

Watershed Stewardship

...it's up to you!

Watershed Stewardship.

It's really not as complicated as it sounds.

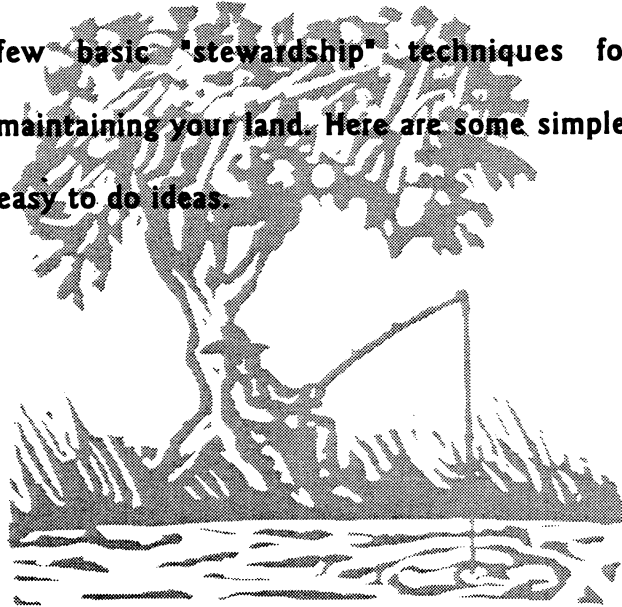
It can be as simple as a few "good housekeeping" ideas for the outside of your home. Good "stewardship" can help reduce the amount of storm-water and chemicals that enter your streams and ground water. For any landowner - from farm operators to commercial property managers to suburban homeowners - you have the opportunity and the responsibility to become a watershed steward.

All land, no matter how large or small the parcel, is a piece of at least one watershed. Even if there is no stream within sight, your land is a piece of a watershed's puzzle. In fact, your land **IS** a "mini-watershed." When it rains, notice how the runoff flows toward common drainage pathways. These pathways may be small headwater stream channels, natural or constructed swales, or even a driveway or sidewalk.

But every property has the 3 basic elements of a watershed

- 1*** land surface (including your rooftops!) that catches the rainfall and directs the runoff into runoff pathways;
- 2*** drainage ways, either natural or manmade, that collect and drain the water from the land surface; and
- 3*** a ground-water aquifer that underlies your property.

As the owner of your "mini-watershed," you have many opportunities to contribute to environmental protection just by following a few basic "stewardship" techniques for maintaining your land. Here are some simple, easy to do ideas.



Know your nearest stream.

If you do not know what named stream your property ultimately drains into, look at a map. Commercial book maps for Chester County show nearly all named streams. Find the stream nearest your property and note its name. Or, call us at Chester County Water Resources Authority and we'll help identify your watershed and provide you with a watershed map.

Join your local watershed association.

In Chester County, there are 8 non-profit, membership based, watershed associations - Brandywine Valley Association, Red Clay Valley Association, White Clay Creek Watershed Association, Octoraro Watershed Association, Green Valleys Association, Elk Creeks Watershed Association, Chester-Ridley-Crum Watersheds Association, and the Darby Creek Watershed Association. Call CCWRA for contact information. For a nominal dues fee, these associations will provide many stream and environmental events, newsletters of interesting information, and other members that share your interests and commitment. Get involved!

Lead by example.

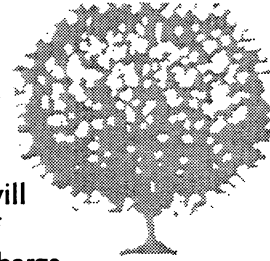
If your neighbors, friends and family see you being a "watershed steward" by the way you manage your "mini-watershed," they may decide to do it as well. Share your information and ideas with them.

Practice "good watershed housekeeping."

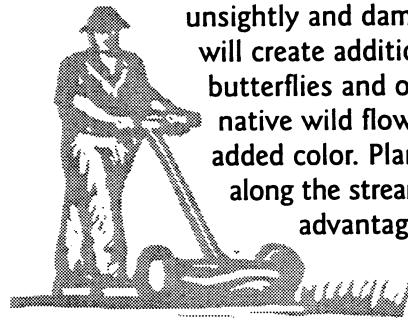
The outside of your home is as important as "good housekeeping" is on the inside. Here are some ideas that take little time, effort, or cost, but as more people do them, they collectively can make a **BIG** difference in preserving our streams and ground waters:

Plant more trees and bushes.

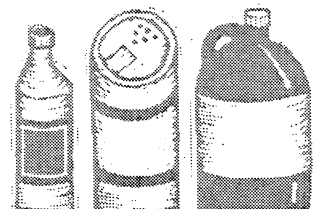
These help to "break the fall" of raindrops and therefore slow the flow of runoff and erosion. This helps to retain more beneficial rainfall on your land so that it will infiltrate to support the roots of your plants and grasses, and recharge your ground water aquifer (and your well!).



If you live along a stream, **don't mow right up to the stream bank.** Leave an unmowed buffer along the stream, as wide as you are willing to allow (the wider the better). This will allow for better protection of the stream bank from unsightly and damaging erosion, and will create additional habitat for birds, butterflies and other wildlife. Plant a native wild flower mix in this area for added color. Planting bushes and trees along the stream also add tremendous advantages to protecting the stream and its living resources.



