



# WaterSmart Basics: Groundwork for Creating Your Green Plan



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- About Citrus Heights Water District
- Services
  - Water-wise house calls
  - Rebates
- Raffle! B-hyve weather-based controller
  - Winner selected after each webinar
  - District to notify by phone or email



# WaterSmart Basics: Groundwork for Creating Your Green Plan

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Landscape Designer & Contractor





# WaterSmart Basics: Make a Green Plan Part 1 - Starting Your Green Plan

- Presentations & Handouts Available on CHWD website
  - <http://chwd.org/our-water/events/>
- Consider the Principles
- Evaluation & Assessment
- Steps to Creating a Plan

“Begin with the end in mind...”

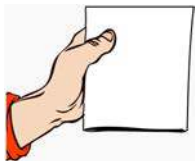
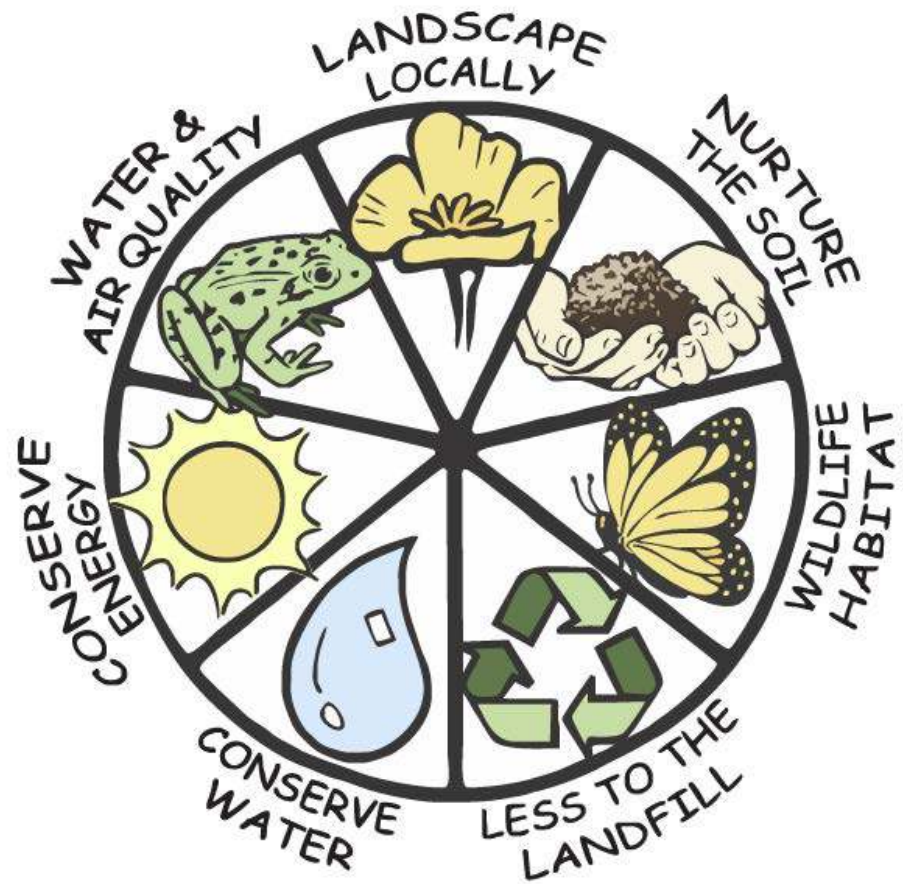
*Stephen R. Covey from*

*“The Seven Habits of Highly Effective People”*



# Principles of River-Friendly Landscaping

- Consider each of the 7 RFL Principles throughout planning & designing process
- Keep “watershed approach” in mind



Handouts  
online after  
webinar



# A River-Friendly Landscape is...

- Functional
  - Serves intended purpose
  - Uses resources wisely
  - Supports garden “life”
- Sustainable
  - Low maintenance
  - Limited inputs & waste
- Beautiful
  - Shapes, forms
  - Year-round interest





# Steps to Creating a Plan

**Why create a plan?** Helps you get organized

- Thoughtful planning
  - Select trees, plants, and materials appropriate for your specific site, you, & family
- Protect Your Investment
  - Avoid costly mistakes
  - Maintain / increase curb appeal
- Installation
  - Based on schedule & budget
  - Progressively work to achieve goals
  - Implement over time, phases or all at one time
  - Allow time for proper installation
- Assemble your “team”



# Who Will Design, Install, & Maintain?

- You or hire qualified, licensed professionals
- Ask friends, family, co-workers for referrals
- APLD – Association of Professional Landscape Designers, [apldca.org](http://apldca.org)
- California Landscape Contractors Association, [clca.org](http://clca.org)
- EcoLandscapers™ & Green Gardeners, [rescapeca.org](http://rescapeca.org)
- Landscape Architect, [asla.org](http://asla.org)
- Consultation



AMERICAN SOCIETY OF  
LANDSCAPE ARCHITECTS



Association of  
Professional  
Landscape  
Designers  
California Chapter



# Assess You & Your Family

Ask yourself:

- Budget
- Temporary or permanent home
- Life stages & lifestyle
- New landscape or update existing

What does my family need & want?

