Healthy plants, healthy planet, healthy people

WATER WISELY: Best practices for your garden

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What to water

• Understand your site conditions
• Look for microclimates in your site
• Choose plants that will thrive in your yard & garden soil, light and space.

Understand your basic site conditions

1. Hardiness
2. Soil
3. Light – sun /shade
4. Space
Look for microclimates

*Different conditions than predominant, surrounding areas in the landscape*

- Sunny and shady areas
- Winds / drafts
- Temperature changes
- Moisture / dry soils
- Snow & ice buildup

Then choose plants that will thrive in your site conditions

1. Hardiness zone
2. Soil type
3. Sun / shade
4. Space

Others: landscape use, texture, seasonal interest, design use, pest resistance, form

Tip: Identify plants ...

a. Prefer consistently moist soil – locate near water source
b. Prefer drier conditions – locate far from water source
Use our database to find plants that match your site & style:

- Plant type
- Soil
- Light
- Size
- Hardiness zone
- Design use
- Landscape use
- Texture
- Form
- Seasonal interest
- Insect & disease resistance

http://landscapeplants.extension.umn.edu/
When to water:

1. Best time of day: Early morning
   - Minimize evapotranspiration
   - Utilize maximum amount of water
   - Allow leaves to dry and reduce foliar diseases.

2. Feel the top 6” of soil. Dry? Time to water.
   - Clay soil has more water holding capacity, poorer drainage
   - Sandy is well-drained, but dries out more rapidly.

Where to water

1. Water at the base of the plant
   a. Hand watering
   b. Drip hose irrigation
   c. Low emitters

2. Space plants per mature size for better air circulation, drying foliage

3. Mulch to prevent soil splashing
Water at the base of the plant

- Conserves water - Applies water directly to the root
- Prevents soil from splashing onto lower leaves
- Reduces evaporation

Space plants per mature size

- Read plant information
- Plant “on-center”
  - 20” from plant center to plant center for Astilbe ‘Rhythm & Blues’
- Spacing plants allows for air flow and foliage to dry after rain
- Better plant health
Spaced 18” on-center for mature size

Benefits of mulch

- Herbaceous plants: 2-3” deep
- Conserves soil moisture
- Protects roots
- Moderates soil temperatures
- Discourages weeds, disease
- Adds organic matter
- Reduces soil erosion.

Materials: organic, rock, rubber
- Landscape fabric needed under rock, synthetics
Collect and use rain water

- Reduce city / well water use
- Better for plants
- Rain barrels
- Cisterns

Designing for water
Design to increase water infiltration on-site

• Manage slopes, reduce run-off
• Use turf alternatives on slopes
• Direct water back into ground, on-property
• Use plants that absorb water

Slopes: Retaining walls
Slopes: Alternatives to mowing

- Hardy perennials
- Bee lawns
- Native plants for shorelines

Fine fescue no-mow mix
Design to retain and use rainwater
Use plants for water absorption

- Adapted, hardy
- Extensive root systems
- Persistent plant parts
- Low nutrient requirement

- Native plants
- Ornamental grasses
- Hardy perennials

Design for water: Raingardens

http://ecobrooklyn.com/bioswale-basics/
Reduced site run-off from roof, hardscape

- Retention from 25% existing roofs, 50% from new roof;
- Harvested rainwater for watering plants.
- Run-off from the roof areas and paver walk estimate: 400 gallons in a 1” rain.
  - Rain barrels: hold 100 gallons
  - Raingarden: holds 290 gallons
- Planted areas for rainwater absorption.
- Some water absorbed between pavers.
- Excess run-off (over 390 gallons) goes into the street.
Elevation drawing

- Landscape fabric, river rock
- Wet edge plants
- Upland plants in sandy loam built up & graded
Summary

1. Use best watering practices: what, where, and when to water

2. Design for water by
   a. Using rain barrels
   b. Retaining water on-site
   c. Considering turf alternatives for slopes
   d. Planting plants that absorb and prevent water run-off
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