

**Sustainable  
Santa Barbara  
2008  
Annual Report**



**Sustainable  
Santa  
Barbara** 



Cover Photo: Damian Gadal

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# Leading by Example



**I**N 2005, I BECAME ONE OF THE EARLY SIGNERS OF THE U.S. CONFERENCE OF MAYORS CLIMATE PROTECTION AGREEMENT TO advance the goals of the Kyoto Protocol. Today, I am one of 850 mayors who have accepted the challenge to reduce greenhouse gas emissions 7% from 1990 levels by 2010.

Santa Barbara took immediate action to reduce its emissions. The Sustainable Santa Barbara Program was created. A Sustainability Council Committee was formed. A Green Team of City employees started analyzing their operations. The City vehicle fleet transitioned to biodiesel fuel. Santa Barbara became the first Southern California city to certify its emissions in the California Climate

Action Registry. Solar Design Guidelines were adopted, followed by California's most stringent Building Code requirements for energy efficiency.

**I'm proud to announce that Santa Barbara beat the Kyoto Protocol target two years ahead of schedule.**

Current emissions from City operations are 10% lower than 1990 levels. Our leadership was confirmed when the U.S. Conference of Mayors selected Santa Barbara as one of the top five cities in the nation for climate protection activities.

As a City organization, we are committed to leading by example in environmental protection and enhancement. Our employees find opportunities to save energy, conserve water, and prevent waste as they serve the community each day.

The 2008 Annual Report presents our City's best practices, achievements, and plans for the future. I've enjoyed working with the City Council, staff, and community leaders to brainstorm and implement these innovative projects.

I encourage you to find ways to reduce your eco-footprint and enjoy the benefits. Walking instead of driving will improve your health. Turning off the lights and becoming more energy efficient will save you money. Recycling will protect the planet's natural resources.

I'm proud to lead a city where sustainability is a top priority and I thank our City staff and community partners for pursuing a Sustainable Santa Barbara for future generations.

Mayor Marty Blum

# Message from the Chair

**A**S CHAIR OF THE SUSTAINABILITY COUNCIL COMMITTEE, I'M VERY PLEASED TO PRESENT THIS ANNUAL report to you. The City's Green Team enthusiastically takes the challenge of becoming as energy efficient as possible to heart – and I am very proud of them and the City's many accomplishments thus far.

The popular children's tune may say, "It's not easy being green;" however I don't believe that is always the case. "Being Green" does not have to be difficult – or expensive – as you will notice from the many small operational and capital changes that have a huge cumulative positive impact over time. What is required is ongoing commitment and the political will of policy makers and staff at all levels to make choices that move us away from the status quo towards new innovative practices and protocols.

Some ideas are quite simple – such as switching around large garbage bins to blue recyclable ones under employees' workstations. Others require more expertise and study. One very important aspect of the Annual Sustainability Report is the ability to monitor and measure the City's progress over time to build on our successes and fill in the gaps.

As we continue our work getting the City's own house in order, we also strive to partner with local businesses and the community. Examples this past year include funding and participating in the newly formed Green Business Program regional partnership, continuing our exploration towards providing commuter rail operations between Ventura and Santa Barbara Counties, and collaborating with local architects and the building community in creating a new Energy Ordinance that requires the most stringent energy



standards for new buildings in the State of California. We hope to see more opportunities in the future.

Chairing this committee, I witness the buzz of energy from the Green Team and committee members to be bold and visionary. I look forward to launching new renewable energy sources on City facilities and learning more about the potential of using renewable energy sources, such as wind power. Is it really possible for the City of Santa Barbara to become carbon neutral by 2020? We want to find out and set firm goals this year to chart a path towards carbon neutrality in a way that is also economically feasible.

Please join our efforts – ask questions, get involved. Enjoy the report.

Councilmember Helene Schneider  
Sustainability Council Committee Chair

# Fiscal Year 2009 Action Plan

**I**N 2007 SANTA BARBARA CERTIFIED ITS FIRST GREENHOUSE GAS EMISSIONS INVENTORY THROUGH THE CALIFORNIA CLIMATE Action Registry. The report calculated the emissions related to use of vehicle fuel, electricity, and natural gas. Santa Barbara was one of the first cities in the nation to certify emissions from its operations.

The City of Santa Barbara achieved and surpassed the Kyoto Protocol for its operations with emissions 10% below its 1990 carbon dioxide level.

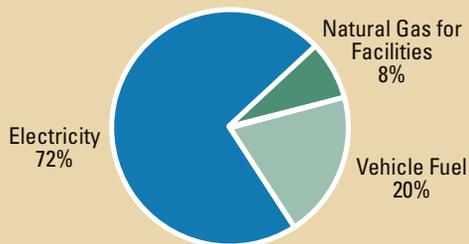
An Action Plan was developed for Fiscal Year 2009 to continue greenhouse gas emission reductions in the City's operations. The Plan focuses on three main areas: Energy Efficiency, Renewable Energy, and Reduction in Fuel Use.

## ENERGY EFFICIENCY

- Conduct lighting audits and install T-8 and T-5 fixtures where appropriate.
- Install dual technology occupancy sensors and timer switches in City facilities.
- Replace air conditioning systems with new energy efficient models that use fresh air cooling on mild weather days.
- Install direct digital controls on all HVAC units.
- Submeter facilities to analyze energy usage.
- Initiate mechanical retro-commissioning of City facilities.
- Replace pumps and motors with more efficient and variable speed equipment.
- Consolidate office equipment and activate energy saving features.
- Achieve Leadership in Energy and Environmental Design (LEED) certification for:
  - Community Development/Public Works Offices;
  - Airport Terminal; and
  - Fire Station Headquarters.

### Source of Estimated Greenhouse Gas Emissions for City Facilities and Fleet, 2006

(Metric Tons)



## RENEWABLE ENERGY

- Construct a 330 kW solar photovoltaic system at the Public Works Corporate Yard.
- Install a solar photovoltaic array at the Airport Car Rental Quick Turnaround Facility.
- Assess project requirements and develop scoping documents to implement a grease-to-gas injection project at the El Estero Wastewater Treatment Plant.
- Evaluate the feasibility of reactivating the Gibraltar hydro-electric plant and other opportunities to employ hydroelectric power in City water facilities.
- Evaluate solar photovoltaic energy at the Airport Long Term Parking Lot.
- Install a solar thermal water heating system at the Marina One restrooms.
- Explore options to increase the City's renewable energy portfolio through on- and off-site renewable energy generation and Community Choice Aggregation.

## REDUCTION IN FUEL USE

- Initiate a pilot program to test B50 biodiesel in selected vehicles.
- Implement a vehicle pool sharing program for the City fleet.
- Reduce the number of vehicles in the City fleet.
- Provide monthly reports to City departments on fuel consumption.
- Implement a vehicle replacement policy that emphasizes selection of fuel efficient and appropriately sized equipment.
- Plan and conduct driver behavior education classes.





