



Reduce your use, decrease your impact:
**Caring for your
Environment at Home**



Caring for Your Environment at Home

Table of Contents

Introduction	page 2
Lawns and Garden	pages 3-5
Around the House	pages 6-9
Water Quality	page 10
Water Conservation	page 11



Caring for Your Environment at Home

Introduction:

Today's modern homeowner understands that we're all connected—humans, animals, plants, even water—and that everything in the environment is affected by our actions. It's easy to live a more "green life". All it takes is a little know-how and the right resources.

This manual provides what experts consider Best Practices for lawn and garden care, pest control, water quality and conservation, the value of carpooling and more!

Evidence and opinions about environmental issues and green practices may vary. This manual is meant to act only as a general guide, and in no way provides all the information or opinions available on the listed subjects. Recommendations are based on information from several authoritative bodies, including, but not limited to: King County Water and Land Resources, Local Hazardous Waste Management Program, Seattle Public Utilities, Seattle Water and the State of Washington.

Caring for Your Environment at Home

Lawn and Gardens (continued)

Using Integrated Pest Management (IPM) techniques ensures beautiful, healthy lawns and gardens, and is environmentally sound. Natural lawn care techniques are safer and less time-consuming than dowsing your lawn with hazardous pesticides and fertilizers. IPM techniques are also less expensive.

Caring for Your Lawn

- Mow high and mow often. Setting your mowing height between 2 and 2 1/2 inches ensures better root development. It also helps crowd out weeds because they need lots of exposure to the sun in order to grow. Mowing once a week during the spring and early summer saves time and is less stressful on the grass. It's easier to mow and better for your lawn when you keep the blade sharp and mow when it's dry.
- Practice "grasscycling". Your lawn provides you with more than one-third of its own fertilizer. By leaving grass clippings on the lawn to fertilize it, you help it grow greener and denser. This method will not cause thatch buildup (the accumulation of dead grass and soil that compacts into a dense layer and inhibits lawn growth). Best of all, fertilizing with grass clippings is free! Use a mulching mower or push mower for best results. Setting you mower to a higher level and mowing frequently makes it easy to grasscycle. It also



takes the strain off compost facilities, which are historically overloaded with grass clippings.

- Fertilize with a natural organic or slow-release fertilizer. If you must fertilize your lawn, moderation is the key. Too much of a good thing—or the wrong thing—can damage a lawn and wreak havoc on the environment. Organic and slow-release fertilizers feed you lawn slowly and are less likely to leach into streams and rivers. For best results, fertilize in September and May. If you only fertilize once a year, do it in the fall. Avoid fertilizing your lawn before May in the springtime unless it has suffered insect or disease damage. Early fertilization causes rapid growth.
- Check your soil. Soils west of the Cascades can be low in calcium. You can test for calcium deficiency by contacting your local conservation district. If you discover that your soil needs calcium, apply lime in the spring or fall.
- Raise your tolerance level and embrace lawn diversity. A "perfect" lawn, completely free of weeds and moss, is not necessarily the best lawn. Diverse lawns are more likely to survive during times of drought and are easier to maintain. Clover, which is a weed, is actually beneficial because it provides nitrogen for your lawn. This cuts down on the need for supplemental fertilizers. Mosses do not kill existing grass, but grow in bare areas. Overseeding you lawn impedes moss by growing grass. If moss growth is at unacceptable levels, kill it with products containing ferrous sulfate and ferrous ammonium sulfate. Products such as Moss-Out, Moss-Kill and Kid-Moss contain these ingredients, as well as iron and sulfur, which are essential grass nutrients and are not harmful to the environment. As with any product, it's important to carefully read and follow all label directions. Be aware that unless other steps are taken (improving soil conditions, overseeding and fertilizing), moss is likely to reappear in time.
- Pests and Diseases. There is no such thing as completely eradicating disease and pests in our lawns and gardens. But lawns and gardens are able to withstand a certain amount of both. Healthy lawns have been known to have 40 crane larvae per square foot and not show any damage. Similarly, some aphids on your plants may damage a few leaves while the overall plant remains healthy and strong. Regardless of the IPM tactic you choose, monitor your pest problem to evaluate its effectiveness.
- Strive for a lighter shade of lawn color. Contrary to popular belief, healthy lawns are not greener, but medium or light green in color. A darker colored lawn indicates you are over watering or over fertilizing, and damaging the lawn. Unhealthy lawns are more prone to thatch buildup and damage during droughts.

