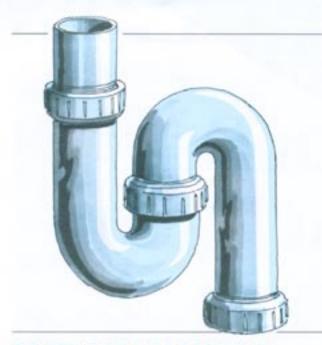
# **FACT** SHEET

# A Clean Bay Begins At Home

T Tou may not realize how Coastal pollution means lost your daily activities add to jobs, inedible shellfish, closed coastal pollution. How you beaches, and less wildlife. The maintain your septic system, good news is that you can do clean your bathroom and a lot to reduce pollution by kitchen, and fertilize your changing your lawn can pollute Casco household habits Bay or the lakes, today. rivers, and streams that eventually flow into it.



#### SEWERS AND SEPTIC SYSTEMS

Sewage from our homes is a major cause of coastal pollution. Sewage treatment plants in Portland, South Portland, Westbrook, Falmouth, Freeport and Cumberland contribute about 35 million gallons of treated effluent to Casco Bay every day. However, municipal sewer systems are not available in most of the Casco Bay watershed so most residents depend on individual septic systems to treat their waste.

Sewage carries pathogens (viral and bacterial microorganisms) into Bay waters that can pose a health threat to swimmers and shellfish consumers.

### You can help Casco Bay by ...

Reducing your use of water. Install low flow toilets and shower heads, and aerators in your sink faucets. Reducing your water usage will help treatment plants and septic systems run more efficiently. Run only a full dishwasher and full loads of laundry.

Have your septic system checked and pumped approximately every 3 years. Clogged leaching fields and poorly maintained or failing septic systems can contribute significantly to water pollution.

Avoid septic system cleaners or additives. These products are toxic, ineffective, and an unnecessary expense.

Don't use your toilet as a garbage can. Solids such as disposable diapers, sanitary napkins, plastic tampon applicators, condoms, grease or oil, and cigarette butts disrupt sewage treatment plants and discharge into Bay waters. In septic systems these solids plus garbage disposal wastes can clog the leaching field, hastening the need for expensive pumping procedures or system replacement.

#### **TOXIC HOUSEHOLD PRODUCTS**

Unfortunately, today you almost need a degree in chemistry to know what's in most of the products you use around the house. Common toxic household products include most paints and solvents, household cleaners, pesticides, medicines, and auto care products, such as motor oil and antifreeze.

In many cases, people dispose of these toxic products by simply pouring them down toilets or sink drains. This "out of sight, out of mind" attitude is having serious consequences on the health of the Bay.

In communities with public sewer systems, toxic chemicals poured down drains are carried by pipes to sewage treatment plants. Because treatment plants are not designed to remove chemicals from the waste stream, most toxics are ultimately discharged with the wastewater into the Bay.

In septic systems, toxic household chemicals can kill the bacteria needed to break down waste. The chemicals can also percolate through the leaching fields and pollute groundwater, rivers, streams and the Bay.

#### You can help Casco Bay by ...

Following these easy steps when deciding what products to use in and around the house:

- Use chemicals less often or rotate use with nontoxic chemical alternatives listed below. Apply the chemicals sparingly.
- Never dispose of unwanted chemicals down your sink or toilet.
- □ For any household task that may require the use of chemicals, consider whether any of the alternatives listed below could be used instead.

#### Alternatives

All purpose cleaners: Mix liquid castile soap and baking soda or borax.

Toilet cleaners: Use liquid castile soap, baking soda or borax, and a toilet brush.

**Drain cleaners:** Use a drain strainer in each drain to prevent clogs. To unclog plumbing, mix and pour 1/2 cup baking soda with 1/2 cup vinegar down the drain. Cover for one minute. Rinse with boiling water.

Oven Cleaners: Use baking soda and steel wool pads.