# Waste Prevention



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# Recycling

## What is it?

Recycling is the collection and reprocessing of waste materials into new products. Materials can be recycled within several major categories, including paper, plastic, glass, metal, foodscrap, and greenwaste.

## Why is this important?

Recycling prevents useful resources from being wasted and reduces the consumption of raw materials and the energy needed to process them. This dramatically reduces toxic releases to the air, water and greenhouse gas emissions. Recycling also prevents valuable resources from reaching a landfill.

### YOU CAN MAKE A DIFFERENCE

- Recycle materials such as paper, cardboard, glass, newspaper, cans, and most plastic products
- Purchase products made from recycled content and items that can be recycled or composted
- Learn about items that can be recycled at: [www.SBrecycles.org](http://www.SBrecycles.org)

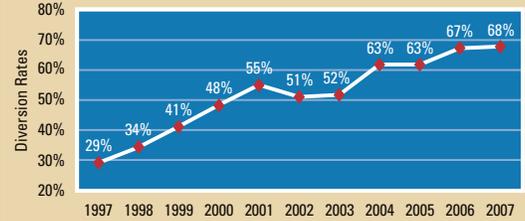
## How do we measure our progress?

The City measures its success by the diversion of waste from the county-operated Tajiguas Landfill and an increase in materials sent to recycling or reuse programs.

### City's Best Practices

- "Reduce, Reuse, Recycle" materials and signage are displayed in common areas to help employees understand how to prevent waste.
- Public trash and recycling containers are placed throughout many City streets and parks.
- City construction projects also recycle construction and demolition debris.

### City of Santa Barbara Citywide Diversion Rates



## RECENT ACHIEVEMENTS

- The City passed an Unscheduled Collection Permit Ordinance that mandates the recycling of construction and demolition debris, as well other waste materials.
- To improve recycling in the community, the City distributed over 500 recycling containers to Santa Barbara City Schools. Through the School District Recycling Committee, City staff has assisted schools to institute an efficient and well-managed recycling infrastructure. The schools realized significant cost savings through reduced trash collections.
- Successful public outreach efforts resulted in a total of 142 businesses contacted to learn about opportunities to increase recycling and reduce costs.

## NEXT STEPS

- Implement new solid waste rates for the business sector that create greater financial incentives for recycling.
- Meet with 300 new contacts in the business sector about the environmental and financial benefits of foodscrap composting and recycling.

# Composting

## What is it?

Composting is a process where organic materials, including leftover foodscraps, waxed paper, and yard wastes, rapidly decompose, resulting in a product rich in nutrients for use in gardens, lawns, and farms as a soil conditioner.

## Why is this important?

Composting organic materials, such as foodscraps, has many benefits. One of the primary benefits of composting is that it diverts materials that would otherwise be buried in the landfill. Nutrient-rich compost is an excellent soil amendment and a superior alternative to synthetic fertilizers. The use of compost also reduces watering requirements and prevents soil erosion. A Citywide composting program will facilitate the implementation of a future ban on Styrofoam “to-go” containers and petroleum-based plastic bags.

## How do we measure our progress?

As composting efforts expand, the City will measure its success on the increase of food wastes diverted from the Tajiguas landfill.



## City's Best Practices

- All City staff functions are Zero Waste Events, with all tableware either recyclable or compostable. Compostable cups, plates, and utensils are made from bio-degradable materials, such as sugar cane, potato, and corn. To date, Zero Waste Events have served over 5,000 people. The City utilizes compost made from its foodscraps in public parks and on school fields.

## RECENT ACHIEVEMENTS

- The City implemented a business foodscrap composting pilot program with 11 participants including Cottage Hospital, Santa Barbara City College, the Santa Barbara Zoo, and several restaurants and coffee shops. In its first year, the pilot has collected 148 tons of foodscraps for composting. This has directly reduced over 221 tons of carbon dioxide equivalent emissions (CO<sub>2</sub>e) by not land filling the foodscraps.
- A recently completed survey of pilot participants showed overwhelming support to continue the program, citing ease of composting and environmental benefits.

## YOU CAN MAKE A DIFFERENCE

- Buy and serve appropriate food portions to waste less
- Compost yard trimmings and foodscraps at home
- Supplement your soil with local compost material

## NEXT STEPS

- Work with food-serving businesses to launch a full-scale foodscraps composting program.
- Offer the foodscraps composting program to all businesses at a reduced cost compared to trash.
- Determine the feasibility of expanding the foodscraps composting program into the residential sectors.
- Make compost available to residents for use in gardens, landscaping, and lawns.

# Hazardous Materials Management and Disposal

## What is it?

A hazardous material is any solid, liquid, or gas that can harm people, other living organisms, property, or the environment. A hazardous material may be flammable, explosive, radioactive, toxic, corrosive, biohazardous, an oxidizer, an asphyxiant, an allergen, or may have other characteristics that make it hazardous in specific circumstances.

## Why is this important?

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, other property, and the environment.

### YOU CAN MAKE A DIFFERENCE

- Dispose of batteries, electronic devices, CDs, fluorescent bulbs, antifreeze, oil, and paint at the ABOP Facility at 132 Nopalitos Way (these items are not accepted in trash or recycling containers)
- Visit [SBrecycles.org](http://SBrecycles.org) for more information on proper disposal of hazardous materials

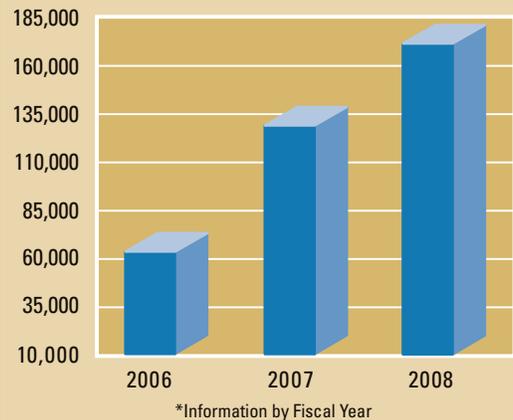
## How do we measure our progress?

For the disposal of any amount of hazardous or household hazardous wastes, it is mandatory to create a Hazardous Waste Manifest that tracks the waste from cradle to grave. Manifests are submitted to the California Department of Toxic Substance Control Board (DTSC).

## City's Best Practices

- The City contracts with MarBorg Industries to operate the City's ABOP (Antifreeze, Batteries, Oil, and Paint) facility six days per week, offering increased convenience and opportunity for residents to safely recycle or dispose of hazardous materials.

Hazardous Materials Collected From City Residents at ABOP Facility (Pounds)



- The Harbor is a certified California Clean Marina for activities to improve water quality, enforce no-discharge rules, and reduce toxic materials from boating equipment and supplies.