- Use of areas
- Flow between areas
- Shade, screening, privacy, views
- Noise reduction
- Storage
- Rainwater catchment
- Areas for activities
- Habitat, pollinator support
- Edibles, composting, recycling areas
- Aesthetics



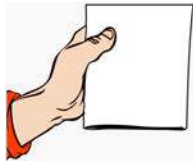
Bocce Ball Court with Flagstone Walkway





# Landscape “Styles”

- Formal
  - Contemporary (Modern)
  - Mediterranean
  - Southwestern (Desert)
  - Asian or Japanese
  - California Casual
- 
- Any “style” can be created for any size landscape
  - Any style is possible using California native & climate-appropriate plants
  - Learn about plants, select right forms & shapes along with right placement & care



Handouts  
online after  
webinar

**1) Determine Intended Use and Audience:**

- Shared Spaces
- Private Areas
- Functional Areas

**2) Define Universal Aesthetics:**

- Balance
- Focalization of Interest
- Simplicity
- Rhythm
- Proportion
- Unity

**3) Integrate Personal Aesthetic:**

- Style
- Hobbies
- Entertainment
- Family Structure
- Attitude to the Outdoors
- Habits
- Materials Preferences
- Use of Outdoor Space

**4) Consider Cultural Requirements:**

- Zoning
- Homeowners Associations
- Easements
- Setbacks
- Historical Areas

**5) Integrate Existing and New Materials:**

- Integrate Hardscape Considerations
- Integrate Softscape Considerations

In this document, we briefly present what is required to design, install and maintain a proper landscape. A proper landscape is a space custom-tailored to your way of life: that takes into consideration not only your aesthetic tastes and practical needs but the potential of the site. A proper landscape will grow with you, will be sustainable, will be environmentally conscious, and will require less maintenance, which ensures your enjoyment and the landscape's maximum potential.

While we encourage you to boldly step into designing your own landscape, let us know if we can help.

Connect with us to see how experts put these considerations into practice.

**Call Martin at  
(530) 632- 3263**





**Landscape Symphonies/Martin Carrion van Rijn**  
**Landscape designer, contractor C-27 – 939582**  
**cell 530 632 3263**  
**[www.landscapesymphonies.com](http://www.landscapesymphonies.com)**

**Practical questions**

- What motivated you to consider landscape design/installation/renovation?

I am beginning a new phase of life (post-divorce, kids off to college), and recreating my home space as *mine*, and as a sanctuary for my spirit.

Stopped watering all grass 3 years ago due to drought, and let back yard go totally wild; am now in a position to take incremental steps toward the outdoor environment I have always wanted for my home.

- When does renovation/design/installation need to start?

My schedule is entirely flexible.

- What is the primary purpose of the landscape; entertainment, relaxation, family time, playtime..?

Primary purpose is relaxation/contemplation

- If money were no object, what would you include in your landscape?

Back patio with beautiful flagstones

A semi-enclosed intimate garden space with wooden arbor/trellises and bench

A fire pit (glass stone type/environmentally friendly)

Sculpture incorporated into garden areas

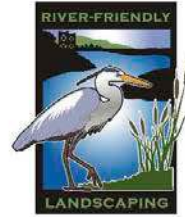
- How often do you entertain outdoors and for how many people in average?



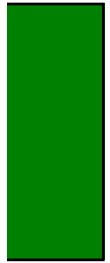
# Gather Information Building Codes & Regulations

Are there rules & regulations with which you need to comply? Are permits needed? Ask before you begin:

- Land use regulators (e.g., city, county, state)
- Homeowner Associations Governing Documents
  - Covenants, Conditions, & Restrictions (CC&Rs)
- Laws & ordinances that regulate new & rehabilitated landscapes
- Water Provider guidelines & restrictions



## River-Friendly Landscaping Green Gardener at Home Garden Checklist



Name \_\_\_\_\_

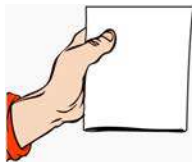
Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

*Please check all the features/practices that you believe apply to your garden.*

*Small Actions make a difference. You can start by doing a practice or two today!*

### Building Healthy Soil

1.  Soil has been tested to identify need for appropriate amendments.
2.  Soil has been tested to identify any contaminants.
3.  Garden beds are prepared by hand rather than with a tiller.
4.  After initial preparation, beds are maintained with little or no tilling.
5.  Sheet mulching is used to establish planting areas or pathways, and as a way to control weeds while improving soil. (Weed cloth is not used.)
6.  Soil is protected from compaction with clearly defined paths and or raised beds.
7.  Soil is amended with compost, which increases water holding capacity and reduces erosion.
8.  Cover crops are grown to enrich the soil.



Handout  
online after  
webinar

### Reducing Waste in the Garden

9.  Active compost bin or worm bin.
10.  Leaves, chipped plant debris, compost, or other organic materials are used as mulch.
11.  Garden trimmings are used on site for composting or mulching and/or disposed of in green waste cart.
12.  Plant waste is minimized by not overplanting, overwatering, or overfertilizing.
13.  Pruning is minimized by choosing plants that are appropriate for the space when mature.
14.  Sheared hedges are not included in the garden.
15.  Clippings are left on the lawn after mowing.





# Base Plan & Site Conditions

- Use graph paper to lay out measurements
  - “Bird’s-eye” or Plan View of property
- Scale
  - 1/8” scale = 1/8” inch on ruler / 1 “box” on grid paper = 1 foot
  - 1/4” scale = 1/4” inch on ruler / 1 “box” on grid paper = 1 foot
- “North Arrow” direction on the plan (orientation)
- **Make copies** of Base Plan for use in other phases of design development & for “as built”



