



BUILT GREEN is a network of architects, builders, subcontractors, suppliers and real estate agents working together to improve your quality of life by providing quality homes that are cost-effective to own and operate, protect your family's health and well being, and help preserve our beautiful Pacific Northwest environment.

For more information, call the Home Builders Association of Kitsap County at 360-479-5778 to request a brochure and a list of participating members or on the web, see <http://www.wa.gov/kitsap/departments/pubworks/buildbetter.htm> and <http://www.kitsapHBA.com>.

FOR ON-SITE SEWAGE (SEPTIC) SYSTEMS

A septic system that doesn't work properly can pollute surface and ground waters and cause disease and odors.

- Know where your septic system is and protect it. Don't pave or drive over it, or you may damage the tank and drainfield.
- Maintain your on-site septic system according to Kitsap County septic maintenance regulations. Many newer septic installations have pumps, alarms, and timers. These systems must be serviced regularly by Health District certified companies. For more information, contact the Bremerton-Kitsap County Health District at 360-337-5235 or visit the Health District's web site, <http://www.wa.gov/kitsaphealth/EH/Onsite/onsitehm.htm>.
- Don't flush oil, plastic, diapers or anything else that won't decompose. If you have a food disposal, use it sparingly, and have your septic tank inspected more often.
- Divert runoff away from your drainfield. Excess water over a drainfield saturates the soil and can lead to failure.



When You Remodel

When you remodel, choose a *BUILT GREEN* participating remodeler. You'll be sure that your project will be constructed in a high quality way that improves the value of your home, protects your family's health, and protects the environment too.

Additional Resources

Available through the Office of Surface and Storm Water Management, Kitsap County Public Works, (360) 337-5777 or (800) 825-4940:

1. *Salmon and Your Driveway: What's the Connection?*
 2. *What's Surface and Storm Water Management All About?*
 3. *Storm Water Runoff in Kitsap County.*
 4. *Sound Car Wash.*
- Also:
5. *Your Impact on Salmon/Fish—A Self-Assessment.* Published by the Washington Department of Fish and Wildlife. Phone (360) 902-2200. <http://www.wa.gov/wdfw>.
 6. More information about pollution prevention, hazardous waste, recycling, and stormwater management is available at the Kitsap County Public Works web site: <http://www.wa.gov/kitsap/departments/pubworks/>

This fact sheet was developed for Kitsap County Public Works and Kitsap County Office of Surface and Stormwater Management (SSWM), in partnership with the Home Builders Association of Kitsap County

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HOW TO MAINTAIN A "FISH-FRIENDLY" HOME

Erosion occurs when soil from your site is carried away by rain or wind. Often, the soil ends up as sediment in nearby waterways where it can harm fish.

Stormwater is rain that falls on developed land and runs off directly into nearby waterways instead of filtering into the ground. This runoff pollutes our waterways by carrying everything in its path into streams, lakes, and bays. Pollutants include oil, grease, toxic lawn chemicals, bacteria, and nutrients.

A *buffer zone* is a vegetated area near streams or other water bodies. Natural vegetation along stream corridors is critical to habitat. Contact the Kitsap County Department of Community Development at 337-7181 to get buffer requirements before removing any vegetation near a stream or other waterway.

The recent listing of salmon under the Endangered Species Act (ESA) highlights the critical decline of salmon in Kitsap County and other areas of Puget Sound. As a homeowner in Kitsap County, you can do a great deal to protect the habitat that salmon need—plenty of clear, calm, clean, cool water.

This fact sheet will show you how to maintain your home in a "fish-friendly" manner. It describes ways to control erosion, manage stormwater runoff, conserve water, and protect water quality.

CONTROL EROSION

Keeping soil on site and out of waterways is an important part of maintaining healthy salmon habitat. Permanent erosion control measures may be required or already in place. If you are moving into a new home, temporary measures from construction may remain.

