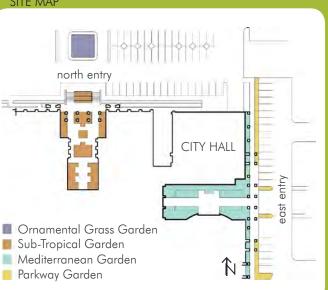
# CALIFORNIA-FRIENDLY GARDENING STARTS WITH YOU

Here in Southern California water is a precious resource. As the demand for water in our region increases, making the most of every drop of water helps to protect our natural resources. The City of Corona has a semi-arid climate that supports a wide variety of beautiful plants that use less water than traditional landscapes. A California-Friendly garden offers a less-thirsty, attractive and environmentally friendly way to make a difference in your community.

The Corona Department of Water and Power is proud to present to the residents of Corona this California-Friendly Demonstration Garden as a way to educate and enrich our Southern California community. Here you will find information on waterefficient irrigation techniques, California-Friendly plant species, paving materials, and design concepts that you can implement into your landscape to help reduce your water use while still maintaining a beautiful landscape.

### SITE MAP



### **ADDITIONAL RESOURCES**

Websites:

Corona Department of Water and Power www.discovercorona.com/dwp

The Metropolitan Water District of Southern California www.bewaterwise.com www.emwd.org/conservation/pdf/LandscapeDesign.pdf http://es.bewaterwise.com (spanish version)

United States Environmental Protection Agency www.epa.gov/watersense

The California Native Plant Society www.cnps.orq

Western Municipal Water District www.wmwd.com/landscape.htm

Rancho Santa Ana Botanical Garden www.rsabg.org

### Books:

Sunset Western Garden Book Kathleen Norris Brenzel (editor) Sunset Publishing Corporation

Landscape Plants for California Gardens Robert C. Perry Land Design Publishing (2010)

### Nurseries:

Sunshine Growers Nursery (951) 736-6000 www.sunshinegrowersnursery.com www.louiesnursery.com

7 Oaks Nursery (Corona) (951) 277-2927 www.7oaksnursery.com

Mockingbird Nursery (Riverside) (951) 780-3591 www.mockingbirdnursery.com

Louie s Nursery (Riverside) (951) 780-7841

Quality Growers Nursery (Corona) (951) 371-7193 www.qualitygrowersnursery.com

Armstrong Garden Center (Anaheim (714) 779-2091 www.armstronggarden.com



# **City of Corona Demonstration Garden**

400 S. Vicentia Avenue Corona, CA 92882

# Orona demonstration garden



# **MAINTENANCE**

Proper maintenance can make a big difference in the appearance of a landscape and the level of maintenance that is required can be easily managed during the planning stages. Key strategies to keep in mind include:

- Spacing plants at their mature growth size means the only trimming that will need to be done is for maintaining natural form and removing dead or diseased areas.
- Making proper pruning cuts can also help to manage the growth of a plant and prevent disease.

Mulching a landscape can have a number of positive effects on the plant material. Laying down a good cover of mulch will:

- Reduce the evaporation of moisture from the soil and allow for less water to be dedicated to the watering of the plants.
- Reduce weed growth
- Add a finished look to a new or refurbished landscape.

Traditional types of mulch include bark mulch, rock mulch, and decomposed granite. New alternatives to traditional wood mulch are recycled rubber mulch and recycled tumbled glass. Re-apply mulch as often as needed to maintain an approximately three inch depth.

# WATERING

There are three key components to an irrigation system

- The Controller, which manages when and how long water is applied.
- The Valves, which turn water on in specific areas.
- The Delivery System, which actually applies the water to the landscape.

There are a variety of delivery systems that can be used to help conserve the amount of water used in landscaping. Here in the demonstration garden we used drip irrigation for the shrubs and bubblers for the trees. These are very efficient for watering plants, because the water is applied to the soil, directly where it is needed, at the plants roots. With other delivery systems, such as spray heads, water is often lost to evaporation, misting and wind before it even hits the ground. See the images to the right for a description of commonly used delivery systems.

A great way to conserve water in a landscape is with a weather based irrigation controller or WBIC. A WBIC adjusts when and how long to run based on current weather conditions. This means that when it rains there is no need to turn off your controller, the controller will automatically do it for you. In most cases you simply input information regarding your landscape in to the controller such as soil type, plant type, sun exposure, etc. and the controller calculates start and run times for you. You can even set the controller only to run at night.



