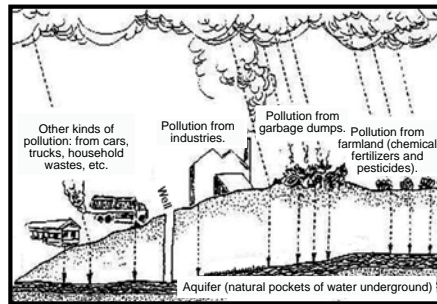


What do you know about water?

Our bodies are made up of more than 80% water!

Clean fresh water (that isn't full of salt like sea water, or polluted like sewage water and waste water) is one of the most precious resources we have. Without fresh water we couldn't live on this planet. Unfortunately there are big problems with fresh water in our world today because of pollution from people and industries. Many of the places that supply us with fresh water (like forests, rivers, and lakes) are disappearing or becoming polluted.



We use water every day for cooking, drinking, washing, growing food, and making almost everything we use.

How can we conserve fresh water?



Understand how precious fresh water is and...

- Stop polluting rivers and oceans.
- Don't leave taps on when you are not using them.
- Fix broken taps as soon as they start leaking.
- Collect, store, and use rain water.
- Reuse water as much as possible.

What is wastewater?

Wastewater is water that has been contaminated by chemicals, human waste, or animal waste. This includes water that comes from toilets (blackwater), and water that has been used for bathing or washing things (graywater).

What can blackwater do to our environment? It depends on how the blackwater is disposed of. If blackwater is stored in a septic tank that isn't sealed properly, it will seep into the ground and can contaminate well water and ground water. If blackwater is pumped into rivers or the ocean, it will eventually kill fish and other sea life, as well as causing human illness to those who come into contact with the water.

What can we do about our blackwater? Blackwater needs to be treated before it flows back into the environment. Wastewater Gardens® purifies blackwater so it can be safely returned to nature. Doing this will help conserve precious fresh water resources.

Today, Wastewater Gardens® are purifying and conserving water in many countries all over the world. You can see samples of some of these gardens on our website: www.idepfoundation.org

A Wastewater Gardens® Fact Sheet

How to conserve & clean

Water

with

Wastewater

Gardens®

Wastewater Gardens® are a great way to clean water for reuse and to help conserve our fresh water resources!

www.idepfoundation.org

How do Wastewater Gardens® purify and conserve water?