- If temporary measures remain due to weather conditions, make sure you know when it is safe to remove them.
- Review critical areas (for example, steep slopes or streams) to determine what needs to be done to protect them.
- Are there any buffer zones? Do not landscape or remove vegetation. Buffer zones are to be kept natural!
- When landscaping or doing other site work on your property, don't leave any bare areas. Cover exposed soil with compost, mulch, or vegetation as soon as practical.

Erosion control measures include interceptor dikes/swales; grass-lined flow channels; riprap (stone)-lined flow channels; and vegetation. Consult with your builder or the County when adding, removing, or modifying specific erosion control measures.

CONTROL RUNOFF

- Don't add impervious surfaces (asphalt and concrete). Instead, use crushed rock or pavers for drives, walkways, RV pads, and decks. They allow water to soak into the ground.
- Preserve natural soils and vegetation.
- Promote drainage to plant beds, surface depressions, and level, vegetated areas.
- For weed barriers, use burlap on hillsides and perforated or porous landscaping fabrics on level areas. Don't use plastic or other impermeable materials.
- Wherever possible, retain existing or plant more trees, bushes, and plants.
- Install a roof drain/catch facility (infiltration system). Infiltration systems direct roof runoff into the ground through a variety of different means (for example, trenches, dry wells, rock pockets, and splash blocks).



As-built drawings show the layout of the system as installed, including actual locations. You can obtain as-builts from your builder or by calling the Bremerton-Kitsap County Health District at (360-337-5285) for on-site sewage systems or Kitsap County Public Works, Stormwater Division (360-337-5777) for stormwater runoff devices. To prevent damage to any permanently installed equipment, refer to as-builts before you perform any excavation or repair work on your property.

Non-Point Pollution
Most pollutants now come, not from large factories, but from our homes, yards, streets, and farms. “Non-point” pollution includes contaminants in runoff from these areas, such as pesticides, fertilizers, oil, antifreeze, herbicides, and sediments.

PROTECT WATER

Whether water falls from the sky as rain or pours out of your faucets and hoses, it will eventually leave your property and flow into nearby waterways or underground waters systems. Here are some things you can do to prevent polluting the water that traverses your property.

- Promptly repair leaky crankcases and transmissions to keep leaking oil out of streams.
- Sweep sidewalks and driveways rather than hose debris into storm drains.
- Direct downspouts and flow paths to drain rainwater to your yard, not the street or drainfield. Helping water seep into the ground aids natural purification processes and prevents water pollution caused by runoff.
- Limit use of bark mulch, and never use in areas that drain directly into storm sewers or open water. It creates toxic leachate that may end up in the water.
- Clean up pet wastes from your lawn.
- Drain chlorinated hot tubs and swimming pools away from waterways and storm sewers.
- Minimize the use of fertilizers. Carefully follow the directions on pesticides and herbicides and apply recommended amounts. Spray on cool, windless days and never near ditches, lakes, or streams. Avoid:
 - ☞ “Weed-and-feed” fertilizers
 - ☞ Chemical fertilizers, especially phosphorus
 - ☞ Lawn subscription services that spray lawns routinely.
- Properly time fertilizer applications. Fertilize only once (in mid-October) or twice (first in late June, after the rainy season and again in mid-October.)
- Use organic or synthetic slow-release fertilizers instead of regular synthetic fertilizers.