Caring for Your Environment at Home

Lawn and Gardens (continued)

- Use alternatives to weed and feed, herbicides and pesticides. When you use weed and feed products, you are spreading large amounts of unnecessary herbicides over the lawn (to kill the weeds). The herbicides are harmful to humans, fish and wildlife. Medical studies have linked herbicides in weed and feed products to certain cancers in children and adults, including leukemia and brain cancer. Most products contain a quick release fertilizer that's nitrogen heavy and can damage your lawn by reducing earthworm populations. Earthworms keep the soil healthy by loosening it as they move through it, allowing water and air to penetrate.

Pesticides used to control crane flies and other harmful lawn pests can be more dangerous to your family and the environment than the pests! Dealing with pests such as crane flies, leatherjackets, and fleas without pesticides is preferred. Alternatives such as beneficial nematodes (microscopic organisms that eat leatherjacket and flea larvae) are better for your lawn and our water supply. It's best to apply them in the early morning or evening, and they must have consistently moist soil. For effective application, read and follow all directions on the package. Please refer to the appendix for a list of area nurseries which sell nematodes. They are usually available only during warm-weather months.

Herbicides, pesticides and fertilizers are also harmful to our water. State and federal agencies monitoring our water quality over the past eight years found more pesticides in urban streams than in our agricultural ones. Several ingredients in common weed and feed products were found,



including Diazinon. When it rains, they wash off lawns and into our lakes, streams, rivers and Puget Sound. The result is an increase in algae growth. As the extreme amount of algae decomposes, oxygen is consumed by the decaying process, which produces putrefaction, killing fish and other aquatic wildlife.

- Hand weed or spot spray. Several products are available to make hand weeding easier, including long-handled tools that allow you to stand while pulling weeds. You can also spot spray weeds with an appropriate herbicide. If you use chemical solutions, make sure you read and follow all directions carefully and use the correct product for the task.

- Improve poor soil by overseeding and aerating. Sometimes thatch builds up on lawns. If you have more than a 1/2-inch layer, it's time to rent a de-thatcher and make several passes over the lawn with it. Compacted soil may also need to be aerated (by poking lots of holes in it). You can also rent a power aerator or hire a professional to do it for you. Make sure your aerated soil is moist, and rake or mow to break up the cores caused by aerating. Leftover soil helps to decompose excess thatch in your lawn. Once you have aerated and/or de-thatched, overseeding will help bring your lawn back. Use a perennial rye/fine fescue mix of grass seed specifically designed for our northwest environment. Your local nursery or the Washington State University Cooperative Extension can help you choose the best grass blend. Just like fertilizing, May and September are the best times to aerate, de-thatch and overseed.

Caring for Your Garden

- Cultivate your soil. Healthy soil means healthy plants, and a healthy plant is better able to resist attacks by insects and diseases. Adding two to three inches of compost or seasoned manure to your garden each year will help ensure healthy soil. Adding an organic fertilizer once a year will help complete the recipe. While organic fertilizers may appear more expensive than synthetic ones, in the long run they save you money because they last longer in the soil. And because they are less likely to run off into our water sources and storm drains than their synthetic counterparts, they are more environmentally friendly. Regardless of which fertilizing method you choose, always remember to read the instructions carefully and only use as much as is needed for your garden's size. Too much of a good thing will harm your plants and our water supply.

- Use native plants. Plants that naturally grow in our northwest climate are not only beautiful, but will thrive in your garden. Native plants are less likely to succumb to disease, are easier to nurture

Caring for Your Environment at Home

Lawn and Gardens (continued)

and stronger than those that are imported from a foreign environment. See the resource guide in this manual for more information on northwest plants.