# Site Assessment Tools





# Site Assessment Tools





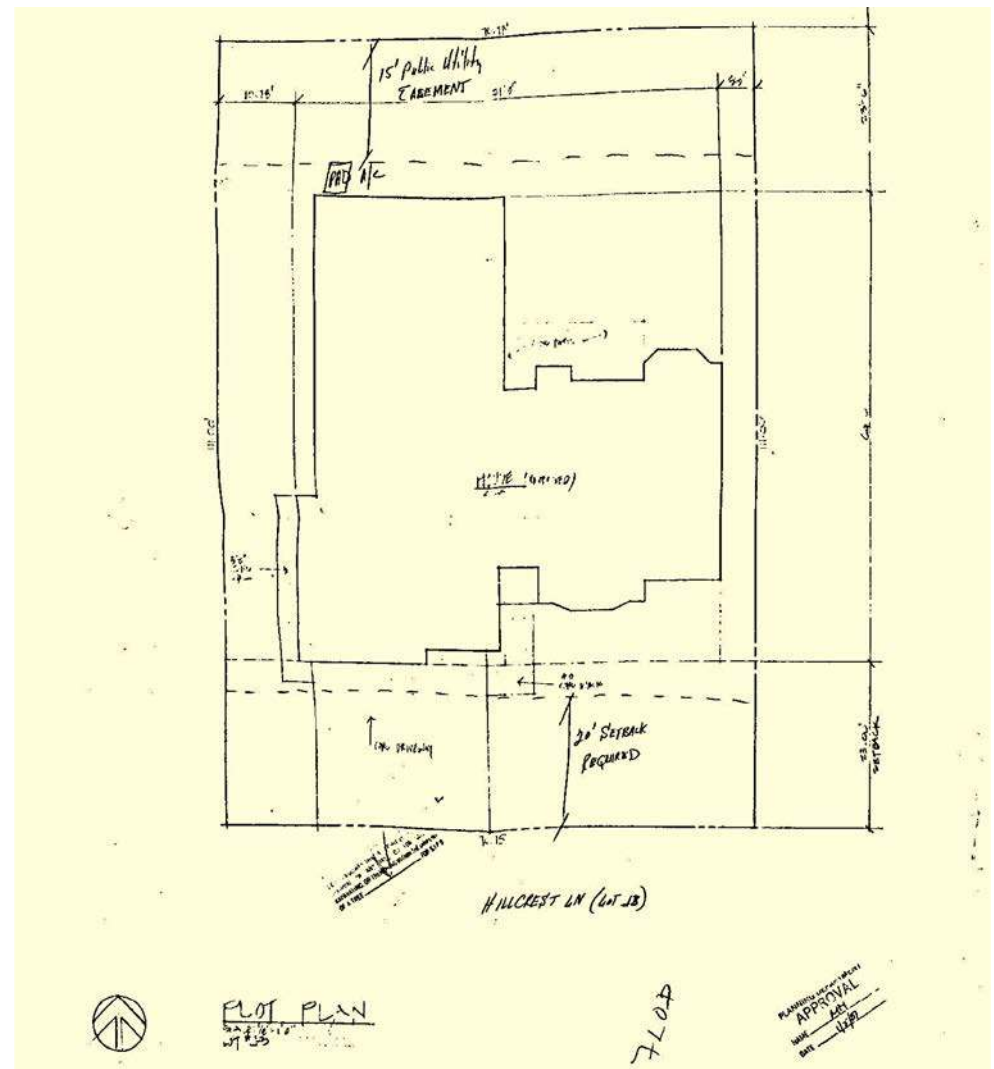


# Creating Your Base Plan Site conditions

Base Plan (also called Plot Plan)

- Dimensions
- Legal information
- Restrictions & regulations
- Orientation
- Climate

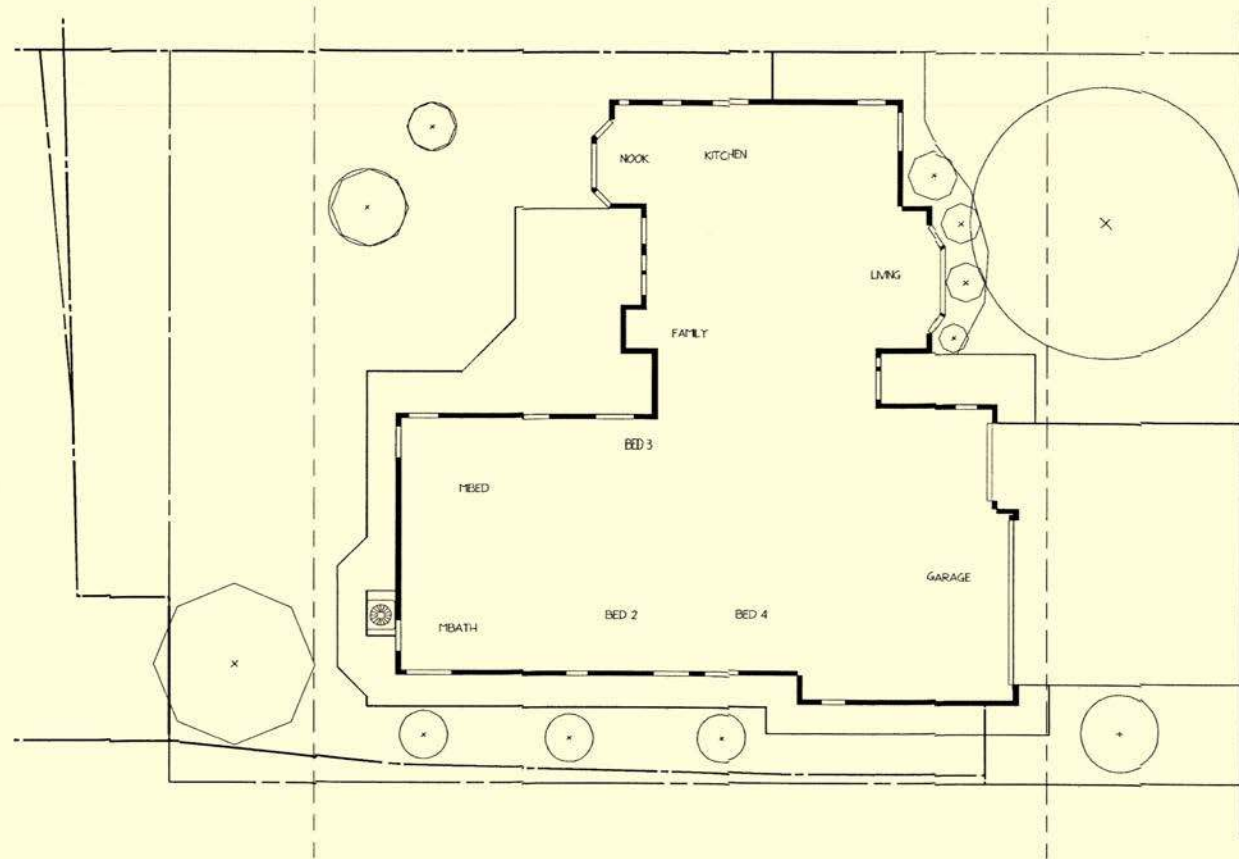
Tip: Use Google Earth to obtain property lines & footprint of home

