

How to Prepare Your Own Water Efficient Garden

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Improve our environment and reduce the problems in your garden by practicing drought resistant gardening techniques.

Step 1 Planning

City Bylaws: Check the before starting the garden design.

Site analysis: take an inventory of everything that exists on the property. These features will impact on the landscape. Start by drawing an enlargement of the survey plan. On this plan place:

- The environmental conditions such as wind, sunlight, and drainage
- Existing features such as trees, structures and utilities
- Focal points and areas to be hidden from view

Assess your needs:

- Privacy from neighbours, or the street
- The children's play area
- The vegetable garden or pool
- The clothesline, barbeque, patio, walkways, etc.

Determine where these areas should be. Draw balloons on the plan for the designated areas.

Measure the areas outside to see if they will meet your needs.

Draw up a final plan with the house, all the structures and plants on the enlarged site plan.

Plan the watering method

Step 2 Soil Preparations

Before you plant, prepare the soil so it can provide nutrients and moisture to thriving plants.

- Determine the soil type you have, then add appropriate organic materials to amend it.
- Dig in compost, aged manure, peat moss, alfalfa pellets, etc., into the top 30 – 60 cm (1 – 2') of soil.
- Correct the pH if it is significantly above or below 6.5
- Dig in fertilizer if needed

Step 3 Reduce the Turf Area

Maintain turf where it provides functional benefits. Use lawn areas sparingly for heavy trafficked areas, play areas, paths, and as an accent for flowerbeds and borders.

Consider alternatives to grass wherever turf is not needed:

- Patios, and decks
- Mulch
- Groundcovers
- Meadow spaces with wild flowers

Step 4 Plant Choice

Choose drought resistant plants to reduce maintenance, insect/disease problems and water consumption. Refer to the Xeriscape plant list for recommended trees, shrubs, perennials, groundcovers and annuals.

- Choose plants that are adapted to the actual conditions in each part of the yard.
- Native and naturalized plants are adapted to our climate making them a good choice.

- Group plants according to their water requirements.
- Install irrigation for plants that require plenty of water. Lawns, vegetable gardens, and annual flowerbeds need 2.5 cm (1") of water/week if it does not rain. Lay soaker hoses down in the garden and beds then cover with a mulch layer 7 – 10 cm (3 – 4") deep.
- Consider installing an irrigation system for the lawn.

Step 5 Mulch

Mulch is any material, organic or inorganic, used to cover the soil because it:

- Reduces moisture loss
- Reduces erosion and weeds
- Moderates the soil temperature
- Reduces the spread of diseases
- Improves soil fertility (if it is organic)
- Can be used as a unifying or contrasting element in the landscape

Compost, grass clippings, leaves, bark, cocoa or wood chips, sawdust (from most hardwood trees), and crushed rock can be used to mulch beds.

Spread a 7 - 10 cm (3-4") layer of mulch over the soil after it has warmed up in late spring or early summer (about 21° C (70°F)).

Step 6 Irrigation: if you must

Proper irrigation techniques ensure that your garden receives adequate water while maintaining water efficiency.

- Soaker hoses and a drip irrigation system reduce water lost to evaporation. Drip irrigation takes about one hour for a rose bush, and up to four hours for a mature tree. Soaker hoses are inexpensive, portable, black, round hoses that ooze water through the sides.
- Always take into account the amount of rain your garden has received before watering. Leave a measuring cup or container in the flowerbed to assess how much it rained.
- If watering is necessary, do it before dawn or in the early morning.
- Avoid watering the beds in the heat of the day since much of it will evaporate.
- Use a rain barrel to collect water for the gardens.
- Runoff erodes the topsoil away (down the sewer) so water at the rate the soil absorbs water.
- Reducing the amount of asphalt or concrete will decrease the runoff and allow rain to soak into the ground.

Step 7 Maintenance

Regular maintenance preserves the beauty of your landscape, manages insect/disease problems, while saving time and water.

- Monitor for insect or disease problems and treat them promptly
- Amend the soil in the fall, and mulch it after it has warmed up in the spring/summer
- Fertilize the plants if they need it and at the optimal time for each plant
- Weed when they are young and easy to pull. Don't let them go to seed.
- Prune to maintain a healthy branching pattern
- Prune as soon as you see a damaged or diseased branch.
- Water the soil before the plants suffer heat or drought stressed