## RECENT ACHIEVEMENTS

- The City ABOP facility handled 172,649 pounds of household hazardous waste in the past year, more than doubling the amount of household hazardous waste collected in 2006.
- The City conducted three electronic waste disposal events for the public, ensuring proper disposal of 163,253 pounds of electronics such as televisions, computers, stereos, and other electronics.
- Consistent with State requirements, the City removed Leaking Underground Fuel Tanks (LUFTs) from two City-owned properties.

## NEXT STEPS

- Investigate and identify options for curbside collection of universal, household hazardous, and electronic waste.
- Bring 3 of the City's operable underground storage tanks into compliance with the California Water Quality Control Board and California Air Resources Board requirements.

# Green Purchasing

## What is it?

Green purchasing is the practice of purchasing products and services that are less harmful to the environment. Green products are produced, shipped, and used with minimal impact to the environment.

## Why is this important?

The City will minimize its impact on the environment by using its purchasing power to promote environmental sustainability and wise use of resources.

## How do we measure our progress?

The City has developed a system for tracking green purchases and will begin data collection in the upcoming year. The City also works with key suppliers to provide reports on green purchases.

## City's Best Practices

- The City encourages the use of recycled materials in many supplies. For example, recycled asphalt is used in the construction of streets and sidewalks. Playground materials are constructed with recycled wood and rubber.
- The City transitioned to Green Seal certified cleaning supplies in most facilities. These products are effective in cleaning work areas with no significant negative impacts for custodial staff.

## RECENT ACHIEVEMENTS

- The City of Santa Barbara became the first city to eliminate the use of plastic water bottles for City meetings and events. By

drinking water from the tap, the City helps reduce waste and the environmental costs of producing and shipping water.

- The City organization transitioned to 100% post-consumer recycled content paper for copying and printing needs and stationary, saving over 1,000 trees each year. New computers and printers meet an Electronic Product Environmental Assessment Tool (EPEAT) Silver or Gold certification. New products in use include remanufactured toner cartridges, recycled-content cotton rags and traffic cones.
- The City took steps to reduce packaging materials for equipment purchases. Office computers are now delivered with several computers in each box without Styrofoam packing.



## YOU CAN MAKE A DIFFERENCE

- Buy products that consist of post-consumer recycled material
- Look for EPEAT certification when buying a new computer
- Purchase Energy Star equipment
- Buy local products when available

## NEXT STEPS

- Develop and implement a Green Purchasing Policy and Procedure to assist departments.
- Modify the Purchasing Code to include language that supports and encourages the acquisition of green products and services.
- Train City departments on how to write "greener" specifications to help employees understand alternatives and analyze costs.



# Water Quality, Conservation and Habitat Restoration



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# Water Conservation

## What is it?

Water conservation is the efficient use of water resources to reduce the demand for potable water.

## Why is this important?

It is important to save water because we live in a semi-arid climate and rainfall is not always plentiful. The City's water supply is diverse but we rely on rainfall to fill our main water supplies, which are Lake Cachuma and Gibraltar Reservoir. Conservation continues to be a key part of managing our water supply by helping stretch our supplies in case of drought.

### YOU CAN MAKE A DIFFERENCE

- Take the 20-Gallon Challenge at: [www.sbwater.org](http://www.sbwater.org)
- Adjust your irrigation schedule according to local weather
- Change to new, water efficient plumbing fixtures – rebates are available
- To learn more ways to save water, visit: [www.SantaBarbaraCA.gov/water](http://www.SantaBarbaraCA.gov/water)

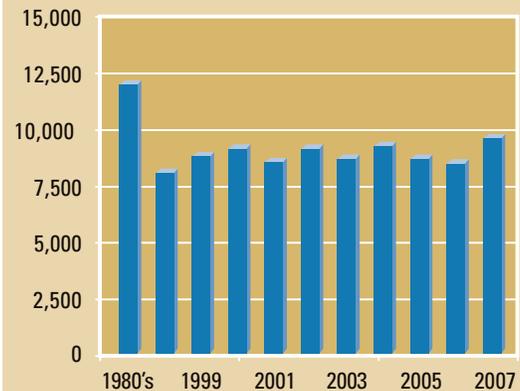
## How do we measure our progress?

The City measures its success by tracking annual residential potable water use which is down 20% since 1988, despite an increase in population.

## City's Best Practices

- Consistent with water conservation requirements, City facilities are equipped with the latest in water-saving devices, including waterless urinals, and low-flow toilets and showerheads.
- City facilities and parks are landscaped with water-wise plants and irrigation systems continue to be upgraded with smart irrigation controllers, rain sensors, and rotating nozzles with pop-up spray heads. Additionally, staff evaluates other state-of-the-art irrigation equipment as potential pilot projects at City landscape sites.
- The use of recycled water significantly

Residential Metered Water Sales (Acre Feet)



reduces the use of potable water. Recycled water is delivered to over 48 sites for irrigation which use approximately 800 acre feet per year, including 24 parks, 8 public restrooms (for toilet flushing), and an ornamental fountain.

## RECENT ACHIEVEMENTS

- The City amended Landscape Design Standards for Water Conservation affecting private development and now requires projects to be designed with the most water-conserving plants and irrigation systems. Staff distributed over 50 rain sensors and issued approximately 200 rebates to the public for low-flow toilets, waterless urinals, water brooms, and high efficiency clothes washers.
- The City launched the 20-Gallon Challenge media campaign to encourage the public to save an additional 20 gallons of water each day.

## NEXT STEPS

- Initiate a water supply planning study to identify additional conservation and recycled water opportunities.
- Launch the Smart Landscape Rebate Program which will provide customer rebates for state-of-the-art improvements in landscape and irrigation efficiency improvements.
- Distribute an interactive water-wise plant index on CD-ROM for the public to select plants that conserve water.

# Creek and Coastal Ocean Water Quality

## What is it?

Creek and ocean water quality depend on healthy watersheds. A watershed is land that is drained by a creek system that flows to the ocean. Healthy creek systems contribute to improved coastal ocean water quality.

## Why is this important?

Urban runoff flowing into creeks contains pollutants such as oil, pet waste, trash, soap, fertilizers, and landscape waste that are carried out to the ocean. Reducing storm water pollution and restoring creeks improves the water quality of our creeks and ocean, resulting in a healthier environment for humans, plants, and animals.



## How do we measure our progress?

Progress is measured through weekly creek and ocean monitoring, storm monitoring, DNA-based source tracking, annual biological assessments, and monitoring the performance of water quality and creek restoration projects.

## City's Best Practices

- Efforts to prevent water pollution are implemented on a daily basis with creek clean-ups, storm drain filters, enforcement of city pollution prevention laws, implementation of the City's Storm Water Management Program, youth education and media outreach campaigns, and business technical outreach programs.