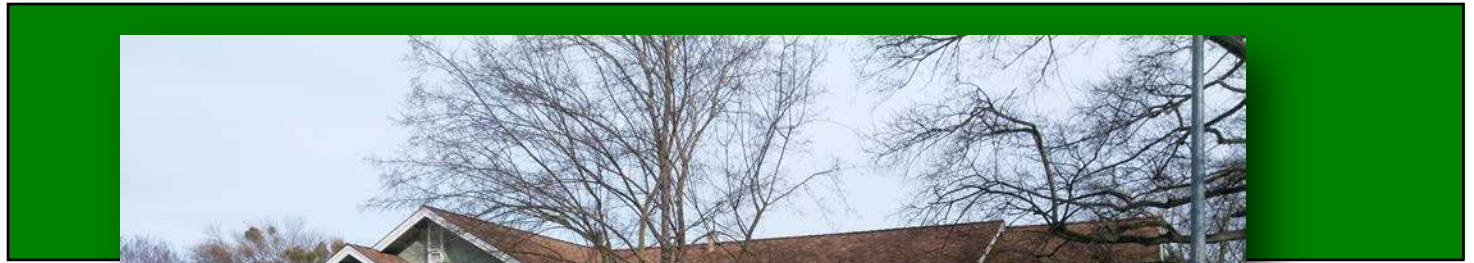






# Base Plan











# Site Assessment Conditions Climate & Others

- Climate & Conditions
  - Sacramento region
  - *Sunset Zones 7, 8, 9, 14*
  - Sun/shade
  - Wind
  - Microclimates
- Trees & other features to be kept
- Water source & existing irrigation
- Grading, drainage – Address now!
  - Signs of overwatering (ponding, moss)
- Topography (flat, sloped)



# Sun Exposure

On one copy of the base plan

- Determine direction home faces (Orientation) & note with “north” arrow
  - North-facing receives the least sunlight
  - South receives the most sun
  - East afternoon shade
  - West morning shade
- Are there obstructions that block
  - Houses, trees, windows etc.
- Intense heat next to street, reflective heat from walls & windows

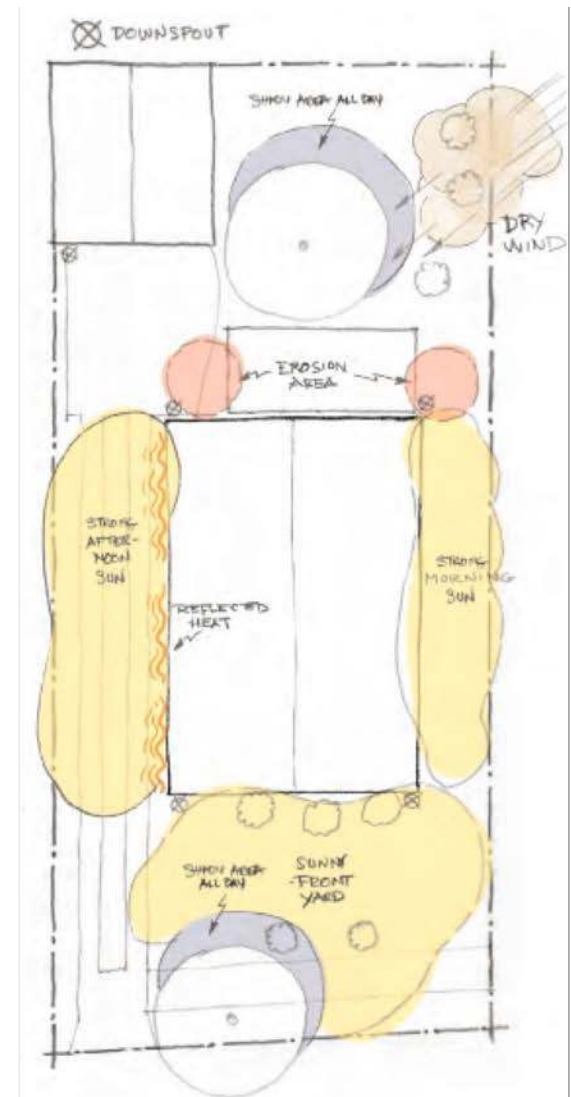




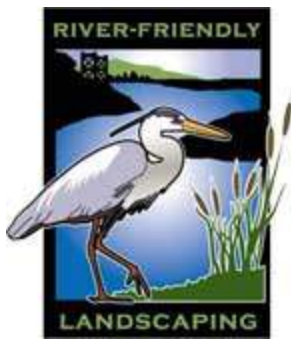
# Plants & Sun

On same copy of the plan, note

- Which areas receive sun all day, part day, & shaded areas
- Large trees, shrubs, lawn, significant vegetation
  - What needs to be removed, dead wood, tree canopy hanging over or touching roof
- Outline canopies & identify
- Structures, walls, fences, other plants that affect amount of sun & shade
- Predominant wind direction







# Evaluating Your Site Soil

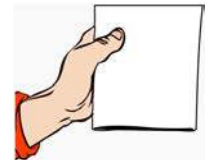
## SOIL PROPERTIES/DRAINAGE

What type of soil do you have?     Clay     Sand     Loam     Don't know  
Is there a slope?     Yes     No  
Do you have drainage issues on your property?     Yes     No