Drip - 90% efficient
Delivers water uniformly over
a grid type layout or it can be
weaved through the landscape
to deliver water directly at the
base of plants.



Bubblers - 85% efficient
Work like a sprinkler but water
does not spray out, it slowly
bubbles out. Bubblers are
generally placed at the base of
individual plants.



Rotating Nozzles - 75% efficient Sprinklers where the water comes out in a stream pattern that then rotates to water the designated area.



Spray Heads - 60% efficient Most common type of irrigation, sprays water out of a nozzle in a circular pattern.

# **SOILS**

Having nutrient rich soils is a major factor in the health of a garden and knowing what type of soil you have is an important part of deciding what plants to grow and how long to water them. The three general types of soil are:

### Clay

- Dense and can hold water for long periods of time
- Good for plants that can tolerate longer periods of wet soil

### Sand

- Has a low water holding capacity and can drain quickly
- Good for plants that prefer drier soils such as desert adapted plants

### Loam

- Composed of sand, silt, and clay
- A blend of characteristics that many plants can grow in

Plants have adapted over time to survive in these differing situations and have developed water needs that suit the soil types. If you are unsure of the soil that is in your landscape you can get a soils test kit from a local garden center or contact a local soils lab. Garden center staff will be able to help by suggesting amendments to your soil based on your soil type and plant selection.

# **PLANT SELECTION**

A good design will take the differing needs of plants into consideration and group them accordingly. This is referred to as grouping them by hydrozone. Plants in a hydrozone will typically share characteristics such as:

- Water requirements Are the plants low or medium water use?
- Sun/ Shade requirements Are the plants full sun, partial sun, or full shade?
- Regional origin Where does the plant come from?
- Aesthetic compatibility How does the plant look grouped with other plants?

A landscape can have several different hydrozones. Before designing a landscape, look at each area at different times of the day to find out the amount of sun that all areas of the site receive.

A good way to know a plants water requirements is to reference the Water Use Classification of Landscape Species (WUCOLS), a publication initiated by the California Department of Water Resources which is available to the public online. WUCOLS outlines the water needs of various plant species based on six different California regions or zones. The City of Corona falls within Zone 4 - South Inland Valley. By looking up each plant you would like to use in your yard, you can determine if it is a low, medium or high water user and then group your plants so that the same watering needs are in one hydrozone.

# SUB-TROPICAL AND SUCCULENT GARDEN



### **BACKGROUND SHRUBS:**

- India Hawthorne (M) - Ivory Tower Yucca (L) - New Zealnd Flax (M)
- Bird of Paradise(M) - Gold Dust Plant (M) - Soft Leaf Yucca (L)



### MIDGROUND SHRUBS:

- Kangaroo Paw (L) - African Iris (M) - Daylily (M)
- Red Yucca (L) - Festival Grass (M) - Dwarf Lily of the Nile (M)



### **FOREGROUND SHRUBS:**

- Blue Chalk Sticks (L) - Cast Iron Plant (M) - Stonecrop (L) - Compact Lantana (L) - Variegated Flax Lily (M) - Jack Spratt Flax (M)



- Red Hot Poker (L)
- Pygmy Date Palm (M) - Bougainvillea (L)
- Octopus Agave (L) - Spiral Aloe (L) - Bush Lily (M) - Squid Agave (L)



### **PARKWAY PLANTS:**

- Blue Chalk Sticks (L) - Trailing Lantana (L) - Daylily (M)



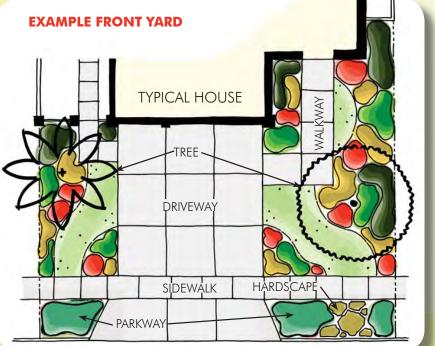
### **TURF:**

TREES: - Tall Fescue (H) - Brisbane Box (M)

### **HARDSCAPE:**

- Flagstone





## CALIFORNIA-FRIENDLY GARDENING **STARTS WITH YOU**

### STEP BY STEP GUIDE:

### 1. Explore your yard

Determine how much sun you are getting in your yard. It will be helpful to check the location of the sun in the morning, mid-day and afternoon.