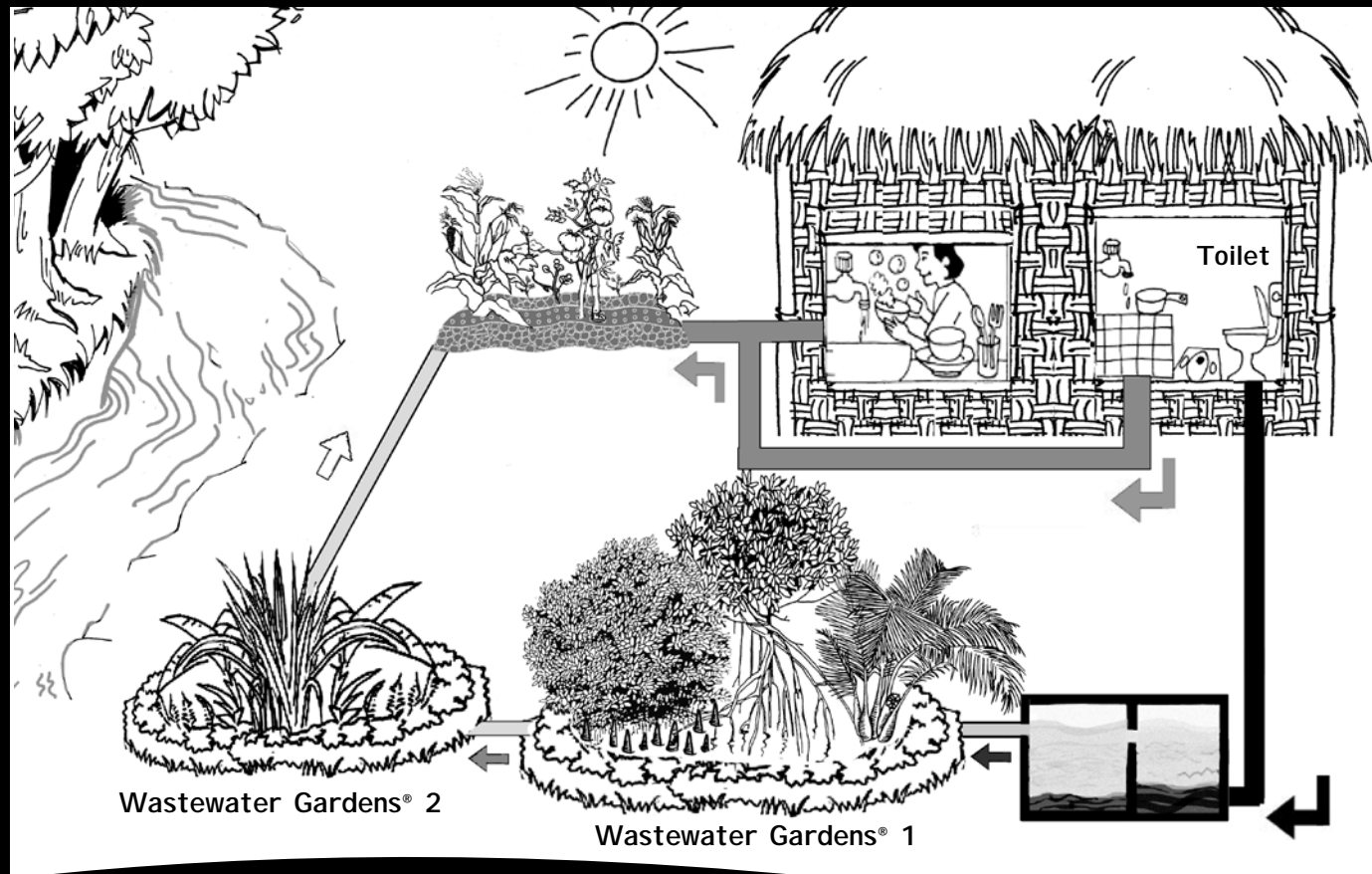
Normally wastewater from your toilets (called blackwater) goes to your septic tank, and disappears into the ground below you. This pollutes your well water and groundwater (the water that flows below the earth's surface). Using rivers or water channels as toilets can be very dangerous for yourself and other bathers, especially children, as there are many diseases and infections that you can catch from this.

In a Wastewater Gardens® system, blackwater flows through a sealed (water tight) septic tank into a water-tight, plant-filled living water treatment system. The plants use the rich nutrients in the blackwater to grow. At the same time, oxygen and microbes that are in the Wastewater Gardens® eliminate harmful bacteria, that could cause disease if untreated. In 5 days, the water that comes out of the Wastewater Gardens® is clean enough to water your gardens.

The wastewater from washing and cleaning (called graywater) can be piped straight from your sinks, drained through a bed of gravel, and stored underground so there is no risk of direct contact. It can then be used directly to irrigate your gardens.

In the system shown here, Wastewater Gardens® 1 uses mangrove trees and shrubs, which can be used for food, medicine and crafts.

Wastewater Gardens® 2 uses native wetland plants, water-tolerant fruit trees such as banana and papaya, and medicinal herbs.



Wastewater Gardens®

Eliminate the risk of diseases caused by contact with blackwater.

Are a low-cost, long-lasting, easy to maintain appropriate technology.

Don't have bad odors.

Mosquitoes don't breed in them.

Can be made any size; for homes, clinics, schools, hospitals, or communities.

Can use either fresh water, salt water, or a combination of both.

Conserve water in dry areas through reusing water for irrigation.

Are beautiful gardens that grow well even in very dry areas.

The plants grown in WWG's are often locally available and are productive and healthy.

To see pictures of Wastewater Gardens® all over the world, visit: www.idepfoundation.org



IDEP

This fact sheet was developed by IDEP Foundation