## IRRIGATION

Do you have or plan to use an irrigation controller/timer?     Yes     No

Valve location \_\_\_\_\_ Pressure \_\_\_\_\_ # of Zones \_\_\_\_\_



## Zones & Irrigation Systems

Drip type \_\_\_\_\_ Sprinkler \_\_\_\_\_ Type \_\_\_\_\_

## Plant water needs

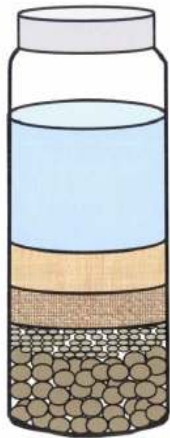
Very Low \_\_\_\_\_ Low \_\_\_\_\_ Moderate \_\_\_\_\_ High \_\_\_\_\_

Handouts  
online after  
webinar



# Physical Properties of Soil Texture

## Jar Test



Measuring Soil Texture

- Clay layer – water clears
- Silt layer – 2 hours
- Sand layers – 1 minute

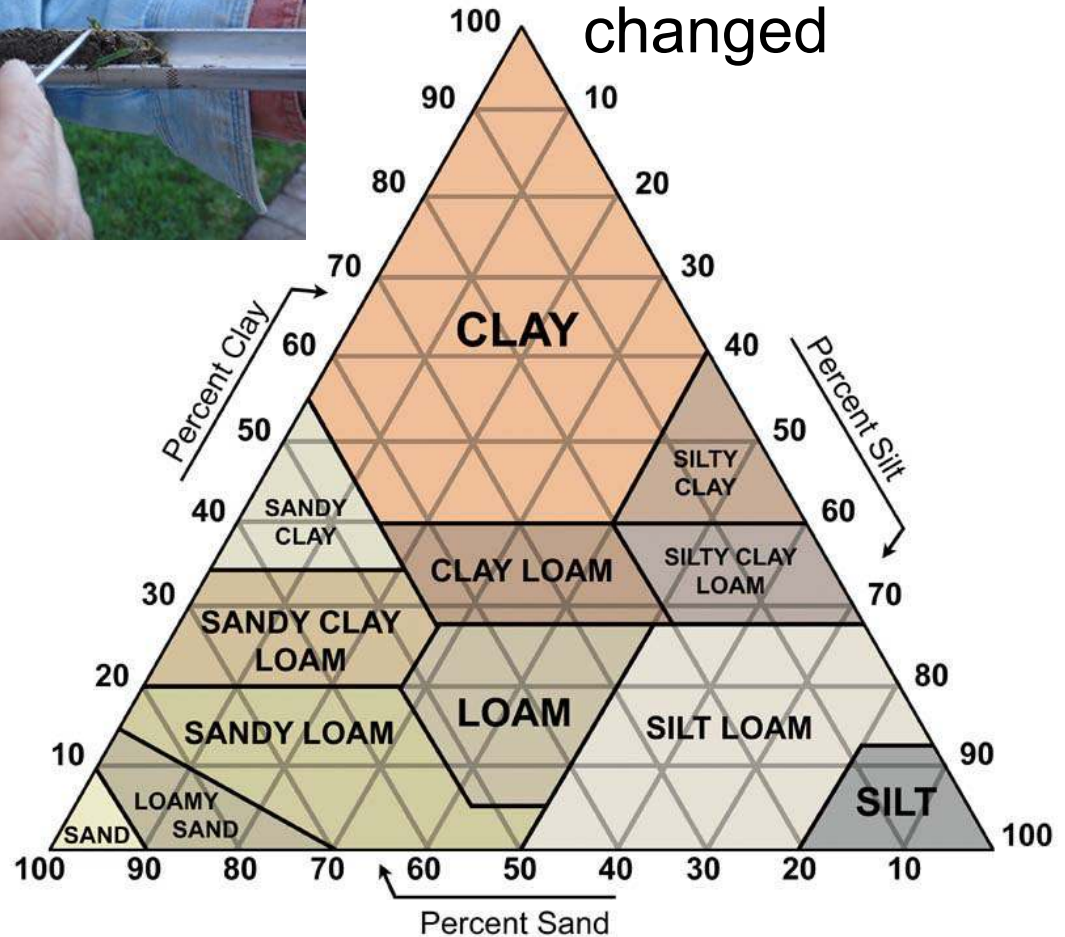


### JAR TESTING FOR SOIL TYPE



- |  |   |  |
|--|---|--|
| <p><b>SAND</b></p> <p>0 - 10% clay<br/>0 - 10% silt<br/>80 - 100% sand</p> | <p><b>LOAM</b></p> <p>10 - 30% clay<br/>30 - 50% silt<br/>25 - 50% sand</p> | <p><b>CLAY</b></p> <p>50 - 100% clay<br/>0 - 45% silt<br/>0 - 45% sand</p> |
|--|---|--|

