

# HOMEOWNER WATER AUDIT IF CONSIDERING RAINWATER HARVESTING IN OREGON

1. How much water do I currently use in a year? How much water do I use each month?
  - a. How much water do I use inside the house? Per month?
  - b. How much water do I use for my garden? Per month?

*Average domestic water use in the USA runs somewhere between 40-100 gallons per day per person. Portland Water Bureau statistics estimate average water usage per day for small residential water pipes averages 62 gallons per day or 22,000 gallons per year*

*My household's inside the house water use for a 2 person household with 1 bathroom and containing approximately 900 square feet based on last year's bills uses very close to the 62 gallons per day for domestic water use (inside house). This total roughly 1800 gallons per month or 22,000 gallons per year*

*Estimate of water use for landscape is 1" per week during the growing season for all plants. Using this figure our garden use would be for 62,000 gallons for June through August. Figure the need for roughly 20,000 gallons per month.*

*Our household in northeast, living on an extensively landscape 0.45 acre landscape with 5000 square feet of irrigated landscape plants (ornamental and edible) actually used close to 150,000 of irrigation water last year, exclusively between the months of March-early October. Heaviest use times are June through early September. We have sandy well-drained soil and do use some overhead irrigation.*

**One conclusion is that close to 90% of our water consumption is for irrigation of landscape plants.**

**A second conclusion: we need the water during the plant growing season when we get little rainfall.**

2. How much water do I expect to use in a year 10 to 20 years from now? How much water will I use each month?
  - a. How much water will I use inside the house? Per month?
  - b. How much water will I use for my garden? Per month?
  
3. How much water collecting roof space do I have available? How much water could I potentially collect and when? What could I store the water in? How do I get the water out? Who maintains the system?
  - a. For 1” of rainfall falling on a roof, you can collect approximately 600 gallons of water for every 1000 square feet;
  - b. Portland airport rainfall average is 35” of rainfall per year so a 1000 square feet roof could potentially collect 21,000 gallons of water per year;
  
4. What costs are involved in setting up a rainwater collection system? What ongoing expenses are necessary?
  
5. What is the current law regarding rainwater collection in Oregon? In Washington?
  - a. In Oregon, it is currently legal to collect rainwater from a roof. However, once the water strikes the ground it technically belongs to the state of Oregon and cannot be used without a permit from the state.
  - b. In Washington, as of April 2009 the Department of Ecology has ruled that you may collect roof harvested rainwater for storage and use, if the water is used on the same property from which it is harvested.
  - c. Be sure to check your locality laws before moving forward.