



FERN VALLEY WATER DISTRICT

Rain Capture System Fact Sheet

Captured rain runoff may be used to irrigate trees, and your various landscaping plants including gardens, and greenhouses, but is not suitable as potable (drinking) water. Given our annual average rainfall, a 1,000 square foot home's roof surface area running into a rain gutter(s) and directed into a rain capture vessel having a capacity of 200-225 gallons, can irrigate multiple trees, plants, and a typical garden for a period of between 40 to 60 days. Each time it rains 0.4 inches, a vessel of this capacity will completely refill.^{Note-1} While both large and small vessels will provide rain capture value, the applicant should determine the size of water capture vessel that would be most appropriate for his or her application, and it should be based on available rain capture surface area and his or her specific irrigation needs.

Note-1 1,000 square feet of roof surface captures, as much as 626 gallons of water for every one inch of rain.

What is a Rain Capture Vessel's Value?

Rain capture vessels are specifically designed or adapted to collect rainwater from hard surfaces such as business, home, patio, or shed rooftops. These capture vessels, along with a gutter system also serve to minimize roof runoff that can saturate ground surfaces near the structure. The real value is that rainwater can be stored for later use. This is especially useful during the spring through summer months when plants need the most irrigation, and rainfall occurs less often. The practice of capturing rainwater for later use has been around for centuries, and continues to be of value in water conservation around the world. In fact, much of the applied captured rainwater is returned to ground water, therefore, having a positive impact on the water table.

Helpful Links

www.epa.gov/soakuptherain/soak-rain-rain-barrels

www.tractorsupply.com

www.homedepot.com

www.lowes.com

www.loomistank.com

www.gardeners.com

www.treehugger.com/best-rainwater-collection-barrels-5201530

www.walmart.com

www.youtube.com



Various Vessel Types, to Consider

There are several rain barrel, tank, and IBC Tote products available by multiple manufacturers in a range of \$90.00 to \$750.00 that will qualify as water capture vessels. The following products are provided solely as examples that meet the vessel qualifications. There are other manufacturers' comparable products that will also meet the requirements. FVWD encourages the rebate applicant to shop around since prices vary significantly for the same products.

Two examples:

- ❖ **60 Gallon Weather Resistant Plastic Drainable Dual Overflow Planter Rain Barrel**
By Great American Rain Barrel
MSRP: \$120.00



❖ **205 Gallon Weather Resistant Polyethylene Rainwater Tank**
By: Bushman

MSRP: \$699.00



Suggested Maintenance for Rainwater Capture Vessels

Annually, the applicant should inspect their water capture vessel, piping, and foundation for cracks or signs of damage. If damaged or notable deterioration has occurred or is occurring, the water vessel, piping, or foundation should be repaired or replaced.

Every three or four months, the applicant may want to add six ounces of 5.25% or 5 ounces -7.5% concentrated Sodium Hypochlorite (Household Bleach) to 150 gallons of stored water. This will reduce smell, clarify the water, and reduce organic bacteria and insect breeding.

Semi-Annually, the applicant should inspect the water vessel for proper rain gutter flow since build-up of leaves, pine needles, and dirt may block water flow. It is recommended that an intake filter be added to the vessel(s) to help minimize insect breeding such as mosquitos. Most tanks and barrels designed specifically for this application already have a built-in filter that is serviceable. In addition, homeowners may want to consider installing rain-gutter guards to prevent leaves and pine needles from entering the gutters.