### 2. Select plants

Select plants appropriate for your condition. You should consider sun and water requirements as well as mature growth size when selecting and laying out plants. Plants with similar water and sun requirements should be planted together. Many plants come in different varieties that can have varying mature sizes, so make sure to read up on the plant or check the tag at the nursery. Turf areas should be limited to 40% of the total landscape area. As an alternative to turf you can use a hardscape such as flagstone instead.

### 3. Clean up

Remove any dead, diseased, or unwanted plant material. If necessary call an arborist for removal of any trees. Any Trees that are close to power or utility lines should be removed by a professional. For city trees in a parkway, contact the Parks Department.

### 4. Improve your soil

The addition of organic material to the soil will help the growth of plants. In addition, most soil labs will send you an envelope to fill with a sample of your soil and send back to them to get a recommendation for proper soil treatments.

### 5. Repair/Install Irrigation

Prior to planting, make any necessary repairs to your existing irrigation system. If starting from scratch there are several online resources to help you with a suitable design. Consider switching your spray heads to drip irrigation and/or installing a weather based irrigation controller for even more water savings.

### 6. Planting

Before putting plants in the ground, place the containers in their final location and make any last minute adjustments to the layout. Remember to give plants enough space to reach their mature growth size. Dig a pit twice as deep as the roots of the plant and one and a half times as wide. Fill up half of the pit prior to placing so the roots can take hold easily. Then place the plant so that the top of the roots will sit even with the surrounding ground, then fill the rest of the pit with soil. Once all plants are in the ground give the newly planted area a good watering.

### 7. Install Bark Mulch

To put the final touch on your new landscape, place a 3 layer of bark mulch over the bare soil. If you are using decomposed granite a 2 layer should do the job.

### 8. Enjoy

If you have planted low water use plants make sure to turn down the watering times on your controller and enjoy the savings on your water bill.

# ORNAMENTAL GRASS GARDEN

# **BACKGROUND SHRUBS:**

- Bear Grass (VL) - Purple Fountain Grass (L) - Giant Rye (M)

- Japanese Silver Grass (M)

### **MIDGROUND SHRUBS:**

- Deer Grass (M) - Regal Mist Pink Muhly (M)

- Dwarf Mat Rush (L) - Jack Spratt Flax (M)

### **FOREGROUND SHRUBS:**

- Blue Fescue (M) - Blue Wheat Grass (L)

- Tufted Hairgrass (M) - Flax Lily (M)

### **ACCENTS SHRUBS:**

- Blue Oat Grass (M) - Festival Grass (M) - Japanese Blood Grass (M)

- Kangaroo Paw (L)

### **PARKWAY PLANTS:**

- Mexican Feather Grass (L)

- Bearberry Cotoneaster (M)

### **TURF:** TREES:

- Tall Fescue (H) - Shoestring Acacia (L) - Rock Mulch 3 and larger

**HARDSCAPE:** 

Limit to 40% of area - African Sumac (L)

# **EXAMPLE FRONT YARD** TYPICAL HOUSE TREE-DRIVEWAY HARDSC PARKWAY

# MEDITERRANEAN AND CALIFORNIA GARDEN

### **BACKGROUND SHRUBS:**

- Purple Rock Rose (L) - Noell Grivillea (L) - Ceanothus (L) - Texas Ranger (L) - Pyracantha (M) - Rosemary (L)

### **MIDGROUND SHRUBS:**

- Spanish Lavender (L) - Artemisia (M) - Dwarf Pittosporum (M)

- Russian Sage (M) - Mexican Bush Sage (L) - Ground Morning Glory (L)

### **FOREGROUND SHRUBS:**

- Tricolor Sage (M) - Coral Bells (M) - Common Thrift (M)

- Compact Kinnikinnick (L) - Lamb s Ear (M) - Lavender Cotton (L)

### **ACCENTS SHRUBS:**

- Scarlet Carpet Rose (M) - Autumn Sage (L) - Gaura (M)

- Butterfly Bush (M) - California Fuschia (L) - Blanket Flower (M)

- Beardtongue (L) - Dwarf New Zealand Tea Tree (M)

### **PARKWAY PLANTS:**

- Creeping Mahonia (M) - Wooly Yarrow (L) - Mexican Blue Sage (L)

**TURF:** TREES: **HARDSCAPE:** 

**PARKWAY** 

- Tall Fescue (H)

- Limit to 40% of area - Western Redbud (L)

### - Fruitless Olive (L) - Concrete Stepstones

**EXAMPLE FRONT YARD** TYPICAL HOUSE TREE -DRIVEWAY SIDEWALK HARDSCAP