- Foster diversity. Your garden, like your lawn, needs diversity to thrive. Planting different combinations of plants helps create an ecosystem that's good for insects, plants, birds and wildlife. Diversity helps plants stay healthy and strong, and allows beneficial insects and wildlife to help you control pests that are harmful to your garden. You can outsmart disease and harmful pests by planting a combination of annuals (plants that live only one year) and perennials (plants that live from year to year), and rotating your annual plants each year.
- Know your insects. Is it a good insect or a bad insect? Sometimes it's hard to tell. But there are lots of books available that provide you with valuable information on identifying insects that are beneficial to your garden. You can use these insects in place of pesticides and herbicides to help rid your garden of harmful or "bad" insects. Ladybugs are a perfect example of a good insect. They eat aphid larvae and are fun to watch. Butterflies, bees and lacewings are also examples of good insects you want in your garden.
- Find non-toxic answers to minimizing harmful insects. When you use pesticides to rid your garden of "bad" bugs, you kill the "good" bugs, too. These harmful chemicals run off into our lakes and streams and down our storm drains. Plus, harmful pests are likely to develop a resistance to the pesticide and return in larger numbers. This upsets the biological balance in your garden and makes it harder for beneficial insects and birds to do their part. If you don't feel you have enough beneficial insects in your garden, you can buy these natural predators from garden stores (see appendix for a list of area retailers, many of which stock natural garden predators such as ladybugs). Nature gives us lots of little gardeners free of charge to help us grow

and maintain healthy gardens—so take advantage of the free labor. One example: Mason or orchard bees are harmless to people but love to feast on aphids. They can be purchased at many local nurseries.

If you have a severe pest problem you may need to use chemical compounds to get it under control. Stay away from extremely hazardous pesticides like Diazinon. While it is registered for use on home lawns, it is banned at golf courses and sod farms. It kills birds and natural predators and is harmful to fish and aquatic life. Many alternative treatments are available to rid yourself of harmful pests, including horticultural oils, sticky traps, insecticidal soaps and barriers. Use chemical treatments only as a last resort and find the least toxic treatment available. Remember that even the least toxic chemicals may kill beneficial garden predators. Always read and follow directions carefully when using any pesticide. For more information about alternatives to chemical treatments, see the resource guide in the back of this manual.

Herbicides, used to control diseases on plants, are also hazardous and run off into our water supply. Cultivating healthy soil and using indigenous plants will drastically reduce the chance of disease. There are several disease-resistant varieties of roses and other plants from which to choose. These are also several organic alternatives to using herbicides, including baking soda and sulfur.

Composting and Mulching

- Use compost or mulch instead of fertilizer. Mulching is a safe, inexpensive way to fertilize your garden. It helps improve soil's ability to retain water and provides essential nutrients. Early spring is the best times to apply mulch, but it can be spread anytime of the year. Mulch products are available from several stores, or you can make your own by composting certain organic wastes.

Notes



Caring for Your Environment at Home

Around the House

Using low-environmental impact best practices around the house is as important as using them on our lawns and gardens. Household cleaners, hazardous household waste disposal and oil drips all affect the environment, too. What we do around our homes, and in our garages and driveways, profoundly impacts our water and wildlife, ultimately affecting our quality of life.

Housecleaning the "Green" Way

- Find alternatives to household products marked "danger". The word "danger" on products means that the product can kill you, or can cause serious skin or eye damage. It may also mean the product is extremely flammable-increasing risk of fire. The best products to buy are those with no warning, like water-based products (latex paint and white glue are two examples). If you find that these products aren't working for a particular job, choose one with "caution" or "warning" on the label. Avoiding "danger" labels also lessens the risk that a child or pet may end up seriously ill if they get into the product. Always keep products with any risk of danger to children or pets locked up or out of reach (even those that may not have a warning label).



- Learn about alternatives to toxic cleaners. You wouldn't want your child or pet exposed to hazardous chemicals, so why use them in your home? There are several alternatives to these cleaners, including Dr. Bronner's Castile Soap, Ajax Lemon Fresh Liquid, Citra-Solve, EarthRite, Ecover, Mr. Clean, Murphy's Oil Soap and Spic and Span. Many of these are known as "all-purpose" cleaners and can be used to clean walls, floors, counters and tile. Buying only one cleaner instead of three or four also saves you money. Larry's Market sells a variety of environmentally-friendly cleaners, soaps and polishes. Some QFC and Safeway stores also sell selected natural home cleaning products.

Cleaning the bathroom. All-purpose cleaners are also good for cleaning soap scum and mildew in your bathroom. Non-abrasive cleaners like baking soda and castile soap, or Bon Ami Cleanser, are effective for scrubbing out sinks, bathtubs and toilets. Borax, Toilet Duck and EarthRite Toilet Cleaner will do the trick on your toilet as well. Avoid scouring powders that contain chlorine bleach. Never mix two household cleaners together—it can be hazardous to your health! When certain products with chlorine bleach are mixed with ammonia or acid cleaners (commonly used in conventional toilet bowl cleaners), they can emit hazardous gases. When inhaled, these gases can cause severe lung damage.