## RECENT ACHIEVEMENTS

- The City recently completed a Storm Water Best Management Practices Guidance Manual to assist architects, engineers, developers, and homeowners with storm water management designs for development and redevelopment projects, thereby improving water quality and reducing erosion and flooding.

## YOU CAN MAKE A DIFFERENCE

- Clean up after your pets
- Don't send your wash water to the street
- Use non-toxic alternatives to pesticides and use organic gardening techniques
- Dispose of household hazardous waste properly
- Pick up litter you find and put it in the trash

## NEXT STEPS

- Install storm drain screens throughout the Old Mission Creek watershed to prevent litter, leaves, and other debris from entering the creeks and ocean.
- Support Clean Marina Program by conducting annual seafloor debris clean up (Clean Sweep Event).
- Begin construction of the Santa Barbara Golf Club storm water management project.

# Habitat Restoration

## What is it?

Habitat restoration involves the removal of non-native and invasive plants and replanting with native grasses, trees and shrubs, as well as the enhancement of wetland and creek systems and other natural areas. Habitat restoration improves native plant and wildlife diversity and aquatic environments.

## Why is this important?

Many native plant and wetland communities including oak woodlands, riparian areas, salt marsh and coastal scrub have been lost due to urban development and agriculture. Invasive, non-native plants reduce wildlife diversity and create fire, flooding and erosion hazards. The filling of creeks and wetlands degrades aquatic environments and reduces the filtering capacity of creeks.

## How do we measure our progress?

The City measures the number of native wetland plants planted and the acres or linear

feet of creek and wetlands restored or revegetated, and the diversity of plant and animal species using the site.

## City's Best Practices

- The City Airport property includes approximately 400 acres of the Goleta Slough. 75 acres of native habitat in the Goleta Slough area have been restored and maintained as part of the Safety Area Grading Project, the Airfield Safety Projects and other projects, representing the largest wetland restoration effort on the Santa Barbara County South Coast. The Airport operates a Native Plant Nursery to supply local native plants to the restoration efforts in the Goleta Slough.
- The City recently completed the Mesa Creek and the Arroyo Burro Estuary restoration project, which restored coastal estuarine, riparian and coastal sage scrub habitats, and contributes to improved water quality. With a plant pallet of over 6,000 native grasses, trees and shrubs, a significant feature of the project was daylighting Mesa Creek. Creek restoration projects on San Roque, Old Mission, and Sycamore Creeks include the addition of over 3,000 native plants.
- The City's Golf Course has been certified by the Audubon Cooperative Sanctuary System for the development of a nature preserve.

## RECENT ACHIEVEMENTS

- With the aid of youth apprentices, the City constructed a bioswale and creek restoration project to capture and treat urban runoff before it enters Sycamore Creek.



## NEXT STEPS

- Begin implementation of a watershed based non-native and invasive plant removal program in City creeks.
- Complete final design work for two steelhead fish passage projects on Mission Creek.
- Collaborate with private creekside landowners to plant native riparian trees along City creeks.

# Urban Forest Protection

## What is it?

The City's urban forest is a collection of trees that grow within the community.

## Why is this important?

Protection of the City's urban forest is important because the trees filter air, reduce water runoff, and provide shelter to animals and recreational areas for people. Trees moderate local climate by consuming harmful emissions, releasing oxygen, shade homes and businesses to conserve energy, and reduce temperatures within the city.

## How do we measure our progress?

The City's protection of the urban forest is measured by maintaining or increasing the number of City park and street trees. There are approximately 33,000 trees in the City's program.

## City's Best Practices

- The City adheres to tree preservation ordinances that regulate the planting, pruning, and removal of City trees and residential front yard setback trees. The ordinances define how a City tree or a privately-owned tree can be given special protection by the designation "Historic" or "Specimen" tree.



## RECENT ACHIEVEMENTS

- The City completed an inventory of street trees and trees in developed parks to understand the quantity and type of trees that comprise the urban forest. The City of Santa Barbara was recently named Tree City USA for the 28th year by the National Arbor Day Foundation.

## NEXT STEPS

- Review the Tree Preservation Ordinance for potential updates and modification.
- Complete a comprehensive analysis of the urban forest to quantify the environmental benefits of street trees and develop long-term strategies to protect and maintain the trees.
- Continue a 5-year pruning cycle for street trees.
- Continue planting City trees at twice the rate of removal.



# Green Parks

## What is it?

Green parks are active and passive parklands where no harmful pesticides are used to control weeds or eliminate pests.

## Why is this important?

Besides human health risks, pesticides may pose dangers to the environment.

## How do we measure our progress?

The City measures its progress in the percentage of parkland considered “Green” or “Yellow” using the Pesticide Hazard And Exposure Reduction (PHAER) Zone Model. Low hazard pesticides and methods are used to control pests and weeds in “Green” parklands. Moderate hazard pesticides are used to control pests and weeds in “Yellow” parklands.

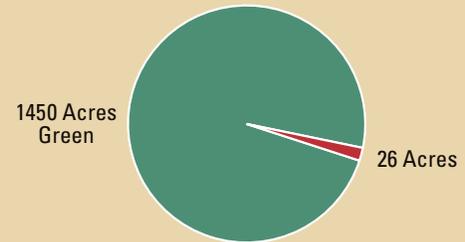
### YOU CAN MAKE A DIFFERENCE

- Apply mulch to control weeds
- Use weed fabric to control weeds
- Use worm castings to control insects
- Hose off plant material with water to remove unwanted insects

## City's Best Practices

- The City has successfully implemented an Integrated Pest Management (IPM) Program to maintain City parks. The City uses propane weed flamers, steam weed killer, compost, slow-release fertilizers, recycler mowers, mulch, and other sustainable methods and materials to eliminate weeds and pests from City parks and landscaped areas.
- Training in the latest methods is a high priority with 90% of City parks maintenance staff recognized as Certified Green Gardeners.

## Percentage of City Parkland Considered Green, 2007



- The City has converted 98% of City parkland to “Green” status. The City’s award-winning A.C. Postel Memorial Rose Garden is maintained without the use of toxic herbicides to control weeds.
- The City also produces the Garden Wise Guys TV show that helps the community learn green gardening principles for their home gardens.

## RECENT ACHIEVEMENTS

- The City received a 2007 IPM Innovator Award from the California Environmental Protection Agency Department of Pesticide Regulation for its leadership and creativity in advancing the use of reduced-risk programs for urban pest management.
- The use of concrete mow strips reduces the need for pesticide use at Dwight Murphy sports fields, La Mesa Park, Hilda Ray Park, Upper Orpet Park, Alice Keck Park Memorial Gardens, West Alameda Park, and Chase Palm Park.

## NEXT STEPS

- Install concrete mow strips and weed deterrent fabric at two city parks to reduce pesticide use.
- Use compost (comprised of City’s bio-solids) for the purpose of top dressing turf and amending soil at the Golf Course.
- Use chipped material from local tree brush trimmings and wildland vegetation removal for weed control and water retention in site landscaping.

