Year

Description of Indicator

This indicator measures the tons of commercial and residential solid waste generated in San Bernardino County destined for disposal in County landfills as well as out of County landfills, countywide diversion rates, the pounds of household hazardous waste collected (such as oil, paint, and batteries) and the number of annual participants in the Household Hazardous Waste (HHW) program.

Why is it Important?

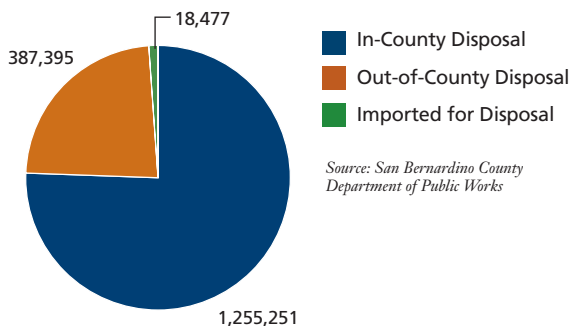
Reducing solid waste production and diverting recyclables and green waste extends the life of landfills, decreases the need for costly alternatives, and reduces environmental impact. As of 2000, all jurisdictions in California are required by law to divert 50% of waste away from landfills. Collection of household hazardous waste helps protect the environment and public health by reducing illegal and improper HHW disposal. "Universal Waste" – hazardous waste that contains chemicals or metals that can harm the environment, such as thermostats, batteries, and fluorescent tubes – contributes increasingly to the amount of HHW collected and to the cost of collection.

How is San Bernardino County Doing?

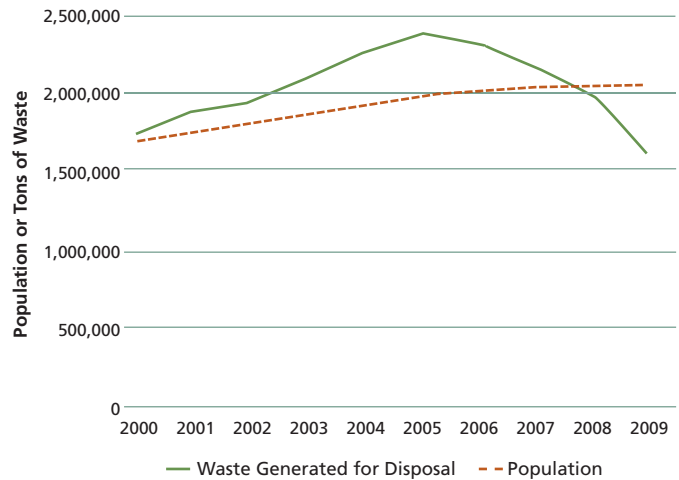
Solid waste disposal and household hazardous waste collection trends are positive:

- In 2009, waste disposed in landfills dropped for the fourth consecutive year, falling 17% in one year.
- After peaking in 2005, solid waste disposal declined 31% in the five-year period between 2005 and 2009, and 8% over the past 10 years.
- Over the past 10 years, the population in San Bernardino County grew an estimated 20%.
- The latest data available (2008) indicates that all San Bernardino County jurisdictions met or exceeded the 50% diversion requirements.¹
- The number of annual participants bringing HHW to regional collection centers rose in 2009/10, reaching the highest level of participation on record.
- San Bernardino County has a higher HHW participation rate (9.4% of households) than the statewide average (6.4%).²

Imported Waste Disposed in County Landfills and Destination of San Bernardino County Resident-generated Solid Waste, 2009



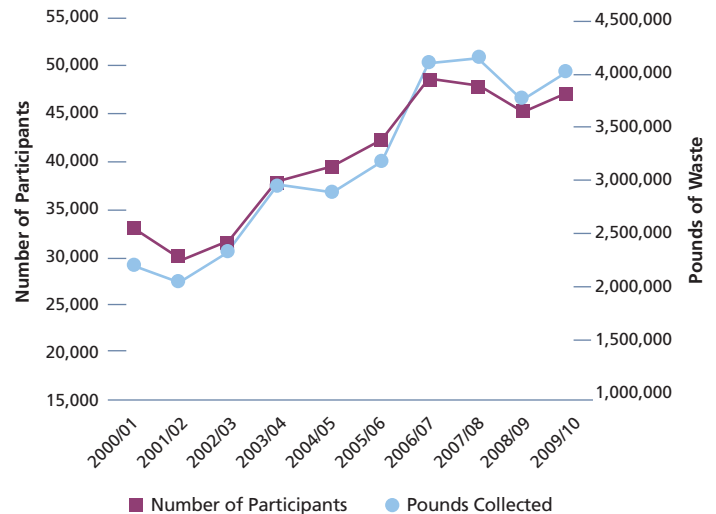
Solid Waste Generated for Disposal Compared to Population Growth San Bernardino County, 2000-2009



Note: Solid waste generated for disposal includes cities and unincorporated areas.

Sources: San Bernardino County Department of Public Works; California Department of Finance, Table E-2 (www.dof.ca.gov)

Household Hazardous Waste San Bernardino County, 2001-2010



Note: Chart includes San Bernardino County unincorporated areas and all the cities except Fontana.

Source: San Bernardino County Department of Public Works

¹ California Integrated Waste Management Board (www.ciwm.ca.gov)

² CalRecycle

(www.calrecycle.ca.gov/HomeHazWaste/reporting/Form303/default.htm), 2007/08 and U.S. Census Bureau, American Community Survey, 2007-2009 Three-Year Estimates (<http://factfinder.census.gov/>)

Connecting the Dots

Reducing Solid and Household Hazardous Waste helps sustain a clean and healthy natural environment, one of the primary contributors to Resident Satisfaction.