Cleaning the windows. Alternative glass cleaners are also a good idea because some cleaners contain ether and ammonia. Both of these chemicals may cause damage when inhaled or absorbed through the skin. Consumer Reports indicates that plain water is more effective than many of the available window cleaners. There are several recipes for making glass cleaners, including using one tablespoon of lemon juice to one quart of water, or 1/4 cup vinegar to one quart of water.

Doing the laundry. Household chlorine bleach or detergents with phosphates can irritate the lungs and eyes. When mixed with ammonia or acids, bleach can emit dangerous gases, and it's bad for our water supply. Non-chlorine bleach won't have the same disinfectant properties, but they are safer for you and your family. So are phosphate-free detergents. Some spot removers also contain toxic chemicals and should be avoided. Before resorting to these stain removers, try using dishwashing liquid, water or rubbing alcohol on the spot. Ecover Stain Remover or Spray 'n Wash are also safe alternatives.

Doing the dishes. Dishwashers are great time savers, but dishwasher detergent is hard on the environment. Many contain phosphates and chlorine bleach, which cause water pollution. Buy

Caring for Your Environment at Home

Around the House (continued)

products that are chlorine-and phosphate-free, like Bi-O-Kleen, Life Tree, Shaklee and Bio Pac.

Polishing the furniture. Did you know that your furniture polish might be flammable and toxic? Any polish with the word “danger” on the label spells trouble. Using products with a vegetable or mineral base are better for your family and the environment. Lemon Pledge (trigger spray), Parker’s Lemon Oil and Earthrite Furniture Polish are just a few of the alternative polishes you can buy.

Cleaning the oven. You wouldn’t want to eat oven cleaner, so why use it around food? Most of these cleaners contain lye and can burn your skin and eyes. They also leave a foul smell in the air. To keep oven cleaning to a minimum, place aluminum foil or a metal tray underneath whatever it is you are cooking, and wipe up spills as soon as the oven is cool. They are easier to clean up if they are not left to bake on the oven. For a really dirty oven, use a cleaner that doesn’t contain lye (Such as Easy Off Non-Caustic Formula), or try Bon Ami scrubbing powder. You can also use baking soda, or soap and water with a copper scrubber. Throw in some elbow grease, and you’ll have a clean oven in no time.

Polishing the silver and brass. Like furniture polish, metal cleaners and polishes can contain hazardous ingredients. Look for products like Twinkle silver and copper polishes, or Wright’s



creams. Avoid the old-fashioned method of immersing metal in hot water and using aluminum foil and baking soda because it gives off harmful gases.

Avoid chemical drain cleaners. These products are extremely dangerous and can cause chemical skin burns and eye damage. In addition, they’re not very effective on clogs. A more effective alternative is using a plunger, snake or hose-end bladder. (A hose-end bladder provides an airtight fit between a garden hose and the insides of a drainpipe and uses water pressure to free the clog.) They’re less expensive than drain cleaners in the long run because you only have to buy them once. You can prevent clogs by pouring boiling water down a slow drain or by using an enzyme-based drain build-up remover product such as Zep “Drain Care” available at Home Depot. They use enzymes to break down grease and soaps. While they aren’t designed to clear blocked drains, they will help prevent drains from getting to that point.

Removing Pests from the Home

- Consider alternatives to pesticides in your home. Rid your home of individual pests as you discover them. To avoid ants and cockroaches in the home, promptly seal food containers and rinse dishes with food particles before putting in the sink or the dishwasher, and clean sink baskets. Make sure your floors are free from food particles, and that you don’t have any leaky faucets. Caulking cracks and weather stripping around doors and windows will also help control unwanted insects and save you money in energy consumption.

When you put a flea collar on your pet, you’re putting poison around its neck. While fleas on your pets are miserable for them and us, there are several safe options for controlling them. To avoid fleas, frequently bathe your pet and use a flea comb to be “flea free.” Frequent vacuuming and washing your pet’s bedding also helps. You can use sodium-based products like Fleago or Fleabusters, which dry out flea larvae before they can hatch. However, make sure you read and follow all directions carefully, since such products can be hazardous if used incorrectly. Your veterinarian can also provide you with many alternatives for controlling fleas. For best results, treat your lawn, home and pet at the same time. All the best pet care stores sell natural flea collars and sprays. Some e-commerce pet websites also sell natural flea collars.