# Wastewater Treatment for Water Quality Protection

## What is it?

Wastewater treatment is the cleaning of wastewater from the City's homes and businesses to remove pollutants prior to returning the water to the environment.

## Why is this important?

Clean water is the foundation of healthy ecosystems. Wastewater treatment allows protection of our ecosystems and environment. Wastewater treatment is also critical to preventing disease.

## How do we measure our progress?

The City measures its progress in protecting water quality in a number of ways, including compliance with the discharge permit issued for the wastewater treatment plant and counting the number of sewage spills.

## City's Best Practices

- The City operates the El Estero Wastewater Treatment Plant (El Estero) to clean all wastewater to strict Environmental Protection Agency standards prior to discharge to the environment. In addition, El Estero generates valuable products such as compost to fertilize soil and recycled water for use in irrigation and plumbing.
- Rainwater entering the sewer system through leaky pipes can cause overflows. Inspecting private laterals is critical to making sure leaking pipes are identified and eliminated. The City adopted a Sewer Lateral Inspection Program to ensure that

sewer laterals are inspected when property owners are doing substantial work, whenever there is cause to believe that the lateral needs repair, and on a ten-year cycle for commercial properties and condominium complexes. Residents receive incentives to proactively inspect and replace laterals.

## RECENT ACHIEVEMENTS

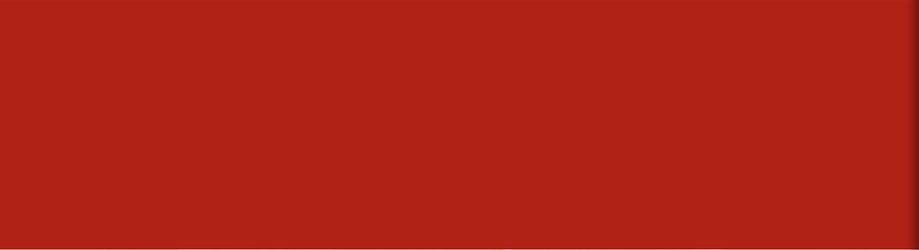
- In its initial year, over 250 residents participated in the Sewer Lateral Program to inspect and replace sewer laterals. The program incentive budget was increased to encourage more residents to participate in the upcoming year.
- The City rehabilitated over 32,504 lineal feet of sewer line to reduce the frequency of sewage spills during wet weather. Staff cleaned over 206 miles of sewer pipes and video-inspected over 744 sewer laterals and 34 miles of sewer mains to ensure that sewer lines were functioning properly and remove potential blockages.
- The City performed water quality analyses to ensure safe drinking water.

## YOU CAN MAKE A DIFFERENCE

- Don't pour grease down the drain – it clogs pipes, causing overflows
- Dispose of hazardous materials properly
- Disconnect out-door drains from the sewer
- Inspect your sewer lateral to make sure it's not clogged or broken

## NEXT STEPS

- Implement a pilot project to allow the disposal of restaurant grease at El Estero thereby eliminating the need for this waste to be hauled out of the County for disposal.
- Expand participation in the Sewer Lateral Inspection Program.
- Continue the proactive maintenance and rehabilitation of the City's 277 miles of sewer lines.



# Energy Management



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# Renewable Energy

## What is it?

Renewable energy comes from resources that are regenerative or cannot be depleted. Examples of renewable energy sources include solar, wind, biogas, hydro-electric, and other sustainable sources.

## Why is this important?

Increasing the City's use of renewable energy consumption helps reduce the use of non-renewable fossil fuels that contribute to pollution, global climate change and economic instability.

### YOU CAN MAKE A DIFFERENCE

- Consider using solar power for your energy and water heating needs. New technologies and an expanding market are bringing down the cost of solar systems every day.

## How do we measure our progress?

The City measures its success with the increase of renewable energy used to power City facilities as a percentage of total energy consumed.

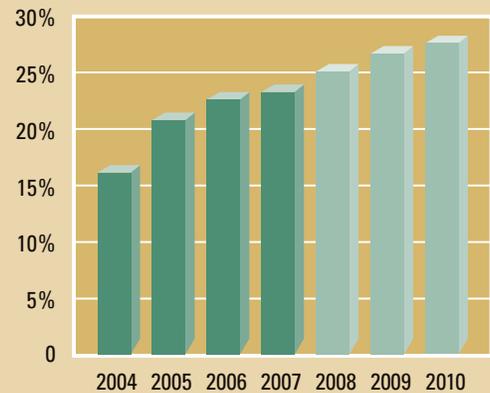
## City's Best Practices

- Two fuel cells at the El Estero Wastewater Treatment Plant transform methane gas into electrical energy on a daily basis, meeting half of the Plant's electrical demand.

## RECENT ACHIEVEMENTS

- City design review boards used new Solar Design Guidelines to incorporate photovoltaics in project designs.
- City Council conducted two Solar Awards ceremonies, granting 33 residents and

## Use of Renewable Energy in City Facilities



businesses with Solar Design Recognition Awards for their implementation of solar power.

- A 15 kW photovoltaic array was completed at Fire Station 2, supplying one-half of the electricity used at the station.
- Harbor marina restrooms started using solar thermal systems to heat water.
- Final plans were developed to install a 330 kW solar photovoltaic generation system at the Public Works Corporate Yard. Once completed, the system will be able to produce 520,000 kWh per year which is enough energy to supply electricity to 1,040 single family homes. The City is also considering solar photovoltaic electrical generation in its buildings and parking facilities.

## NEXT STEPS

- Complete installation of a 330 kW photovoltaic array at the Public Works Corporate Yard.
- Evaluate solar power provider proposals for development of a solar facility in the Airport Long Term Parking Lot and proceed with an agreement, if an acceptable proposal is received.
- Determine the feasibility of recommissioning the Gibraltar hydroelectric plant and other opportunities to employ hydroelectric power in City water facilities.
- Assess project requirements and develop scoping documents to implement a grease-to-gas injection project at the El Estero Wastewater Treatment Plant.

# Energy Conservation

## What is it?

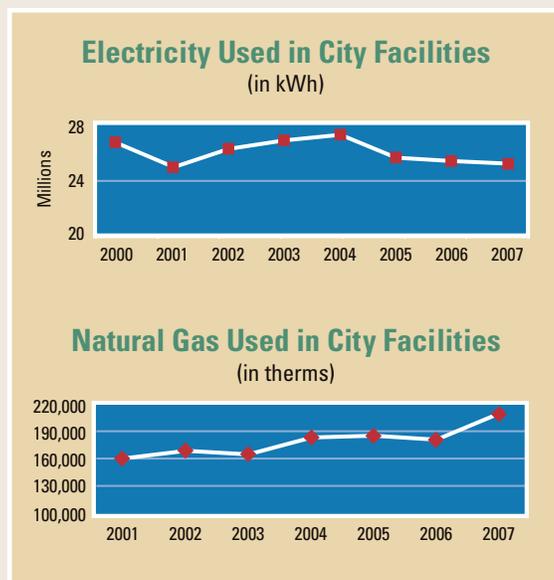
Energy conservation is using less energy in the operation of facilities. We conserve energy through energy-efficient facilities, equipment, and devices and behavioral changes that reduce energy use.