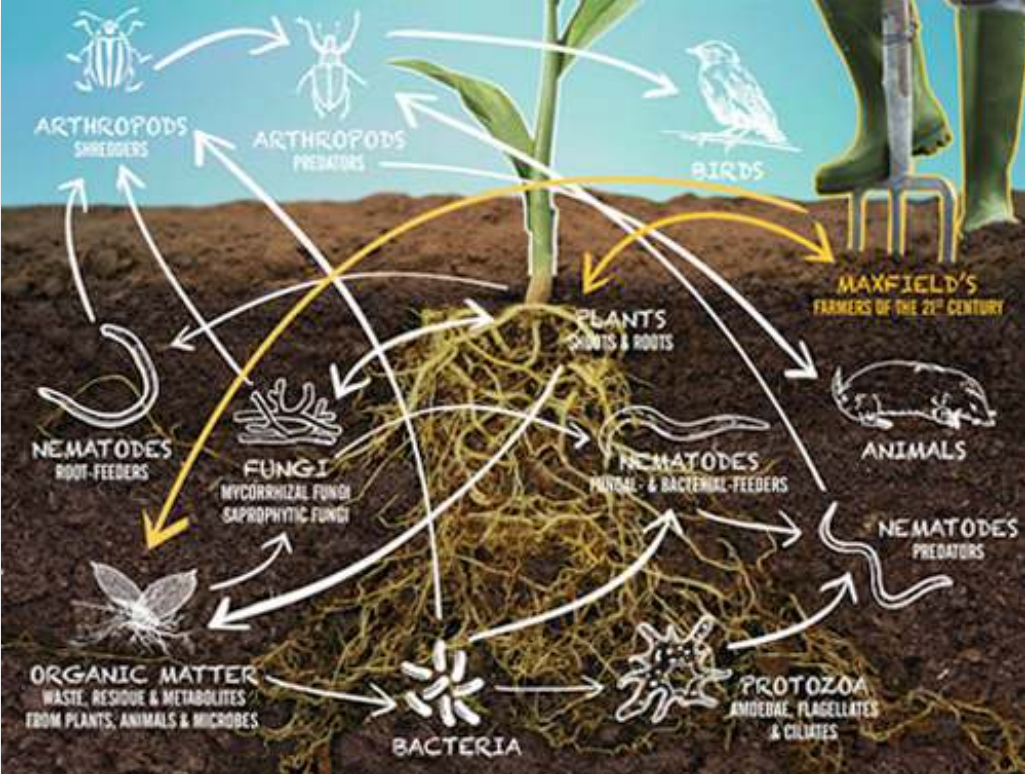
Soil textural triangle  
Texture can't be changed





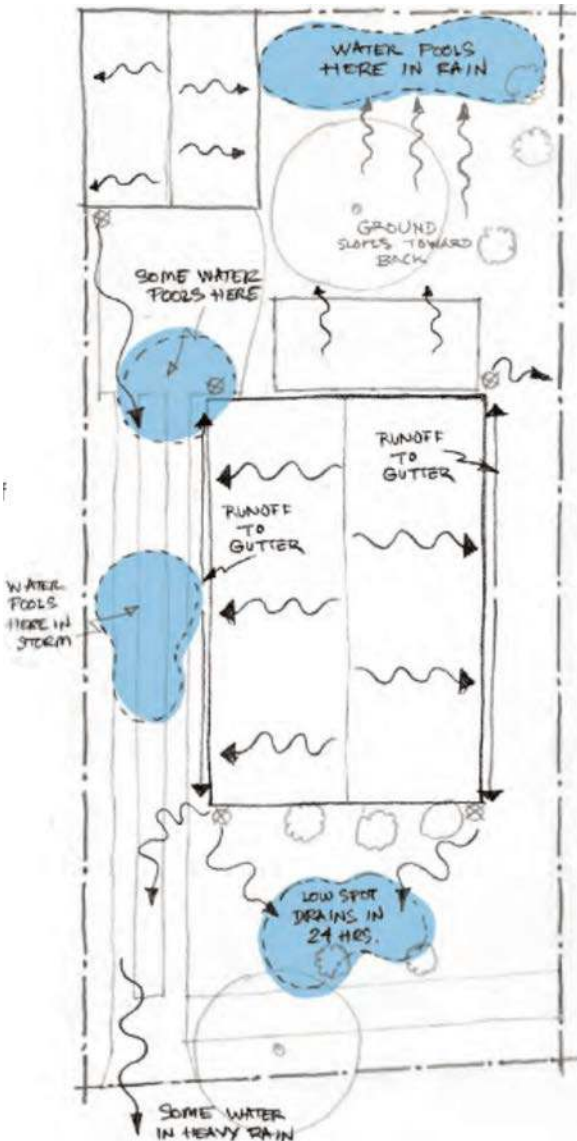
# Physical Properties of Soil Structure

Healthy soil needs a balance of minerals, organic matter, soil biology, water, air, light...



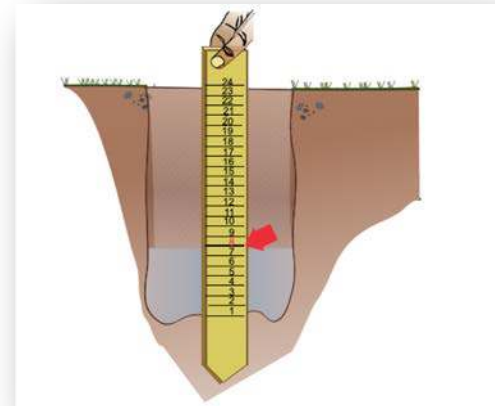
Healthy soil improves infiltration, percolation, & water retention  
Soil Structure can be improved