Always properly dispose of household hazardous substances. Paints, used oil, batteries, tires, household cleaners, solvents, pesticides, sealants, fertilizers etc. are hazardous to plants, wildlife and humans. **PLEASE DO NOT** pour these chemicals into your sink drains, nearby storm drains, or onto your land. Forget about that old habit of emptying containers (no matter how small) behind your garage. Sink drains will discharge these chemicals into your on-lot septic system, and then into your ground water. Storm drains discharge these



chemicals **DIRECTLY** into our streams. Chester County offers household hazardous waste drop-off events 4 times per year. Check with the Chester County Health Department or your watershed association to find out where to take your hazardous substances.

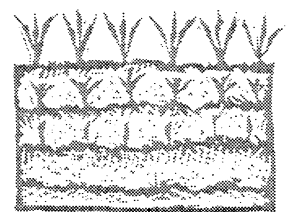
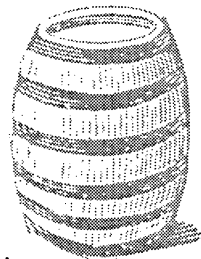
Have your on-lot septic tank emptied by a reputable professional about once every 3 years. Sludge collects in the buried tank and as the tank fills, the fluid it receives cannot be adequately separated. When the tank overflows, it can cause sewage to back up into your house, and can cause raw sewage to be discharged into the ground and into your (or your neighbors) ground water.



Re-direct your downspouts away from driveways and sidewalks and onto grassed areas or flower gardens. Put a few small rocks at the end of the downspout to help dissipate the velocity and energy from the running water, and therefore help avoid creating erosion rivulets in your yard.

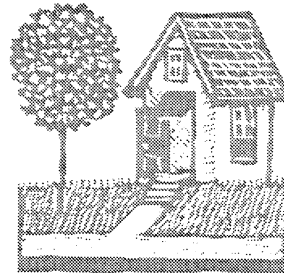
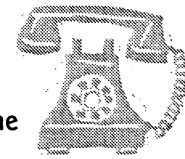


Install a rain barrel at one or more of your downspouts. These are available from gardening and arborist supply companies. New designs nearly eliminate the problems with odors and bugs, but put it away from the doors to your house to be sure. Rain barrels are made of recycled plastic and have valves to use to fill watering cans for watering your flower beds.



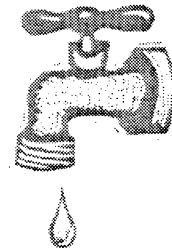
Convert small depression areas into rain gardens. These can be small gardens consisting of water tolerant plants and bushes that will help retain runoff and allow it to be used beneficially. Planting water tolerant plants in areas where erosion is winning the battle may also help solve an unsightly problem.

Contact the Penn State Cooperative Extension, Chester County Conservation District, or the Chester County representative for the Natural Resources Conservation Service if you have a significant erosion problem. They can help provide you with the information or technical assistance to design and install a solution that will work for you and for the environment.

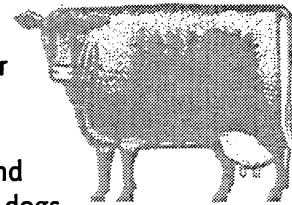


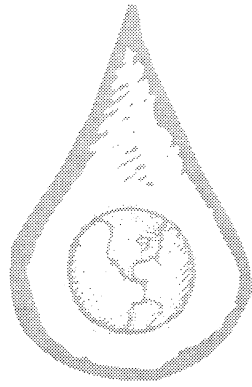
Don't fertilize your sidewalks and driveways. Use a mulching mower, if possible. Always leave a buffer strip around the outer edge of your lawn that you do not cover directly with your spreader. This will eliminate excess chemicals landing on the pavement and being carried off with the next rain into our streams and waterways.

Always conserve water. Even when there is no drought, water conservation is our responsibility. Use a broom instead of a hose to clean your driveway and sidewalks. Compost your garbage instead of putting it down the garbage disposal (running a garbage disposal consumes a lot of water). Never walk away from a running faucet. Keep a pitcher of water in the refrigerator for that cold drink instead of letting the tap water run until it is cool. When running water for hot water, catch the initial cool water and use it for your plants or pets.



If you have outdoor pets or farm livestock, their **waste can be a serious source of pollution** to our streams and ground waters. If you own dogs, always collect the waste and dispose of it. If you own livestock (from 1 to 100 animals or more), call the Penn State Extension Office or the Chester County Conservation District or your watershed association for information on waste management practices that will help keep your livestock - and our streams - healthy.





There are many other tips and techniques for keeping your land from contributing unnecessary pollution and erosion to our streams and ground water. You and your family may have other techniques that work for you.

Share them with us!

Send in your ideas for "at home stewardship" and we will put them on our website to share with others. If you need assistance in getting started with any of the ideas above, call your watershed association, conservation district, extension agent or Chester County Water Resources Authority for more information.

WE'RE HERE TO HELP!!

Remember, "watershed stewardship" is everyone's responsibility. But it can also be fulfilling. This weekend as you go about your chores, look at your watershed and be a watershed steward!!

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Fax: 610-344-5401
Website: www.chesco.org/water.html

Other sources of information and assistance:

Chester County Planning Commission
610-344-6285

Chester County Conservation District
610-696-5126

Chester County Health Department
610-344-6526

Penn State Cooperative Extension of Chester County
610-696-3500

Natural Resources Conservation Service, U.S. Department of Agriculture
(Chester County Office)
610-696-0398