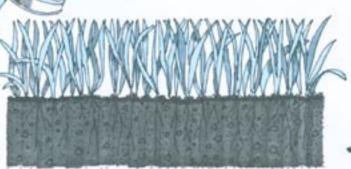
Glass cleaners: Apply vinegar and water with newspaper and then buff with dry newspaper.

Linoleum floor cleaner: Mop with one cup of white vinegar mixed with two gallons of water to remove dull greasy film.



Stain remover: Instead of powered bleach, sprinkle borax or baking soda on stains and scrub! If using bleach, select a non-chlorinated brand.

Paint remover: Use a heat gun to peel off paint. Lead-based paint should always be removed by professionals,



#### LAWN CARE

Even the products you use on your lawn can cause coastal pollution. While the quantity of lawn care products used by one household may be small, the volume of products used by an entire neighborhood is significant.

Fertilizers contain nutrients that can disrupt the natural balance of Bay ecosystems. In excessive quantities, nutrients can cause eutrophication, a process that harms marine organisms and hinders our recreational and visual enjoyment of coastal waters.

Pesticides contain toxic chemicals that don't always remain in our own backyard. Rainwater flowing over lawns and gardens can wash them into nearby water bodies or storm drains that discharge into the Bay. Pesticides can also percolate through the soil and pollute groundwater that lies beneath the ground's surface.

# You can help Casco Bay by...

If you plan to use fertilizer, have your soil tested to determine the appropriate amount to apply. A healthy lawn also reduces the need for pesticides. Use compost and mulch, instead of chemical fertilizers.

Lay filter fabric over your garden to discourage weeds naturally.

Select plants that require minimal water and fertilizers, such as ferns, myrtle, and barberry. Divert water from paved surfaces to grass where it can soak into the soil so that excess fertilizers and pesticides don't wash into nearby water bodies.



#### CARS: "MOVING OIL SPILLS"

Just driving your car produces hazardous wastes that can end up in the Bay. Burning gasoline and other fossil fuels produces toxic chemicals known as petroleum aromatic hydrocarbons (PAHs), which are released into the air with automobile exhaust, and deposited onto Bay waters. PAHs are also carried by runoff from roads and parking lots into the marine environment by nearby streams and rivers or through storm drains.

Products you use to maintain and clean your car can also produce hazardous waste. For example, every year Americans who change their own motor oil improperly dispose of an estimated 175 million gallons - roughly the amount contained in 10 Valdez oil tanker spills. It takes just one quart of used oil drain to foul the taste of 250,000 gallons of water.

# You can help Casco Bay by ...

Reducing automobile usage. Car-pool, walk or ride your bike. Cars are a major source of air and water pollution.

Don't ever pour used motor oil down a storm drain or onto the ground. Instead, take used oil to the nearest oil collection center for recycling. Oil can be re-used once contaminants have been removed.

Take brake and transmission fluid to a service station or recycling center.

Fix oil and gas leaks from your car as soon as you notice signs of leakage on your driveway. Use absorbants to clean up oil and gas drippings that might otherwise be washed away in a storm.

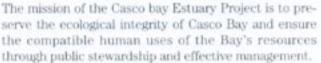
# CASCO BAY ESTUARY PROJECT



The National Estuary Program was established in 1985 to protect nationally significant estuaries threatened by pollution, development or overuse, and to promote the preparation of comprehensive



management plans to ensure the ecological integrity of these important waterbodies. The goal is to protect and improve water quality and enhance ecological resources. In 1990, Casco Bay was designated a significant national resource and included in the National Estuary Program. The Casco bay estuary project will run from 1990 through 1995.



To accomplish this mission, the Casco Bay Estuary Project will:

- take steps to prevent, mitigate and remediate impacts from existing and potential pollution sources and habitat loss
- support efforts to understand the Casco Bay ecosystem, including natural processes and the impact of human activities
- ☐ support public education efforts to instill a responsible sense of public ownership of the Bay, especially among coastal and watershed communities
- develop the management framework to sustain the Bay's resources and benefits

If you are interested in participating in the Casco Bay Estuary Project, or would like more information call or write:

# Casco Bay Estuary Project

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