Caring for Your Environment at Home

Around the House (continued)

Working on Your Car

- Wash the car, not the fish. When you wash your car in the driveway, runoff gets into our rivers, lakes and streams through storm drains. Because this runoff contains road grime, oils, dirt and soap, it can destroy water quality. You can help to avoid this by washing your car at a commercial car wash that filters and reuses the water, or discharges it into the sewer. Most commercial car washes use one of these techniques.
- Dispose of anti-freeze properly. Most anti-freezes are toxic. The sweet smell attracts pets (especially dogs), who then drink it. Anti-freeze poisoning is serious and often lethal in animals. A safer anti-freeze containing propylene glycol is now on the market and is less likely to harm pets. However, no anti-freeze is environmentally friendly. If you drain it yourself, remember to use a leak-proof container and take it to a household hazardous waste collection site for proper disposal. The Appendix lists two King County Hazardous Waste Disposal collection sites. Call 206-296-4692 for information.
- Recycle used motor oil. Motor oil and aquatic life don't mix! Dumping used motor oil onto the ground or in a storm drain will kill fish and aquatic plants when it reaches streams, rivers and lakes. Find a used motor oil recycler in your community and recycle your oil. Many auto supply stores will accept used engine oil. Make sure you also

puncture used motor oil filters and drain them for 12 to 24 hours before disposing in the garbage. It's important to fix your car if it leaks oil; keeping it tuned up will help prevent leaks.

Painting

- Use and dispose of paint properly. When you paint, plan carefully and buy only what you need. (One gallon of paint will usually cover 300-400 square feet.) You can also buy paint in quarts if you only need a small amount. If you don't use it up doing touch up jobs or small projects, give it away. Theatres, artists, non-profit organizations, shelters, friends or neighbors may be able to use that extra paint. Make sure to place a call to them first and ask if they want it. If they can't use it, ask if they know anyone who can. Some retail stores also accept leftover latex paint for recycling.

You can mix leftover paints together and use them as a primer or base coats. Make sure you don't mix latex and oil-based paints. Latex paints are more environmentally sound than oil-based paints and have no known hazards. They don't require paint thinner to clean up or thin the paint. If you only have a small amount of latex paint left in the can, leave the lid off and place in a well-ventilated area, away from children and pets. Once the paint has dried out, you can dispose of the can in the garbage. The lid needs to be off the can so the collectors see that the paint has dried out. Oil based paints will not dry up; unused portions need to be taken to a hazardous collection site.

Disposing of Hazardous Waste

- Use the right avenues. For example, most counties have hazardous waste sites. Explore alternatives to hazardous chemicals first. If you do purchase a toxic product, buy only what you need and use leftovers before disposing of the container. The resource guide included in this manual provides more information on hazardous waste disposal sites.

Cleaning Up After Pets

- Take care of pet waste. We love our furry, feathery or scaly little friends! But when we don't properly dispose of their waste it becomes an environmental hazard and an irritant to neighbors. It's also a health risk to pets and people because, like human waste, it's teeming with bacteria. When waste washes into storm drains, it ultimately ends up in our lakes and streams and can infect shellfish. Waste produced by dogs and cats in our city is equivalent to the amount produced by 50,000 people (the population of Renton or Kennewick).



Caring for Your Environment at Home

Around the House (continued)

Being a responsible pet owner includes disposing properly of your pet's waste. Always carry plastic bags with you when you walk your dog, and scoop it up after she or he has done the deed. While at home, you can scoop the waste up and flush it down the toilet or seal it in a plastic bag and throw it in the garbage.

Reducing, Reusing, Recycling

- Follow the rules for effective recycling. Food particles left on recyclable materials can contaminate entire loads of recycling, which then have to be dumped as garbage. A few simple steps will help maximize your recycling efforts.