Less Water Consumption; More Pollutant Dumping Reports

Description of Indicator

This indicator measures urban (residential and commercial) water consumption in gallons per capita per day from a selection of water agencies serving San Bernardino County.¹ It also measures one aspect of stormwater quality management by tracking reports of illegal discharges of pollutants (such as paint or motor oil) into surface waterways and storm drains.

Why is it Important?

Given San Bernardino County's arid climate, effective water management is essential to ensure that the county has an ample water supply now and in the future. Reducing urban runoff pollution and pathogens in surface waterways through a variety of stormwater management practices helps protect the beneficial uses of local waterways.

How is San Bernardino County Doing?

In 2010, the average water consumption per person was 203 gallons a day, for the six agencies sampled:

- Per capita water consumption varied from a high of 278 gallons per capita per day (GPCPD) to 143 GPCPD, depending on the agency.
- Together, the six water agencies sampled serve approximately 1,220,000 residents, or 59% of the total county population.
- Five-year water consumption trends are downward for all the sampled water agencies, except Victorville Water District (VWD).
- The VWD increase is due to preventative maintenance on four water tanks, requiring the tanks to be emptied, and a case of vandalism in which fire hydrants were broken and flowing before being discovered and repaired.²

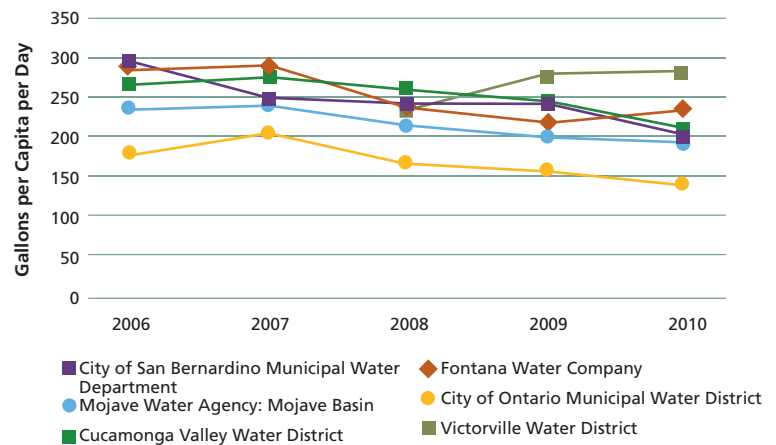
Reports of illegal discharges continue to trend upward:

- Since 1996, illegal discharge reports in the Santa Ana River Basin have increased 211%, to 333 reports in 2010.³
- Also in 2010, there were 378 illegal discharges into the Mojave River Basin.⁴
- Increases in reports of illegal discharges are likely due to several factors including greater public awareness that leads to increased incident reporting, and improved response to and tracking of public complaints.

Illegal Connections Could Increase Pollution in Recreational Waters

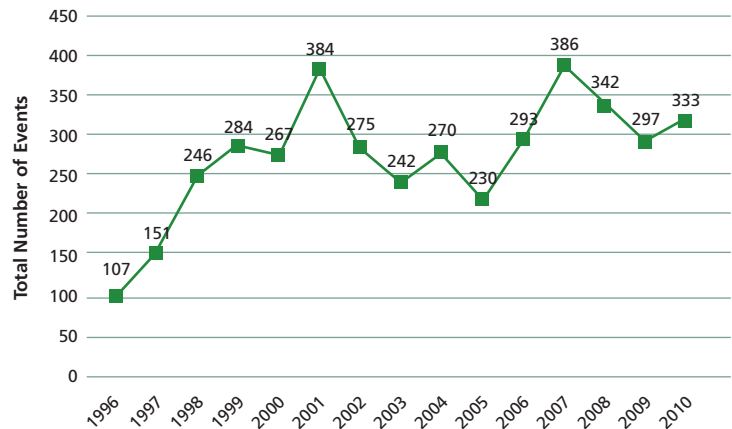
An important focus of the San Bernardino Stormwater Program is the inspection of stormwater collectors such as catch basins or inlets (the curbside opening in street gutters that leads to storm drains), open channels, and underground storm drains to find unpermitted connections to these facilities that may introduce pollutants into recreational waters. In 2010, 51% of the county's storm drain inlets were inspected, as well as 43% of debris or detention basins, 20% of open channels, and 5% of underground storm drains.

Urban Water Consumption in Gallons per Capita per Day for Selected Water Agencies Serving San Bernardino County, 2006-2010



Note: Some data have been revised since previously reported.
Sources: Analysis of data provided by Fontana Water Company; Santa Ana Watershed Project Authority; Cucamonga Valley Water District; Mojave Water Agency; City of Ontario Municipal Water Agency; City of San Bernardino Municipal Water Department; Victorville Water District; California Department of Finance, Table E-4

Stormwater Quality: Illegal Discharge, Dumping and Spill Events by Year Santa Ana River Basin (San Bernardino County), 1996-2010



Note: Data have been revised since previously reported.
Source: San Bernardino County Flood Control District, San Bernardino County Stormwater Program, Annual Report 2009/10

¹ Due to the many independent water agencies serving San Bernardino County, a countywide water consumption figure is not available.

² Victorville Water District data prior to 2008 is not available.

³ San Bernardino County Stormwater Program jurisdiction includes: Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, Yucaipa, and unincorporated areas of San Bernardino County within the Santa Ana River Basin.

⁴ Mojave River Watershed Group jurisdiction includes: Apple Valley, Hesperia, Victorville, and unincorporated areas of San Bernardino County within the Mojave River Basin.

Connecting the Dots

Water Consumption and Stormwater Quality are important aspects of our environmental quality and health as are Solid Waste and Household Hazardous Waste.