# Site Conditions Movement of Water & Drainage



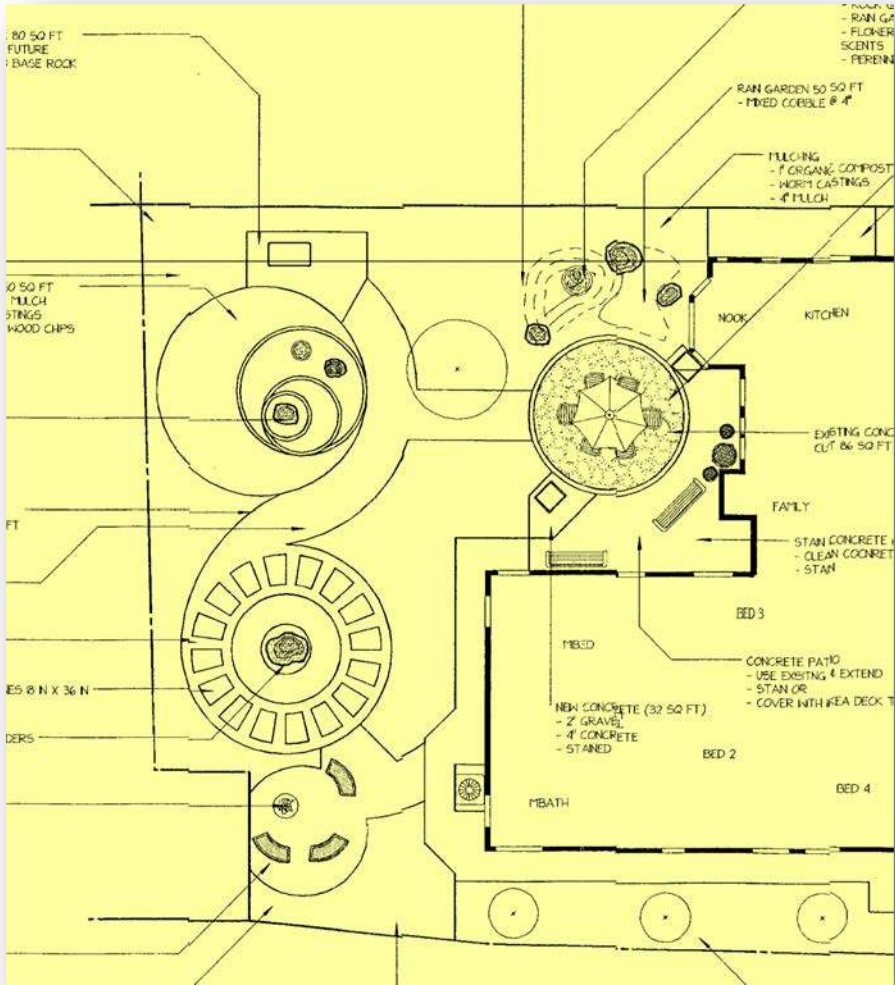
- On one copy of plan, note
- Where & how rain water moves onto, across, & off of property
  - Dig hole, fill with water, how fast/slow does water soak into soil
  - Areas where water collects
    - Opportunities for soil contouring, rain garden, etc.
  - Location of storm drain

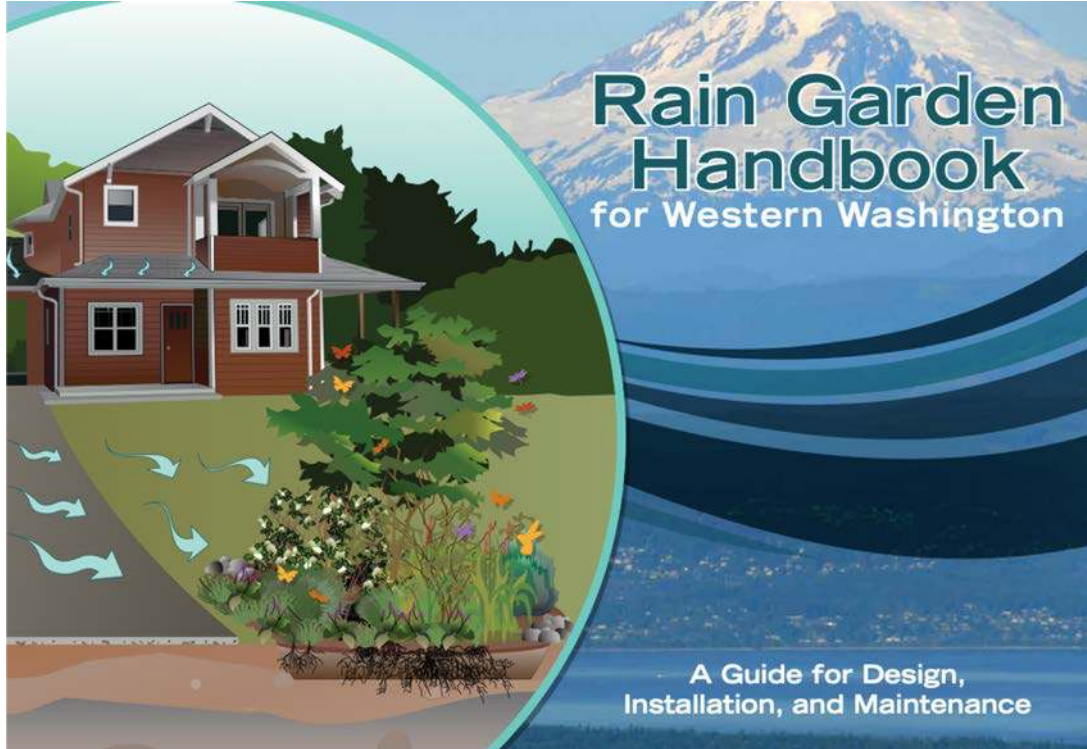
Diagrams courtesy of MWD OC, The Drought Tolerant Garden: Los Angeles County Handbook, 2012





