



FREQUENTLY ASKED QUESTIONS

RAIN BARREL & CISTERN REBATE

How do I determine what size cistern or number of barrels I need?

The size of your system depends on a number of factors, including the size of your roof, the storage capacity of your rain barrel or cistern, and how you intend to use the water. A rough rule of thumb is that one inch of rain will produce 600 gallons of water for every 1,000 square feet of roof area.

How much water can I save using rainwater?

Water savings vary depending on the size of your rainwater harvesting system, rainfall patterns, how you use the rainwater, and the size of your garden. For an in-depth guide to calculating your water storage needs, check out the [San Francisco Public Utilities Commission's Rainwater Harvesting Manual](#).

What happens when my rain storage tank overflows?

Overflow water should be directed to a drain or suitable rain garden that can absorb water onsite at an appropriate rate. Overflow must be directed away from your home or neighboring properties.

Do I need a permit?

Check with your local building department to determine permitting requirements. Local requirements are sometimes more strict than statewide ones. California rules state that a permit is not needed if your rain barrel or cistern meets the following requirements:

- Cistern capacity is less than 5,000 gallons.
- Height to width ratio is less than 2-to-1.
- Captured rainwater is only used for non-spray irrigation.
- Cistern is supported directly on grade.
- Rainwater system does not require power or a makeup water supply connection.

What is a first-flush diverter?

It's a device that diverts the season's first, most polluted flow of rainwater away from your rain barrel. This device also removes any leaves which would clog the system. A first-flush diverter is recommended for all installations.

How much maintenance is required for a rainwater harvesting system?

Rain barrels and cisterns should be inspected and cleaned seasonally. Before and after the rainy season, clean roof gutters, screens, overflow outlets and filters. Once a year, flush out any debris or buildup that may have accumulated on the bottom of the cistern. Repair leaks immediately.

Are mosquitos a problem with rain catchment systems?

Mosquitos look for standing water to lay their eggs. To prevent your rain catchment system from becoming a mosquito breeding ground, best practices call for 1/16" mesh covering all openings. This not only prevents mosquitos from entering, it also keeps debris out of any rainwater catchment system. Make your rain barrels even less appealing to mosquitos by keeping them away from direct sunlight.

Where can I get more information about code requirements for installing a rainwater harvesting system?

Full code requirements can be found in [Chapter 16 of the 2019 California Plumbing Code](#).

Can you show me some examples of installed rainwater harvesting barrels and cisterns?

- Inverted 55-gallon barrels, connected underneath.
- Simple downspout diverter also acts as overflow.
- Spigot at bottom to allow all water to be drained out.
- Decals indicating non-potable water.



- 200 gallons cisterns connected via downspout diverter to large inlet with mesh screen.
- Large overflow pipe is sized to keep up with high inflows and directs water away from building.
- Spigots at the bottom of the cisterns.



How can I find out more?

[American Rainwater Catchment Systems Association](#)

[Greywater Action](#)

[Rainwater Harvesting for Drylands and Beyond](#)

[San Francisco Power and Water Rainwater Harvesting Guidebook](#)

[MarinWater.org](#)