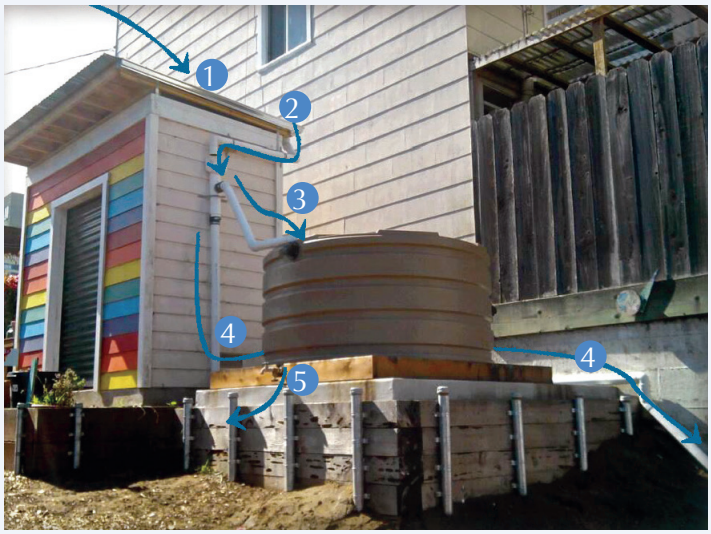
Rainwater Harvesting Garden

This Garden is Irrigated with Rainwater – A Brilliantly Simple Design

1. Water that lands on the roof enters the gutters
2. Water flows through the "first flush" filtration system
3. Clean water then flows into the rain barrel
4. Fine debris and contaminants from roof are separated and washed away
5. Clean water is drawn from the bottom of the barrel, ready to use in the garden



Why We Harvest the Rain

WATER IS A VALUABLE RESOURCE AND RAINWATER IS FREE. For most East Bay residents the Mokelumne River is the primary water source. In drought years, this water supply is scarce. By capturing rain, we reduce our garden's demand on the public water supply. Each gallon in our cistern allows us to save one more gallon for everyone to share.

STORMWATER MANAGEMENT. Rain that falls on our streets, roofs, and playgrounds, drains into the storm drain system before flowing into the Bay and Ocean. Along this journey it picks up pollutants. During heavy storms, our storm drain system can be overwhelmed and street flooding occurs. Each gallon saved in this cistern reduces the burden on the storm drain system and keeps our environment safe and clean.

How Much Water Can This Project Produce?

Rainwater Harvest = Roof Area x Rainfall

1 square foot of roof space receiving 1 inch of rain will produce approximately 0.6 gallons. The garden shed's roof (in the photo above) is approximately 89 square feet and the East Bay receives an average of 21 inches of rain per year.

89 square feet x 21 inches x 0.6 = 1,214 gallons

By using the rainwater through the rainy season, we can capture and use more than the 660 gallon capacity of this barrel and prevent over 1,000 gallons of water from flowing into the city's storm drain system. Keeping rainwater out of the storm drain system can save energy and water treatment costs, and help keep pollution out of the Bay.

the watershed project