

# Best Practices for Rainwater Harvesting

## Assess Roof Design and Construction

- Ensure roof is over 2,000 square feet in size
- Ensure roofing is made of concrete tile or other smooth material, and does not have asphalt or shingles
- Check that the roof has not been treated with any chemicals, paints, or coatings
- Ensure gutters are made with non-toxic construction materials, paints, copper, or coatings

## Assess Rainwater Harvesting System Location, Design, and Construction

- Locate cistern upslope and in a well-drained area that is not subject to flooding
- Place cistern on a solid foundation
- Ensure cistern is opaque and keeps out sunlight, meets NSF/ANSI Standard 61, and is sealed with a material meeting food-grade or water potability standards
- Include a first flush device in the design of the system
- Don't connect the cistern to the sewer system
- Equip the cleanout pipe, measuring 2 inches in diameter, with a ball valve to allow opening and closing and ensure it is connected to the overflow pipe to allow easy draining
- Equip the overflow pipe with a screen and design it to carry excess water to the flower garden
- Locate the hose spigot 4-6 inches above the ground
- Include a metal filter in the design of the cistern to minimize the entry of organic matter
- Screen all inlets and outlets to prevent mosquito breeding
- Put a sign on the cistern that states "Do Not Drink Water" or equivalent

## Operate and Maintain the System to Ensure Integrity

- Remove excessive leaves from the roof and gutters
- Empty and clean the cistern at least annually, using a non-toxic cleaner; in between, monitor the cistern for signs of contamination
- Clean filters regularly
- Don't use harvested rainwater for drinking, hand washing, or cleaning
- Only use harvested rainwater for direct soil irrigation on plants (not sprayed on to plants or manually applied through use of a watering can, etc.)