## Why is this important?

Energy conservation is the most cost-effective method to reduce electrical energy consumption that contributes to climate change.

## How do we measure our progress?

The City measures its success by comparing its energy reduction goals with its measured energy use over time.



## City's Best Practices

- The City's entire system of traffic signals operate on Light Emitting Diode (LED) lighting. All street lights are powered by high-pressure sodium lamps.
- City buildings feature energy efficient T-8 fluorescent lamps and ballasts, compact fluorescents and LED lighting. The City is also installing electronic energy management systems that control lighting and air conditioning systems in its buildings.
- The Airport boasts pilot-controlled lighting that saves energy.

## RECENT ACHIEVEMENTS

- The City received the California Flex Your Power award for innovative water conservation programs that save energy. With energy efficient lighting systems installed in all major City buildings, lighting energy demand has declined by approximately 50%.
- As part of the South Coast Energy Efficiency Partnership, 568 area businesses received free energy efficient lighting and control systems. The Partnership also held events for the community to exchange 800 traditional light bulbs for Compact Fluorescent Light (CFL) bulbs and over 1,300 incandescent holiday light strands for LED holiday lights, reducing energy use by up to 90% for each replacement.

## YOU CAN MAKE A DIFFERENCE

- Use compact fluorescent light (CFL) bulbs instead of incandescent bulbs
- Turn off equipment and computers when not in use
- Learn about Energy Star certified devices at: [www.energystar.gov](http://www.energystar.gov)

## NEXT STEPS

- Participate in the Energy Leaders Partnership Pilot Program, saving energy in municipal buildings and providing free installations of energy efficient lighting to the community.
- Begin a three-year energy efficiency partnership with Southern California Edison that funds energy savings projects for municipal buildings and free and low-cost energy efficiency retrofits for the community.
- Replace air conditioning systems at 630 Garden Street with new energy efficient models that can use fresh air cooling on mild weather days.
- Assess the Airport Administration building using LEED-EB or a similar approach and create a multi-year "greening" plan.
- Replace airfield taxiway edge lights with LED technology.

# Alternative Fuel and Hybrid Vehicles

## What are they?

Alternative fuels are renewable fuels that reduce emissions. Examples include ethanol, biodiesel, electric, hydrogen and solar power. Hybrid vehicles operate on a small internal combustion engine and an electric motor to use less fuel than traditional gasoline vehicles.

## Why are they important?

The increased use of alternative fuel and hybrid vehicles helps reduce reliance on fossil fuels that contribute to global climate change and encourage the development of renewable fuel.

## How do we measure our progress?

The City measures its success by the decline of non-sustainable fuel used to power fleet and facilities. The more we use alternative fuel or fuel technology, the less non-sustainable fuel we need.

### City's Best Practices

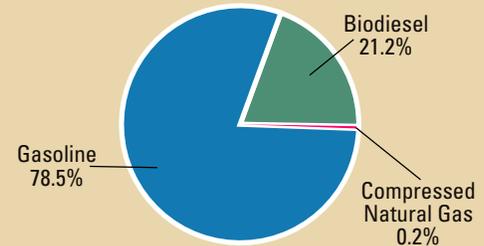
- Whenever available for the vehicle category, the City purchases alternative fuel or hybrid vehicles. The City's fleet currently includes 108 vehicles running on biodiesel, 33 hybrid vehicles, 3 electric vehicles, 8 compressed natural gas (CNG) vehicles, 2 liquid petroleum vehicles, and 8 vehicles that are capable of using ethanol.

### YOU CAN MAKE A DIFFERENCE

- Consider purchasing biodiesel fuel for diesel powered vehicles
- Consider purchasing hybrid vehicles
- Consider fuel efficiency when purchasing a vehicle
- See the following website for fuel efficiency ratings and what you can do to improve fuel efficiency: [www.fueleconomy.gov](http://www.fueleconomy.gov)

### Fuel Use for City Vehicles, 2007

(by gallon)



272,316 total fuel gallons

- The City uses B20 ultra-low-sulfur biodiesel in all diesel vehicles, including fire engines and construction equipment.
- Electric vehicle recharging stations are available at designated City parking lots.

### RECENT ACHIEVEMENTS

- The City added more alternative fuel and hybrid vehicles to its fleet, comprising 63% of all vehicles ordered last year. New vehicles include 14 biodiesel-fueled vehicles, 11 hybrids, 2 electric vehicles, and 9 vehicles that are capable of running on ethanol.

### NEXT STEPS

- Implement a pilot program to evaluate the feasibility of increasing the blend of biodiesel used in the City fleet to a B50 blend.
- Create a centralized electronic vehicle pool program with a reservation system and rideshare component as a tool to improve the utilization of vehicles in the City fleet.
- Coordinate with Santa Barbara Airport rental car agencies to establish a goal for a hybrid vehicle percentage of the total vehicle fleet available in the Airport market.

# Flexible Work Arrangements

## What are they?

Flexible work arrangements are a transportation demand management (TDM) strategy to encourage a non-traditional work schedule, utilizing telecommuting and flexible work schedules.

## Why are they important?

Flexible work schedules will reduce vehicle trips, ease traffic congestion, and reduce emissions.

## How do we measure our progress?

The City tracks the work schedules of its full-time, regular employees and also reports on telecommuting hours.

## City's Best Practices

- The City Flex Work Policy provides guidance to employees and managers on how to apply for, enroll in, and implement Flex Work strategies. Tools are available to assess whether employees and their positions are suitable for telecommuting or working an

alternate schedule. Employees can work from home with high-tech solutions and maintain communication with co-workers. Supervisors and managers receive electronic work schedule summaries for employees they oversee to encourage the use of flexible schedules.

- Firefighters work on a 48/96 work schedule which reduces the number of round trips made per month by roughly half.

