



Certified Wood comes from forests certified by an independent third party agency as well-managed according to strict environmental, social, and economic standards. Two such agencies are the Forest Stewardship Council (FSC) and SmartWood.

EFFICIENT USE OF WOOD

Forests play a critical part in preserving the water cycle and the integrity of natural waterways. A home built with efficient and wise use of wood is friendly to fish. Does the home feature wood efficient strategies, such as:

- Efficient framing (advanced framing). Reduces wood use by 10 to 30 %.
- Engineered wood, such as finger jointed lumber, glu-lams, and I-joists. Reduces wood waste.
- Certified wood. Protects forest habitat.
- Wood waste recycled on site (Ask the builder). Reduces wood waste.

Maintaining Your New Home

Once you've purchased your new home, make sure you know how to maintain it in a fish-friendly way. Ask for *How to Maintain a "Fish-Friendly" Home*, available from the Home Builders Association www.Kitsaphba.com or Kitsap County Public Works Department.

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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Printed on recycled paper.



HOW TO SHOP FOR A "FISH-FRIENDLY" HOME

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 or www.KitsapHBA.com to request a brochure and a list of participating members or on the web, see <http://www.wa.gov/kitsap/departments/pubworks/buildbetter.html> and <http://www.kitsapHBA.com>.

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. Development and construction can negatively impact salmon habitat. Fortunately, homes and developments can be built in ways that better protect the habitat that salmon need—plenty of clear, calm, clean, cool water.

"Fish-friendly" strategies include protecting the site, using wood wisely, and protecting water supplies. This fact sheet will help you be better informed about fish-friendly features as you go about looking for your dream home.

LOOK FOR THE BUILT GREEN LOGO

One way to be sure you have a fish-friendly home is to look for homes that qualify under the BUILT GREEN (BK) Program. Homes qualify for BBK certification by including environmentally-friendly features such as those highlighted in this fact sheet. Homes achieve a 1-, 2-, or 3-star BK rating, depending on how many features are incorporated. Salmon runs benefit, but so will you, with features that offer greater energy performance, improved indoor air quality, and greater durability. You'll get more comfort and value for your investment while helping the environment.

A Case Study—Award-Winning Home Fish-Smart Tool



This 1,650 square-foot, 3-Star BK home won "Best of Show" in its price category in the 1999 Kitsap County Parade of Homes and has been featured on Home and Garden TV. It incorporates many fish-friendly strategies, including a small footprint, efficient framing, engineered wood products, minimal landscaping, and an extremely water-efficient H-axis clothes washer. To find out more, take a virtual tour at <http://www.wa.gov/kitsap/departments/pubworks/bbktour.html>.



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.

As-built drawings show the layout of the system as it was actually installed. You can obtain as-builts from your builder or by calling the Bremerton-Kitsap County Health

PROTECTING THE SITE

- Look for a smart, compact design. Smaller houses are easier on the land. They also take less material to build, repair, and maintain and cost less to heat.
- Are good erosion control measures in place on the property? Such measures may include—interceptor dikes/swales; grass-lined flow channels; riprap (stone) lined flow channels; and vegetation. If some are temporary, find out when they can be safely removed. If permanent, find out what is required to maintain them.
- If the home is near water, are there buffer zones and have they been maintained? (Keep in mind that you cannot landscape or remove vegetation from buffer zones.)
- Make sure no portion of the property is left bare for extended periods. Exposed soil will erode and flow into waterways and should be covered with compost, mulch or vegetation as soon as practical.
- Ask for as-built drawings of any permanently installed stormwater runoff devices and on-site septic systems.

PROTECTING WATER

Pollution Prevention

What features protect against water pollution? Here are some things to look for:

- Limited use of bark mulch, and never in areas that drain directly into storm sewers or open water. Bark can create a toxic leachate.
- Use of low-toxic landscape materials such as low-toxic wood preservatives, naturally rot-resistant woods, and plastic lumber.
- Lockable storage for hazardous cleaning and maintenance products.

- Hot tubs and swimming pools drain away from waterways and storm sewers. Chlorinated water is deadly to fish and aquatic life.
- Built in areas, food waste chutes, and containers for composting yard and kitchen vegetable wastes instead of a garbage disposal.

Stormwater Runoff

What has been done to manage stormwater runoff? Effective strategies mimic nature's processes by encouraging the flow of water into the ground for filtration and purification. Look for:

- Downspouts and flow paths that drain to the yard, not the street or septic drain field.
- Crushed rock or pavers for drives, walkways, RV pads, and decks instead of impervious asphalt and concrete.
- Areas that promote drainage to plant beds, surface depressions, and level vegetated areas.
- Use of burlap, perforated, or porous landscaping fabrics for weed barriers. Plastic and other impermeable materials increase runoff.
- Plenty of trees and shrubs, preferably native trees, bushes, and plants. They capture and hold a lot of rain before it reaches the ground.
- 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), providing temporary storage and opportunity for the water to soak into the ground.

District at (360-337-5285) for on-site sewage systems or Kitsap County Public Works, Stormwater Division (360-337-5777) for stormwater runoff devices.

Non-Point Pollution

Most pollutants now come, not from large factories, but from our homes, yards, streets, and farms. "Non-point pollution" sources include runoff from these areas. Contaminants in this runoff include pesticides, fertilizers, oil, antifreeze, herbicides, and sediments.

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.

For Septic Systems

A septic system that doesn't work properly can pollute surface and ground waters and cause disease and odors. If you are looking at a home with an on-site sewage system, here are some important tips.

- Find out where the septic system components are located. Make sure the tank(s) and drainfield are protected and free of obstructions (removed from large trees and not built or paved over).
- If the home has been previously occupied, ask for maintenance records. When was the tank last inspected? Consider hiring a certified maintenance contractor to inspect the system before you buy.
- Educate yourself about proper operation. For example, you should not flush oil, plastic, diapers or anything else that won't decompose. If the home has a food disposal, you should use it sparingly, and have your septic tank inspected for pumping more often.
- Make sure stormwater runoff is diverted away from the drainfield. Excess water over a drainfield saturates the soil and can lead to failure.

Maintaining Septic Systems

Many newer septic installations have pumps, alarms, and timers. These systems must be serviced regularly by Health District certified companies—Make sure you are aware of current Kitsap County septic system maintenance regulations. 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>.

CONSERVING WATER

Is the site and home designed to conserve water? Look for these features.

- Low-flush volume toilets and devices. A simple toilet displacement device can save up to *12,000 gallons* of water per year! Water-efficient toilets can save up to *34,000 gallons* of water per year!
- Other high-efficiency fixtures, such as low-flow shower heads. (They can reduce water use *by 70%*!)
- Water-efficient domestic appliances such as a horizontal-axis (H-axis) clothes washer (reduces 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)).
- Make sure plumbing fixture sensors are properly tuned.
- If there is an outdoor irrigation system, is it efficient?
- Has the landscaper reused high quality top soil and amended with compost? (If you will be doing the landscaping, take advantage of compost's many benefits.)
- Look for landscaping that uses hardy, water-conserving native plants and groundcover. Avoid vast expanses of lawn planted with thirsty grass.
- A rainwater collection system directs rooftop runoff to barrels, cisterns or areas of the yard to use for outdoor watering needs.
- A "greywater" system collects used water from your dishwasher, baths, showers, and clothes washer. (Consider using greywater to water your lawn.)