



UN WATER

UN HABITAT
FOR A BETTER URBAN FUTURE



World Water Day

2 0 1 0

Clean Water for a Healthy World

How to protect water quality *You can make a difference*

Why care?

Safeguarding the world's water quality is critical for human health and the health of our ecosystems. Our water quality depends on the commitment of individuals, communities and governments.

What can you do?

Individuals can make a difference by spreading *awareness* about the connections between *water quality* and *health*, and advocating for *better services and better water-protection laws and policies* at community, regional, and national levels.

We need action at all levels to:

Prevent pollution

Treat what we dispose of into waterways

Restore polluted waterways

- Awareness can lead to better management of and disposal of solid and human waste and chemical and industrial waste into waterways, as well as treating wastes before they go into waterways.
- Water-quality protection means developing, promoting, and educating citizens to campaign for safe and cost-effective ways of treating drinking water before consumption.
- Tailor made messages and information for communities in areas without sewage collection can help people make informed decisions and determine the best strategies to avoid contaminating local water sources. This means, for example, avoiding urinating or defecating in or near the water; building toilets/sites for waste downhill from wells to reduce risks of contaminating groundwater; employing household water treatment and safe storage techniques and buying least polluting products and services.
- Individuals can also participate in restoration organizations and activities to learn and then educate others in the community and advocate for better water-quality solutions: Some solutions include "Low Impact Development" and protecting natural areas.
- We can work on community campaigns to spread awareness about the impact of refuse disposal and the lack of safe sanitation on water quality and health.

TIPS FOR PROTECTING WATER QUALITY

For residents of urban and suburban areas

As our cities and suburbs grow, more and more surface area is impervious, meaning that water doesn't soak in, it runs off. As it runs off, more and more pollutants are carried into waterways including oil, grease, and toxic chemicals from motor vehicles, pesticides and fertilizers from lawns and gardens, waste from pets and sewers, chemical seepage, trash and more

- Decrease polluted runoff by replacing paved surfaces, where possible, with porous pavement materials and plantings (especially native plants).
- Sweep, don't hose down, driveways, sidewalks, gutters, and patios.
- Direct rainwater to lawns and gardens or rainwater catchment.
- Pick up after your pet. Pet waste is raw sewage.
- Store and dispose of household chemicals properly. Take paints, solvents, cleaners, and pesticides to household hazardous collection sites where available.
- Check cars for fluid leaks and recycle motor oil. Find a "green" car wash that recycles wastewater and avoid hosing down cars in driveways and on streets.
- Don't flush garbage down the toilet.
- Never pour anything down the storm drains and don't litter! Everything you see on the streets can be carried into our waterways.
- On lawn and garden areas, use fertilizers sparingly and avoid harmful pesticides.
- Compost, don't trash, yard and garden clippings.
- Weigh in on city planning! Vote for ordinances and plans that require "Low Impact Development" strategies for new growth and protect natural areas.
- Volunteer for restoration organizations and activities and help educate the community on water-quality solutions.



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TIPS FOR PROTECTING WATER QUALITY

For residents of rural and agricultural areas

Sediment that is washed off from fields is one of the largest sources of agricultural water pollution, as this soil runoff often contains harmful pesticides and chemical contaminants. Runoff from fertilizer adds nitrogen and phosphorous to waterways, and these extra nutrients can lead to algae growth that depletes oxygen in the water and harms the ecosystem.

- Use soil erosion control techniques and implement nutrient management plans on agricultural land to reduce excess and reduce runoff that contaminates waterways.
- Use Integrated Pest Management (IPM) techniques (which include biological pest control) to minimize pesticide impacts on waterways.
- Use the least – and least toxic – applications to protect groundwater, because fertilizers and pesticides used to grow crops may leach through soils and contaminate groundwater supplies.
- Control farm animal access to water resources by constructing fences or bushes and trees to protect water quality. Livestock eat the vegetation that protects stream banks, their hooves can cause further erosion, and their waste degrades water quality.
- Maintain your septic system and have it inspected and pumped every 2-5 years. Keep household hazardous wastes out of it.
- Remember that roots from trees and shrubs can damage the septic system, so keep plantings away from the area.
- Make use of “Green infrastructure” to improve both urban and rural waters: use soil, trees, plants, wetlands, and open space to reduce total runoff and treat what is produced through capture and reuse or infiltration of rainwater.
- Avoid draining, filling and damaging wetland ecosystems. Wetlands act as a natural water treatment and purification systems.
- Sustainably manage forests by avoiding clearcutting to maintain their functions such as storing water and regulating flow.
- Be involved and speak out! Join – or start – a local watershed coalition, stream or river protection group or conservation organization



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TIPS FOR PROTECTING WATER QUALITY

For residents without sewerage systems

Good practices can help contain pollution and keep water safer. Sharing the information and getting a community involved is one of the best ways to begin taking on the water-quality challenge. An organized community can help direct the attention of policymakers to invest in solutions.

- Urinate or defecate in safe distance from water sources to prevent contamination of the water with germs/ bacteria.
- Use safe sanitation solutions to keep human waste away from water. This waste also needs to be treated before it affects waterways.
- Water used for cleaning hands and bodies after defecating should never be dumped into lakes and streams, but rather into a toilet or waste pit (20 meters from any surface water, wells, or springs).
- Build toilets/sites for waste downhill from nearby wells to reduce the risk of contaminating the groundwater.
- Use fertilizers and pesticides in limited amounts to help to keep them from entering waterways.
- Protect the area around a spring source with a fence to help keep animals out. A drainage ditch from the source helps avoid pooling and mud where germs can thrive.
- Use clean, narrow necked containers to collect water to help keep the water safer. If needed, treat water before drinking by using chlorine, UV disinfection, or boiling.
- Spread the word and make sure everyone in your community knows and understands how to help keep water sources safe.
- Many problems can be solved through community organizations or other partnerships.

