

## Rainwater for life

Photo: Trisha Macomber



*Underground catchment tanks can also be hidden by a lanai, which saves space, looks nice, and still provides access to the water.*

Some people specifically choose homes with water catchment because it is environmentally friendly and is part of a self-sufficient lifestyle.

### Rainwater catchment:

- Makes use of a natural resource and reduces runoff
- Encourages conservation or wise water management
- Supports replenishment of groundwater for our earth
- Is ideally suited to agriculture because it contains few salts, which are hard on plants
- Makes it possible to live “off-grid,” for those who desire to live in non-invasive ways, using solar, hydro, or wind power and water which do not deplete the earth
- Rainwater is soft water, lessening the need for soaps and detergents, which saves money, is gentle to clothing and hair, and also tastes great.

### Interesting facts about rainwater catchment:

- As of 2003, about 30% of homes in Hawai`i County are on rainwater catchment
- In some districts, as many as 60-70% of the area’s homes are on rainwater catchment
- Rainwater catchment is a viable option of obtaining water and is used worldwide
- Rainwater catchment meets household, commercial and agricultural needs
- Many design and function options are available
- Catchment is a “green” alternative and a vital part of the reduce/reuse/recycle process.

### For more information, contact:

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## RAINWATER CATCHMENT SOLUTIONS:

# Welcome to Rainwater Catchment



An equal opportunity/affirmative action institution providing programs and services to the people of Hawai`i without regard to race, sex, age, religion, color, national origin, ancestry, disability, marital status, arrest and court record, sexual orientation, or status as a covered veteran.

## What is a rainwater catchment system?

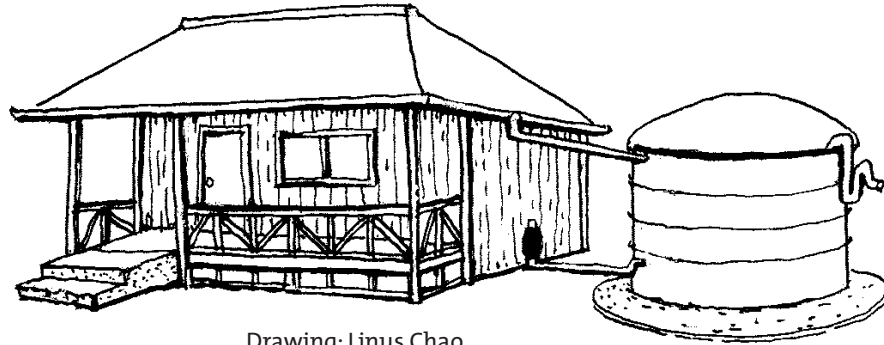
Users catch rainwater from a surface (generally a rooftop), transport it through a gutter system, where it empties into a storage tank. The water is then pumped into the house, usually through a purification system, for everyday use such as showers, laundry, cleaning, cooking, and drinking. It can also be used outdoors. The purification system can be located where the water enters the house (point-of-entry) or at the faucet (point-of-use).

## From home to work to community

In addition to household use, rainwater catchment systems are also used for commercial or community

purposes. Examples include agriculture, schools, businesses, hotels, camps, apartments and military installations. Accessibility to onsite water through rainwater catchment makes it possible to build and provide

basic services in places where it would otherwise be impossible. Rainwater catchment systems can also be valuable for stormwater and flood control management. When integrated with landscape design, rain water catchment systems can allow the



Drawing: Linus Chao

earth to replenish and soak up some groundwater instead of being flooded or overrun. This prevents the pollution of lakes and streams—sources of most public water supply—and oceans.

## What will I need to do if I have a catchment system?

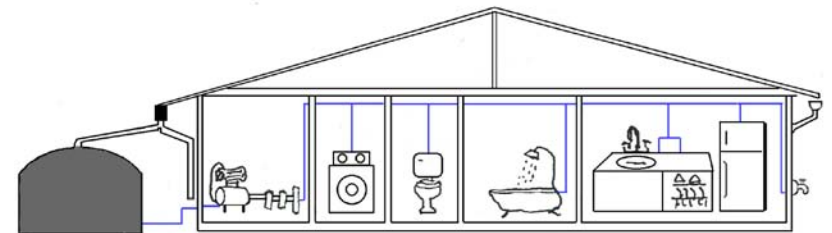
Users need to keep the roof, pipes, and tank clean. Filters, chemicals, or treatment systems like ultra-violet lights can screen or further treat the water to deactivate bacteria, viruses, and protozoa which may cause illness. Because you are responsible for your own water system, you need to be aware of its status on a regular, ongoing basis by testing your water. Simple, low-cost test kits are available on our website at [www.hawaiirain.org](http://www.hawaiirain.org), as well as at local hardware and catchment supply stores.

## Is the water safe?

There are no clear answers here. "Safe" usually means that no bacteria, viruses, harmful chemicals or metals are present, as defined by the Safe Water Drinking Act of the U.S. Environmental Protection Agency (EPA). Rain may arrive clean but get contaminated after it lands. In the end, water quality and safety depend on the system's design and maintenance, as well as the users and their health needs.

## Is Hawai`i the only place where rainwater catchment is common?

No. In fact, rainwater catchment or harvesting is not new. It has existed in some form since ancient times with simple to sophisticated designs. While it was traditionally used in arid or semi-arid places, today, rainwater catchment is used in many parts of the world with varying rainfall such as in India, England, Germany, parts of Africa, the Middle East, China, Japan, Australia, and Autea Roa (New Zealand). In the United States, rainwater catchment is common in many places including Ohio, Kentucky, Florida, Texas, California, Oregon, Washington, and Hawai`i.



Drawing: Trisha Macomber & Luisa Castro