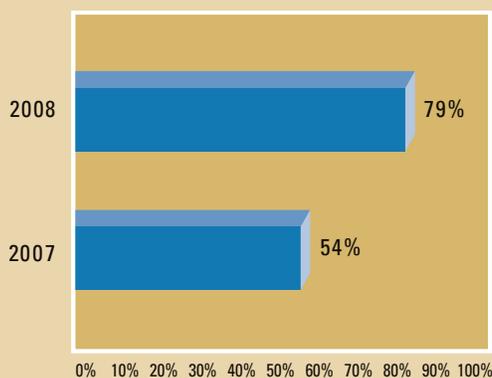
## RECENT ACHIEVEMENTS

- The City organization transitioned to 9/80 work week and achieved many benefits in air pollution and congestion reduction in the first year. Employees on a 9/80 schedule commute 26 fewer roundtrips per year on Fridays, a busy freeway traffic day. Longer work hours have also shifted the timing of many trips to the workplace away from the peak times before 8:00 a.m. and after 5:00 p.m.
- Flexible work arrangements were successfully incorporated in many City operations. 79% of City full-time permanent employees work a 9/80 schedule or an alternative work schedule. In its first year, the new schedule reduced trips over the standard work week by approximately 10,000 trips per year.

## YOU CAN MAKE A DIFFERENCE

- Assess whether a telecommuting arrangement or flexible work schedule will fit your needs, based on the needs of your position and your ability to work effectively from a remote location
- As a manager, help your employees determine whether some work tasks can be completed from a remote location

**City Employees on a Flexible Work Schedule**



## NEXT STEP

- Update technology to enable more City employees to telecommute or work remotely from their work site without incurring additional costs.

# Alternative Transportation

## What is it?

Alternative transportation planning encourages community use of transportation modes other than the drive alone transportation mode, including bicycling, walking, riding the bus or commuter shuttle, vanpooling, and carpooling.

## Why is this important?

Increased use of alternative transportation can alleviate traffic congestion and reduce harmful vehicle emissions.

## How do we measure our progress?

One indicator of Community use of alternative transportation is local bus ridership. With 8,104,576 riders in 2008, MTD ridership has grown by 6% since 2007 and 16% in the last five years.

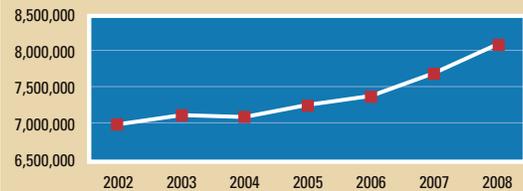
### YOU CAN MAKE A DIFFERENCE

- Take the bus to work
- Bike to work
- Arrange to drive or ride in a carpool
- Ride a commuter shuttle or vanpool for long distance commutes
- To learn about commute options, visit [www.trafficsolutions.info](http://www.trafficsolutions.info)

## City's Best Practices

- The City reviews private development projects to ensure that people can move within the City with equality of convenience and access among all modes of transportation. The City's 43 miles of bike lanes and hundreds of bicycle hitching posts allow bicyclists many routes to commute to work and reach their destination without an automobile.
- A bicycle parking station with storage for 80 bikes is conveniently located Downtown at the Granada Garage, boasting 103 members and the highest adoption rate of any Bikestation Coalition operated facility. Free membership is available for City employees.

## MTD Bus Ridership



\*Information by Fiscal Year

- Upon hire, all City employees receive a free MyRide bus pass for use on local buses to encourage them to ride the bus for their work commute. Carpooling employees park in designated parking spaces.
- Many City facilities are equipped with a City bicycle fleet to enable employees to ride a bicycle to run errands between City facilities and in the community. The City offers monthly "Cyclesmart" bicycle safety classes for employees to boost bicycle ridership and educate bicyclists and motorists on vehicle code provisions as they relate to bicycling.

## RECENT ACHIEVEMENTS

- The City began a comprehensive transportation demand management program to encourage and support alternative transportation in the work place. The Work Trip Reduction Incentive Program (WorkTRIP) main components include a 75% subsidy for long distance transit and vanpool riders, a City vehicle rideshare program, continuation of the MTD MyRide program and free Bikestation membership, as well as a guaranteed ride home in case of emergencies. Additionally, the City holds a weekly raffle to reward employees using alternative transportation for their commute choices.

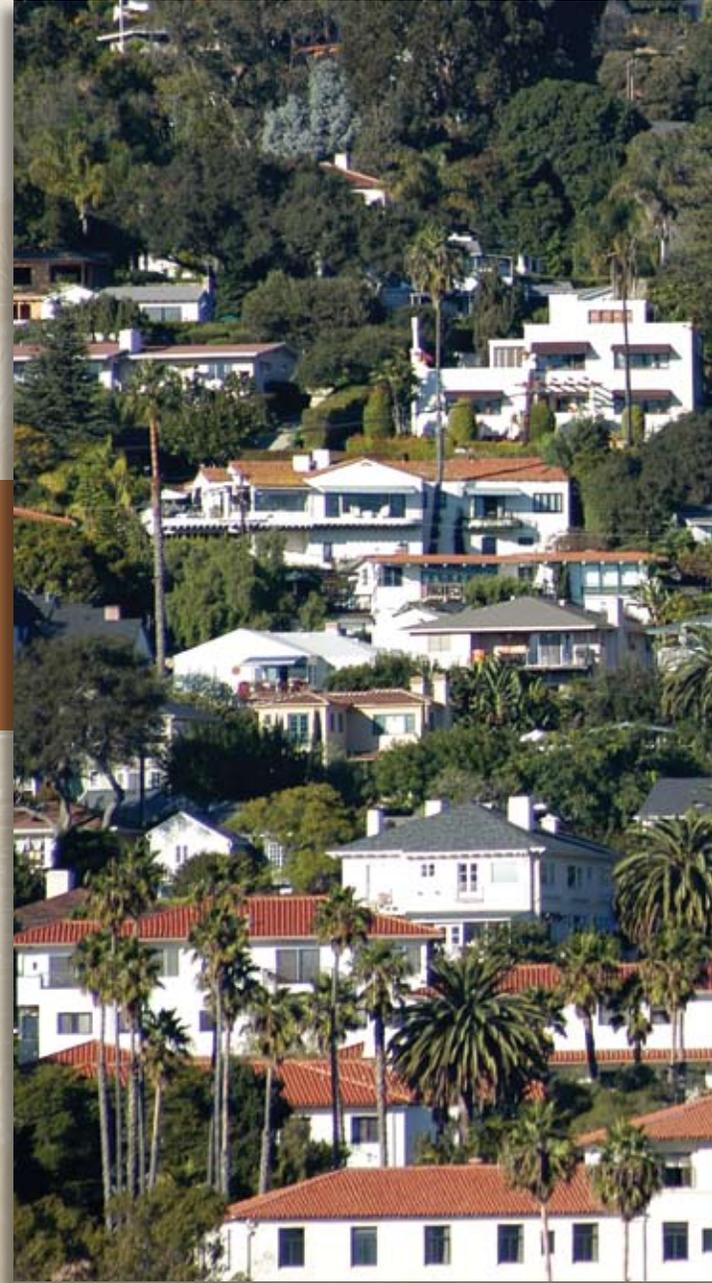


- The City fostered partnerships for On-TRAC (A Plan of Transit/Rail Action for Commuters) with government agencies in Santa Barbara and Ventura Counties to pursue a commuter rail operation. The project involves adjusting the timing of Amtrak trains and enhancing intermodal opportunities at transit hubs to better serve South Coast commuters.
- The City completed construction of a traffic calming project and the Safe Routes to School project, connecting the Upper East Side neighborhood with Santa Barbara Junior High School and High School.