Rinse tin cans and remove labels. The steel industry uses recycled tin cans for everything from automobile parts to fire hydrants. When cans are contaminated with food waste or the labels are left on, they become a hard sale. Make sure all food particles are rinsed out of cans and remove the label. (You can put it in your mixed paper recycling.) Tops of cans are recyclable if they aren't plastic. Make sure to tuck tops inside cans so inspectors don't cut themselves on the edges. Crushing the can will also help maximize space in your recycling bin. Don't recycle any can that contains hazardous material (such as aerosol cans, solvents, paint cans or oil filter.) Hangers, medical waste, and needles are not recyclable, either.



Rinse plastic and glass. Did you know you may be wearing someone's recycled plastic bottle? Several products, including fleece jackets and playground equipment, are made up, in part, of recycled plastic. Rinsing your plastic and flattening it ensures it gets recycled. Plastics marked 1 and 2 are currently recycled, but anything numbered 3 through 7 can't be put in your recycling. Don't throw yogurt or margarine containers, microwave trays, plastic bags, plastic tops or egg cartons into your bins because they can't be recycled at this time. And never try to recycle hazardous material containers.

Like plastic, your glass containers need to be rinsed before recycling them. Labels for glass do not need to be removed because the recycling process is different from the one used for tin cans.

Recycle newspaper, clean mixed paper and cardboard. While paper is our most abundantly recycled material, we're still throwing 15 percent of it into our landfills. Newspaper and clean mixed paper (paper without food contaminants) is easy to recycle because you simply have to place it in the correct bin. Keep newspaper and mixed paper separate, and flatten cardboard. Don't recycle anything with food or human contaminants on it (like pizza boxes, used paper plates, waxed paper, frozen food containers or used tissue). Hardcover books can't be recycled either, but you can sell them to a used bookstore or give them to a local school, library or not-for-profit organization.

Increase the life of materials. Reusing things like cardboard boxes, paper bags and containers reduces the amount of recycling and garbage landfills, and saves money. There are hundreds of uses for most materials. You can make wrapping paper out of old comics, and use old margarine and cheese containers to store food. If you have a dog, use plastic vegetable bags as "pooper-scoopers." You can also take grocery bags with you when you go shopping and reuse them.

Buy only what you need and avoid extra packaging. By purchasing only those items that you need, you reduce the amount of recycling or garbage that you produce. Buying items in bulk also cuts down on packaging. When you purchase products that don't use a lot of extra packaging, you avoid having to throw away or recycle unnecessary materials. When grocery shopping, consider buying staples like pastas in the bulk foods section.

Caring for Your Environment at Home

Water Conservation (continued)

Conserving water is important, even in rainy Puget Sound! As our population grows, water supplies are stretched to the limit. Conserving water in the summer is especially important because that's when we use additional water for lawns and gardens. Wise watering is easy to do and saves money.

Using Water Outside

- Water smarter not harder. Lawn and garden watering accounts for almost half of our water use in the summer. That means wildlife and fish—especially salmon—might have to do with less water when they need it most. And, overnight watering creates a perfect breeding ground for lawn disease. Watering one inch per week during the hottest months of the year (July and August) is sufficient for your lawn. Only newly-planted lawns require daily watering. Our northwest weather often helps with your spring and fall watering, so let the rain do your watering for you. Lawns require less water during the spring and fall because of cooler weather. To avoid evaporation, water early in the morning or late at night—never in the middle of the day. Watering slowly is more effective and helps avoid pooling and run-off. Watering smarter also means a lower water bill.



- Find grass alternatives for slopes, shady areas, and near streams and lakes. Trying to mow a grassy, steep slope is hard work! And grass does not grow well in shady areas. Using alternative plants, grasses and ground covers (low-growing plants that spread quickly) in these areas enhances beauty and saves water, time and labor. The less lawn you have, the less you have to mow. Because mowing near streams and lakes can damage plants that are beneficial to aquatic life, it's a good idea to consider alternative plants for these areas. If you already have a natural plant buffer around a lake, pond or stream, leave it there. These buffers help filter pollutants and protect fish and wildlife.

Alternatives for slopes and shady areas include indigenous plants (plants that are native to a region) that grow well in these conditions. Ecoturf, a mixture of lawn grasses and broadleaf perennials (plants that live from year to year), creates a meadow-like appearance and needs less water than grass. It can be used in lieu of regular grass in lawns.

