

# Rainwater Harvesting

- Why Harvest Rainwater?
  - Save Money
  - Conserve Water
  - Make efficient use of valuable resource
  - Reduce flooding and erosion
  - Rainwater is better for your landscape



- Catchments: 17,250 sq. ft. of roof area
- Distribution: Gutters and downspouts
- Holding areas: 8-2500 gallon Poly Tanks 2-5000 gallon tanks
- 30,000 gallons total storage



- Basic Rainwater Harvesting Steps:
  - Determine amount of water that can be collected
  - Design guttering system to go to one central location
  - Decide on what type of holding tanks to use
  - Decide what you are going to use water for
  - Decide on method of distribution of water. (Gravity flow or pump)
- Calculating Supply
  - .623 gallons of water per square foot of roof per inch of rainfall
  - Example: 3000 square foot building will provide you with 1869 gallons per inch of rainfall.
- Filtering:
  - Screen gutter and downspouts
  - Build First Flush System
    - Remove 1 gallon of rainwater per 100 sq ft of roof space before it goes into holding tanks
    - Ex: 25 gallons of water per 2500 sq. ft. building
  - Screen inlet on holding tanks
  - Filter outlet with 140 mesh spin filter. This is to keep from clogging drip irrigation

