# Rainwater Harvesting and Irrigation Efficiency Worksheet

Determine some efficiencies for your system

- Efficiency Factor: environmental conditions (wind, temperature, humidity)
- System Efficiency: roof materials & other losses to the system (leaks)
- Irrigation Efficiency: sprinkler (.75), drip irrigation (.9)

**Summer Efficiency Calculator**

| Actual Harvested Water (gallons) | = | Catchment Area (name) | Catchment Area ($ft^2$) | * | Month 2017 | Rainfall (in.) | * | Conversion Factor | * | Efficiency Factor (.50 - .75) | * | System Efficiency Factor (x - .99) | * | Irrigation Efficiency (.75 - .9) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | = | | | * | | | * | 0.623 | * | | * | | * | |
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*Rainfall data for Newport, OR provided by OSU Hatfield Marine Science Center*
*http://weather.hmsc.oregonstate.edu/weather/weatherproject/hmsc_weather.html*

**Rework the calculation to determine the catchment area needed to meet your irrigation needs**

| Catchment Area ($ft^2$) | = | Irrigation Water Needed (gallons) | | | | | | | | |
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| | | Rainfall (in.) | * | Conversion Factor | * | Efficiency Factor (.50 - .75) | * | System Efficiency Factor (x - .99) | * | Irrigation Efficiency (.75 - .9) |

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LINCOLN SOIL AND WATER CONSERVATION DISTRICT