The future health of Connecticut’s water depends on the actions of every individual. No matter where we live, work, or play, we are somehow connected to a nearby river, stream, lake, pond, wetland, or shoreline. The rain that falls around us will always move according to gravity, following a path to the nearest downhill body of water and, in Connecticut, eventually to Long Island Sound. This simple fact means that the health of Long Island Sound -- and every river and stream that flows into it -- is connected to how we live on the land. Yet, many people still think that water pollution is caused mostly by discharges from business and industry and are unaware of the unique role we play in determining the fate of our waterways.

The good news is that industrial discharges are largely under control thanks to the Clean Water Act passed in 1972. With passage of this act, we saw the number of healthy rivers across the nation (those considered clean enough for fishing and swimming) increase from just 20% in the mid-1900’s to 57% by 1994. The bad news is that just ten years later we saw that number drop slightly to 53% and by 2012, only 48% of rivers and streams were considered clean enough for fishing and swimming.

With industrial discharges under control, what is causing the decline in river health? According the U.S. Environmental Protection Agency, it is polluted runoff. Runoff is the water that does not soak into the ground during a storm. Forests and meadows are excellent places for water to soak into the ground, but with a growing population these areas are giving way to more developed land (i.e. more buildings, roads, parking lots, lawns) and the volume of runoff is increasing. So is the amount polluted runoff -- water that picks up nutrients, salts, sediments, bacteria, pesticides, and other widely-used chemicals (like cleaning supplies and automotive fluids) from the landscape and carries them to nearby waterways. With fewer natural areas for water to soak into the ground and more pollutants being used in excess, nature’s cleaning systems are overloaded, causing more pollutants to end up in our waterways.

With the health of our nation’s rivers declining over the past two decades, now is the time for you to make a real and positive difference around your home to reduce polluted runoff. Here are just some simple, River Smart steps you can take:

1. **Nurture native trees, shrubs, and flowers.** Native species require no fertilizers or pesticides or watering to keep healthy. They thrive in the local habitat and provide great food and shelter birds, pollinators, and other wildlife.

2. **Reduce the size of grass lawns.** Lawns limit the amount of water that can soak into the ground and often require large amounts of fertilizers and pesticides. If you do have a lawn, follow the rule “mow high and let it lie.” By letting your grass grow taller, you also let the roots grow deeper, and leaving the clippings provides a natural fertilizer. Altogether, you will improve the lawn’s ability to absorb water, stabilize soil, control weeds, and not dry out.
3. Limit the amount of paved areas and create natural places for the water to soak into the ground. Rain gardens and swales are excellent ways to attenuate and treat runoff from roofs and driveways. Pervious material like gravel, porous concrete, and field stone can be used for patios, driveways, and walkways.

4. Plant or grow natural buffers at the edges of rivers/streams, lakes/ponds, and wetlands. These buffers – made up of trees, shrubs, woody and herbaceous perennials and ground cover – prevent shoreline erosion, reduce flood impacts, capture and treat runoff by trapping sediment and removing nutrients, regulate water temperature, and provide food and habitat for wildlife.

5. Reduce or eliminate use of fertilizers and pesticides. These chemicals washed from your property with every rainstorm into a nearby waterway where they can cause algal blooms and be deadly to aquatic organisms. Before applying chemicals, get your soil tested to determine what you actually need and if necessary, use only a slow-release, low-concentration fertilizer or natural compost. If applying pesticides, spot treat only when absolutely necessary and carefully follow the safety guidelines provided.

6. Dispose of pet waste in the trash or a pet-waste processor. It is full of bacteria that can make our waterways unsafe for drinking, swimming and fishing.

7. Have your septic tank pumped and inspected regularly. A faulty system can release harmful bacteria to our waterways and can be costly to repair. Every system is different, but a good rule of thumb is to pump out every 3 to 5 years.

8. Check and fix all the taps on sinks, baths, toilets, and hoses for leaks and drips. Upgrade to more water-efficient appliances and fixtures, like those with the “WaterSense” logo (the water version of EnergyStar).

9. Dispose of unused and unwanted medications in the trash; do not flush them down the toilet. The fate of these chemicals interacting in the environment is still unclear and we are only just beginning to understand their effects on aquatic organisms.

To find resources to help you get started with these and other River Smart practices or to learn more about how polluted runoff affects the health of our local rivers, visit www.riversmartct.org. The River Smart program will introduce you to and provide you with the tools you need to and create areas to naturally absorb and filter runoff, to reduce chemical use, and to conserve water. The future health of our water is in our hands. Working collectively, we CAN reduce water pollution and restore the health of our rivers, streams, lakes, and the Long Island Sound. Show your commitment to clean water by visiting www.riversmartct.org and make the River Smart Pledge today. Pledge participants will a River Smart yard sign, a pledge reminder magnet, and a resource packet (while supplies last).