

Appendix G

City Environmental Program G-1
Water Quality Update G-5

This page intentionally left blank.

City of Santa Barbara Environmental Programs that Support Water Quality Improvement Objectives

The City of Santa Barbara has a number of environmental programs that support water quality improvement objectives and supplement the Storm Water Management Program. These programs include integrated pest management, water conservation, recycling and household hazardous waste management, mandatory trash collection. A private lateral inspection ordinance is currently under development. The Creeks Division is also involved in a range of creek restoration and water quality improvement projects as well as community outreach programs that support the objectives of the Storm Water Management Program. Programs described below are City-specific initiatives and respond to Santa Barbara community priorities.

Integrated Pest Management

On June 17, 2003, the City Council of the City of Santa Barbara adopted Resolution 03-038 which directed staff to develop an Integrated Pest Management (IPM) strategy for all City Departments. In that resolution the City acknowledged the need to reduce the use of toxic pesticides and herbicides in public places, and to promote environmental stewardship. The City acknowledges that the IPM approach to pest management offers the best balance of environmental sensitivity, cost-effective pest management and public acceptance.

Integrated Pest Management is an effective and environmentally sensitive approach to pest management. It uses monitoring to determine pest levels and tolerance thresholds. IPM utilizes extensive knowledge about pests, such as infestation threshold, life histories, environmental requirements, and natural enemies to compliment and facilitate biological and other natural controls of pests. With the goal of minimizing health, environmental, and financial risks, the use of biological, cultural and physical control methods is emphasized with pesticides, generally least toxic pesticides, used only as a last resort. By reducing pesticide use, common household pesticides are less likely to show up in treated wastewater and in local waterways.

The City's IPM Strategy and 2004 Annual Report are posted on the City's website: [http://www.santabarbaraca.gov/Resident/Community/Parks and Beaches/Integrated Pest Management.htm](http://www.santabarbaraca.gov/Resident/Community/Parks_and_Beaches/Integrated_Pest_Management.htm).

Water Conservation

The overuse of water to maintain urban landscapes can result in direct and indirect types of non-point source pollution including increased nutrient and soil runoff from the landscaped area and urban and developed lands, and the increasing demand for additional water supply reservoirs. Decreasing the amount of water used for landscape maintenance and implementing pesticide management plans can reduce the entry of these pollutants into surface and ground waters.¹

¹ <http://www.epa.gov/ow/you/chap2.html>

The City of Santa Barbara depends on water conservation as a part of its water supply program. Many water efficiency improvements can be used at less cost than obtaining new water supplies, with no sacrifice of convenience, aesthetics, or functionality. Information on this program is available at:

www.santabarbaraca.gov/Government/Departments/PW/WCHome.htm or
www.sbwater.org.

Sewer Lateral Inspection Ordinance

Sewer laterals that are failing or adversely affecting the City's sewers represent a threat to public health and must be repaired or replaced. Although the Santa Barbara Municipal Code Section 14.44.160, Maintenance of Private Systems, Etc., identifies that it is the property owner's responsibility to maintain sewer laterals, very little attention is given to these pipes unless they fail. Poorly maintained laterals allow roots to grow into them that can cause blockages or sewage spills from the City's sewer mains during the process of root removal. This is the leading cause of dry weather spills in the publicly maintained part of the sewer system. Poorly maintained laterals also allow groundwater and rainwater into the sewer system during wet weather.

To address the concern, a Mandatory Lateral Inspection Ordinance is currently under development. The proposed triggers for residential properties are 1) the sale of property; 2) the addition or remodel of property that includes addition of 400 square feet and/or increases in the number of plumbing fixtures; 3) following a spill from the private lateral that reaches the public right-of-way; or 4) the identification of defects during routine inspections. The ordinance also proposes that commercial properties and Planned Unit Developments (condos) have their laterals inspected once every ten years. Additional information about the proposed ordinance can be obtained from the City's web site:

<http://www.santabarbaraca.gov/Government/Departments/PW/WWLateralOrd.htm>

Mandatory Trash Ordinance

Adequate trash collection services are provided for every residential dwelling and food serving business located within the City of Santa Barbara. Weekly refuse service regularly removes garbage and waste material to prevent the accumulation of materials that attract flies, rodents or other vectors as well as deter residents and food serving business owners from littering or contributing to illicit waste. Fees may be waived based for regular residential collection based on economic hardship.

Recycling and Hazardous Waste

Commingled recycling and green waste service is provided by the City's contracted waste haulers. All single-family residences are entitled to 95 gallons of recycling and 32 gallons of green waste recycling each week free of charge. Apartment complex residents are also encouraged to recycle. A small amount of recycling is free while the cost of recycling at larger complexes is less than the cost of trash. City recycling personnel also provide cost analysis for building managers. The City of Santa Barbara's Antifreeze, Batteries, Oil, and Paint (ABOP) facility accepts antifreeze, batteries, oil, paint, compact discs, and cell phones from residents at no cost. These free services offer an opportunity for Santa Barbara residents and businesses to dispose of waste in an environmentally friendly fashion, reducing the chance that these waste products will end up in City creeks. More information on this program is available at www.sbrecycles.org.

Creeks Restoration/Water Quality Improvement Division

The purpose of the Creeks Restoration/Water Quality Improvement Division is to improve the health of Santa Barbara's creeks and ocean through storm water and urban runoff pollution reduction, creek restoration, and community information and participation programs. Many of the Creeks Division education and outreach, enforcement, and municipal operations programs are described in Minimum Control Measures 1, 2, 3 and 6.

The Creeks Division is also engaged in two other voluntary long term planning and research community priority projects that support the City's water quality improvement objectives. These include microbial source tracking research to determine the extent to which humans and domestic animals contribute to bacterial pollution, and the development of long range watershed plans to establish community priorities for water quality funds.

Water Quality Research

Traditionally, indicator bacteria are used to infer the presence of human waste and associated pathogens, and the risk of associated diseases. However, it is well known that the use of indicator bacteria to assess the human health risk from recreational contact is problematic since indicator bacteria 1) are not pathogenic, 2) can survive and grow in the natural environment, making the identification of fecal sources difficult, and 3) tests rely on culturing bacteria although many bacteria live in the environment in a viable-but-non-culturable state.

In recent years methods have been developed to quantify bacteria and viruses associated with human waste in environmental waters. The development and employment of DNA-based (i.e. "molecular") tools for detecting and quantifying human fecal bacteria in the environment offers several benefits, namely: the independence from laboratory-based culture which fails to detect many microbes in the environment and in some cases generates false positive signals, the opportunity and promise for