- Encourage insect-eating birds and “friendly” insects like ladybugs and lacewings. These help control pests and reduce the need for toxic pesticides.
- Use water-based paints instead of oil-based paints.
- Use low-toxic landscape materials and methods. Examples include low-toxic wood preservatives, naturally rot-resistant woods, and plastic lumber.
- Use less toxic or nontoxic cleaning and maintenance products.
- Use nontoxic or low-toxic moss and mold removers.
- Compost your yard and kitchen vegetable wastes. Keep grass clippings out of ravines and waterways where they will become unwanted fertilizer.
- Keep litter out of streams. In addition to old appliances and trash, litter includes tree branches and grass clippings.
- Don’t alter natural waterways. *Any* changes you make to streams can destroy spawning beds and fish eggs or block fish migration. Do not build ponds or dams without proper guidance and approval from the Washington State Department of Fish and Wildlife.
- Take your car to a car wash—they filter and recycle the wash water—or wash your car on your lawn to keep suds out of storm drains. Soap in small amounts will not harm your lawn but *will* harm fish. Use low-phosphate soaps.
- Keep livestock away from streams and marshes. Animal wastes degrade water quality, and their hooves can cause stream banks to collapse producing siltation and blocking water flow.

Organic, slow release, or controlled release fertilizers contain nutrients that break down steadily over a long period of time. For lawns, use a fertilizer with a ratio of 3-1-2 Nitrogen-Potassium-Phosphorous (NPK). For other plants, including shrubs, ground cover, trees, and gardens, use a fertilizer with a ratio of 1-2-2 NPK.

Adding Compost to Your Lawn Saves Time and Money

Research at the University of Washington has shown that, compared to traditional lawn installations, turf grown on compost-amended soils:

- Uses less water for irrigation
- Requires less fertilizer and pesticide
- Covers and “greens up” more quickly
- Looks better
- Reduces stormwater runoff.

- Build a lockable storage for hazardous cleaning and maintenance products. This protects against spills and inadvertent contamination of nonhazardous waste.
- Build in areas, food waste chutes, and containers for composting yard and kitchen vegetable wastes. Compost or use a worm bin to “recycle” household food and yard wastes. Don’t use a garbage disposal.
- Do not pour solvents, paint, antifreeze, or lawn and garden chemicals down the drain, in the gutters, or near water. To dispose, follow the disposal instructions on the container and take them to Kitsap County’s Moderate Risk Waste Collection Facility.

The Moderate Risk Waste Collection Facility collects household hazardous waste and is located at 5551 SW Imperial Way in the Olympic View Industrial Park off Highway 3 near Bremerton National Airport. It is open 10:00 a.m. until 4:00 p.m., Thursday through Saturday. There is no charge for Kitsap County residents.

CONSERVE WATER

Groundwater replenishes streams with the cool, clean water that salmon need to thrive. Conserving household water preserves groundwater supplies.

- Don’t use more water than you need to for bathing, washing, cleaning, and flushing.
- Reduce toilet flush volume by installing a displacement device. (And save up to *12,000 gallons* of water per year!)
- Promptly repair plumbing leaks.
- Don’t overwater your lawn. A good rule of thumb is one inch per week in the dry months. Water in early morning or evening to minimize evaporative loss.
- Don’t cut your grass too short. Set your lawn mower blade 2 to 3 inches high to get deeper healthier grass roots, which retain moisture. Use a mulching lawn mower or let lawn clippings lie to add nutrients as they decompose.
- Amend your lawn and garden soils with compost.
- Plant hardy, water-conserving native plants and groundcover. Minimize the area of your lawn planted with thirsty grass.
- Install low-flow shower-heads. (And reduce water use *by 70%!*)
- Install low-flow toilets. (And save up to *34,000 gallons* of water per year!)
- Install a rainwater collection system to use for outdoor watering. (This also helps manage runoff.)
- Install water-efficient domestic appliances such as a horizontal-axis (H-axis) clothes washer (cuts water use by *two-thirds!*) and energy efficient dishwashers.
- Look for appliances with the seal of the Energy Star Program (a program of the Environmental Protection Agency (EPA) and Department of Energy (DOE)).
- Install and regularly maintain a high-efficiency irrigation system.
- Consider installing a “greywater” system to collect used water from your dishwasher, baths, showers, and clothes washer. Use the greywater to water your lawn. (If you do this, use less-toxic or nontoxic cleaning agents.)