## NEXT STEPS

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- Install one hundred bicycle hitching posts in the community every year.
- Complete the East Beach Sidewalk Replacement Project.
- Complete the design of the West Beach Pedestrian Improvement Project that includes crosswalk enhancements and curb extensions.
- Complete the conceptual design and environmental review of the Boysel Bike Path.



# Land Use



# Green Building Practices

## What are they?

Green building practices increase building efficiency and reduce consumption of energy, water, and materials, reducing impacts on human health and the environment.

### YOU CAN MAKE A DIFFERENCE

- Incorporate green building features into your next projects
- Use passive solar heating and cooling techniques
- Use natural lighting whenever feasible

## Why are they important?

Buildings account for 48% of energy consumption and greenhouse gas emissions in the United States. Encouraging green building techniques can substantially decrease our community's impact on climate.

## How do we measure our progress?

The City measures its success by the number of buildings in the community that meet LEED (Leadership in Energy and Environmental Design) or Built Green Santa Barbara certification requirements or are processed under the Green Building Incentive Program.

## City's Best Practices

- The Green Building Incentive Program provides expedited plan check for projects striving to meet LEED or Built Green Santa Barbara standards. Private

development project applicants can obtain Green Builders Packets at the Planning Division at 630 Garden Street.

- A Green Building Policy for City Buildings requires all new construction, major renovations, and building retrofits for City facilities to be designed to exceed California Title 24 Energy Efficiency Standards by 20% and achieve LEED-Silver certification.

## RECENT ACHIEVEMENTS

- Santa Barbara adopted one of the most stringent energy requirements in California to encourage energy efficient building construction in the community, becoming the first city in the country to incorporate the Architecture 2030 Challenge in the Building Code. The Architecture 2030 Challenge is a nationwide movement to reduce building energy use in new construction and major renovations to achieve carbon neutral buildings by 2030. The new Energy Ordinance was supported by the Santa Barbara Architecture 2030 Coalition with representatives from the local American Institute of Architects (AIA), Community Environmental Council (CEC), Santa Barbara Contractors Association, building industry, and other environmental organizations.
- The City recently approved the Cottage Hospital Workforce Housing Project with a requirement to meet LEED-Silver criteria.

## NEXT STEPS

- Re-evaluate the Architecture 2030 Energy Ordinance and consider possible changes or updates, as California's new Title 24 Energy Regulations will be published on July 1, 2009.
- Incorporate energy-saving retrofits in at least 75% of all housing rehabilitation projects.
- Achieve LEED-NC Silver certification for the new Airport rental car quick turnaround facility.
- Achieve LEED-NC Silver certification for the Fire Station No. 1 seismic retrofit project.
- Achieve LEED-EB Silver certification for the Community Development/Public Works offices on Garden Street.

# Review of Development Projects

## What is it?

Review of development projects involves the City review of development proposals for consistency with applicable environmental and planning regulations, policies, and guidelines.

## Why is this important?

Review of development projects provides an opportunity to meaningfully guide development projects, at the earliest feasible time, to include sustainability features. In addition, project design changes can be suggested to ensure that best management practices are incorporated, thus improving project design.

## City's Best Practices

- Development applications are subject to compliance with many state and City sustainability-related regulations, policies, and guidelines. The California Environmental Quality Act (CEQA) and Guidelines require that a project's energy impacts be evaluated. The City's Single Family Design Guidelines promote development that is energy efficient and is constructed with fewer natural resources and less grading.
- The City's General Plan Conservation Element encourages development that improves air quality, preserves historic and archaeological resources, and enhances open space, creeks, and critical ecological resources.
- A Storm Water Management Program (SWMP) requires best practices that minimize ground disturbance and paving,

require installation of filtration areas, reduce the pollutant discharge to the "maximum extent practicable," and protect water quality.

- The City expedites building permit applications designed for LEED or Built Green certification.

## RECENT ACHIEVEMENTS

- New conditions of approval include requirements for the reuse and recycling of construction and demolition material.
- In response to recent state legislation and Attorney General positions, the City now includes a qualitative evaluation of energy use and emission impacts in environmental compliance documents.



## NEXT STEPS

- Work with the design review boards/commissions and Planning Commission to conduct one training seminar on general sustainability education and use in the Project Review process.

# Acknowledgements

## City Council

Mayor Marty Blum,  
*Sustainability Council Committee*

Helene Schneider,  
*Sustainability Council Committee (Chair)*

Das Williams,  
*Sustainability Council Committee*

Iya Falcone

Dale Francisco

Roger Horton

Grant House

## Executive Management

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Paul Casey, *Community Development  
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Marcelo Lopez, *Administrative Services  
Director*

Irene Macias, *Library Director*

Robert Peirson, *Finance Director*

Ronald Prince, *Fire Chief*

Karen Ramsdell, *Airport Director*

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## Green Team Committees and Staff

~ dedicated to protecting and enhancing the environment ~

# Resources

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## **Recycling, Composting, and Hazardous Materials Disposal**

[www.SBrecycles.org](http://www.SBrecycles.org)

## **Green Purchasing**

[www.greenseal.org](http://www.greenseal.org)

[www.ofee.gov/gp/gp.asp](http://www.ofee.gov/gp/gp.asp)

## **Water Conservation**

[www.SantaBarbaraCA.gov/water](http://www.SantaBarbaraCA.gov/water)

## **Creeks and Ocean Water Quality and Habitat Restoration**

[www.SBcreeks.org](http://www.SBcreeks.org)

## **Tree Maintenance**

[www.SantaBarbaraCA.gov/Government/Departments/Parks\\_and\\_Recreation](http://www.SantaBarbaraCA.gov/Government/Departments/Parks_and_Recreation)

## **Green Gardening**

[www.greengardener.org](http://www.greengardener.org)

## **Energy Conservation**

[www.southcoastenergywise.org](http://www.southcoastenergywise.org)

[www.energystar.gov](http://www.energystar.gov)

## **Alternative Fuel and Hybrid Vehicles**

[www.fueleconomy.gov](http://www.fueleconomy.gov)

## **Flexible Work Arrangements**

[www.flexworks.com](http://www.flexworks.com)

## **Alternative Transportation**

[www.trafficsolutions.info](http://www.trafficsolutions.info)

## **Green Building and Solar Energy Systems**

[www.SantaBarbaraCA.gov/Resident/Home/Forms/Planning.htm](http://www.SantaBarbaraCA.gov/Resident/Home/Forms/Planning.htm)



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