- Design your gardens with water in mind. By using drought-tolerant plants, and grouping plants with the same needs (moisture and light) together, you save water. For a list of drought-resistant plants, check the resource guide. Drawing or laying out a design scheme before you plant makes for a water-wise, beautiful garden. Using mulch in your garden also helps conserve water because the soil is rich in nutrients and provides additional moisture.

- Use hoses and sprinklers wisely. Your street driveway and sidewalk don't need to be watered. Make sure your sprinklers are positioned toward your lawn and garden, and away from concrete and asphalt. Using a broom to clean your driveway instead of hosing it down not only helps conserve water, it also keeps foreign debris from entering storm drains.

When your lawn and garden need water, drip irrigation sprinklers and soaker hoses are more effective than traditional sprinklers and hoses. They allow water to seep slowly into the soil and are more water-efficient. If you use a hose to water, use an adjustable shut-off nozzle. This allows you to customize a water stream to your immediate needs and also automatically shuts off the water when not in use. To avoid leaks or hose "blow outs", make sure you turn off the water from the faucet when finished. To avoid leaks between spigot and a hose, use a hose washer and regularly check all parts.

Sprinklers can save time, but often are left unattended for several hours. Because hoses and sprinklers can pour out more than 600 gallons

Caring for Your Environment at Home

Water Conservation (continued)

of water in only a few hours, don't leave them running all day. If your sprinkler system is on a timer, make sure you check it frequently to ensure it's operating correctly. Adjusting the timing for different seasons also helps conserve water and prevents run-off. Your sprinkler system must have a rain sensor device to override it in case of rainfall. Remember that over-watering can damage lawns and gardens, and wastes water.

- Avoid fountains that don't recycle water. Ornamental fountains are beautiful, but if they don't recycle water they're costly and wasteful. Research and purchase fountains from manufacturers that are water conscious.

Using Water Inside

- Check for, and fix, plumbing leaks. Leaks waste water and cost you money in higher water bills, as high as several hundred dollars per year if the leak is severe! Any home can have hidden water leaks. The easiest way to check for leaks is to make note of your water meter reading, and then check it again an hour later. It's important that you don't use any water during this period. If the meter reading isn't exactly the same when you do your final check, you have a leak.

If you have a leak, find your main water valve and shut it off. Again, check for the leak by reading the meter, waiting an hour and checking it again. If the meter reading has changed, you have a leak in the

line leading into your house. If the reading is the same, you have a leak inside your house. Check for toilet leaks by adding a few drops of food coloring to the water in the tank. Don't flush the toilet for 15 minutes. If color appears in the toilet bowl after that time, you have a leak in the flapper valve. Once the test is done, immediately flush the toilet to avoid the potential of food coloring staining the bowl. Your toilet has several simple parts to it, and most parts are inexpensive and easy to replace. Turn off the water to the toilet before replacing any parts. Retailers such as your local hardware store, Lowes or Home Depot frequently offer free "how-to" brochures and classes on basic plumbing repair.

Slow faucet drips are deceiving. They may not appear to be using much water, but they can actually waste hundreds of gallons of water per day. A faucet that drips at the rate of one drop per second wastes 2,700 gallons of water per year—water you pay for, but don't use. Replacing a faucet's washer should fix your leak. Washers are inexpensive and relatively easy to replace. Make sure you turn off the water to the faucet before doing any work.

Find ways to save water. Many water conservation techniques are easy and inexpensive to implement. Insulating water pipes helps keep water hot, and wastes less water while it's heating up. And adjusting water temperatures by turning the cold faucet down will balance the temperature without increasing the water flow.

- In the bathroom. Avoiding unnecessary flushing helps conserve water, as does proper food scrap disposal (place it in the trash, not in the toilet). Flushing certain kinds of debris such as dirt and diapers can mean trouble for your pipes.

If your toilet is not a water-saving model, place a brick or water-filled jar in the holding tank. This will reduce the water needed for each flush without interfering with the toilet's performance. If a toilet ever needs to be replaced, consider purchasing a water-saving model, readily available at all home improvement stores.

Consider taking shorter showers or turn off the water while soaping up. Make sure that your shower heads have water-reducing aerators. If you take a bath, close the drain before starting to fill the tub with water. You can waste water while waiting for the water temperature to rise.

Don't let water run while washing your face, brushing your teeth or shaving. Instead, turn the water on and off for wetting and rinsing. Use the sink stopper and dunk your razor while shaving instead of rinsing it under running water. Installing