# Water Management





# Rain Gardens

Excellent resource  
Study & apply to our  
climate, conditions, &  
your site



<https://fortress.wa.gov/ecy/publications/publications/1310027.pdf>

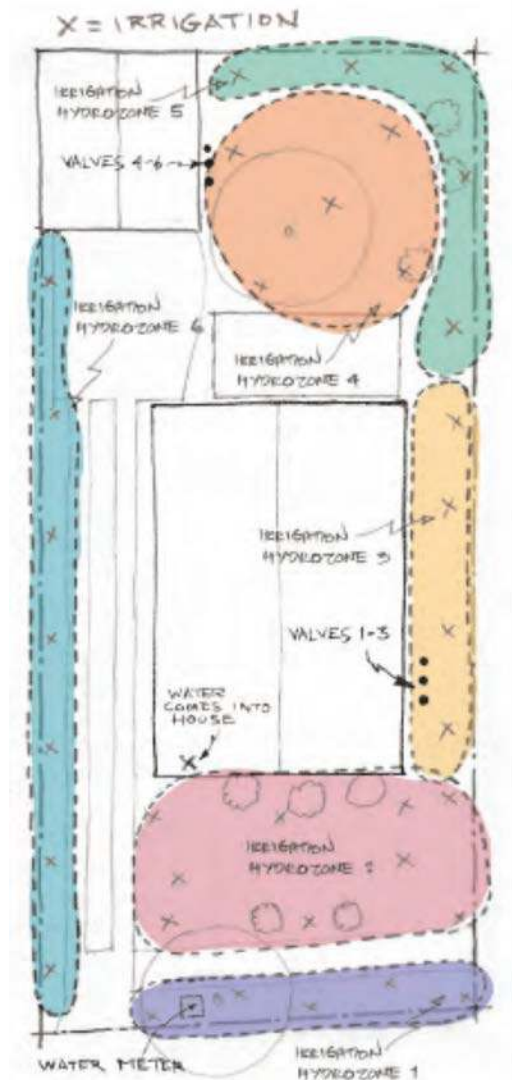
*Funding for this project was provided by the Washington State Department of Ecology through the Municipal Stormwater Grants of Regional or Statewide Significance program, Grant No. GG12015. Curtis Hinman, Washington State University Extension, served as the principal author. Kitsap County managed the project.*





# Irrigation System Gather Information

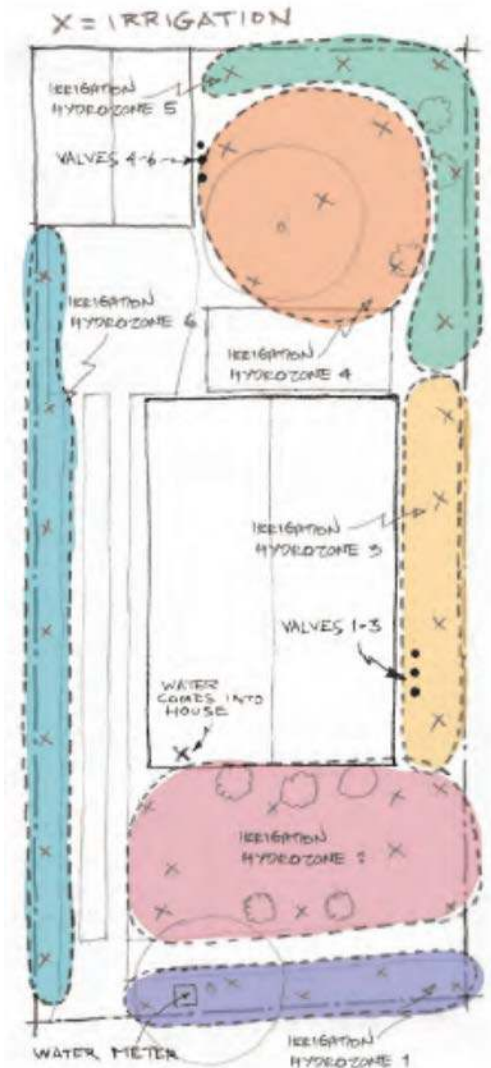
- Begin with the end in mind
- Draw sketch of your yard & note
  - Water meter & where water comes from meter, onto your property, & into home
  - Location of controller
  - Location of sprinkler heads, mark with “X”s
  - Location of valves, mark with “O”s
  - Age of system, consider abandoning
- Whatever system you use, know and understand
  - How much water does it apply?
  - How long does it take to apply it?





# Gather Irrigation & Plant Information

- Turn on irrigation system
- Note if sprinklers go on at the same time in more than one area
  - Color those areas on plan
- Compare color codes
- Are sunny & shady areas on same valve (zone)
- Are lawn & planting areas on same valve
- If yes, alter system so plants with similar water needs & sun exposure are on same valve





# Slopes, Steps, & Changes in Elevation

- Reduce or eliminate slopes to prevent runoff & erosion
- Use terracing or retaining walls
- Add interest, prevent ground level from being “flat”
- Guide to entry, focal point, areas of entertainment

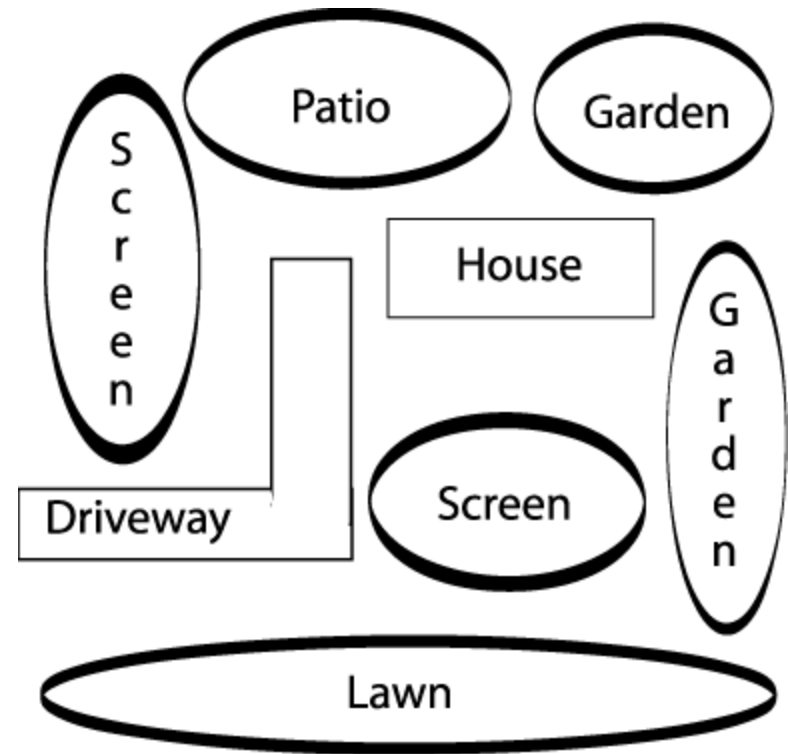




# Functional / Bubble Plan

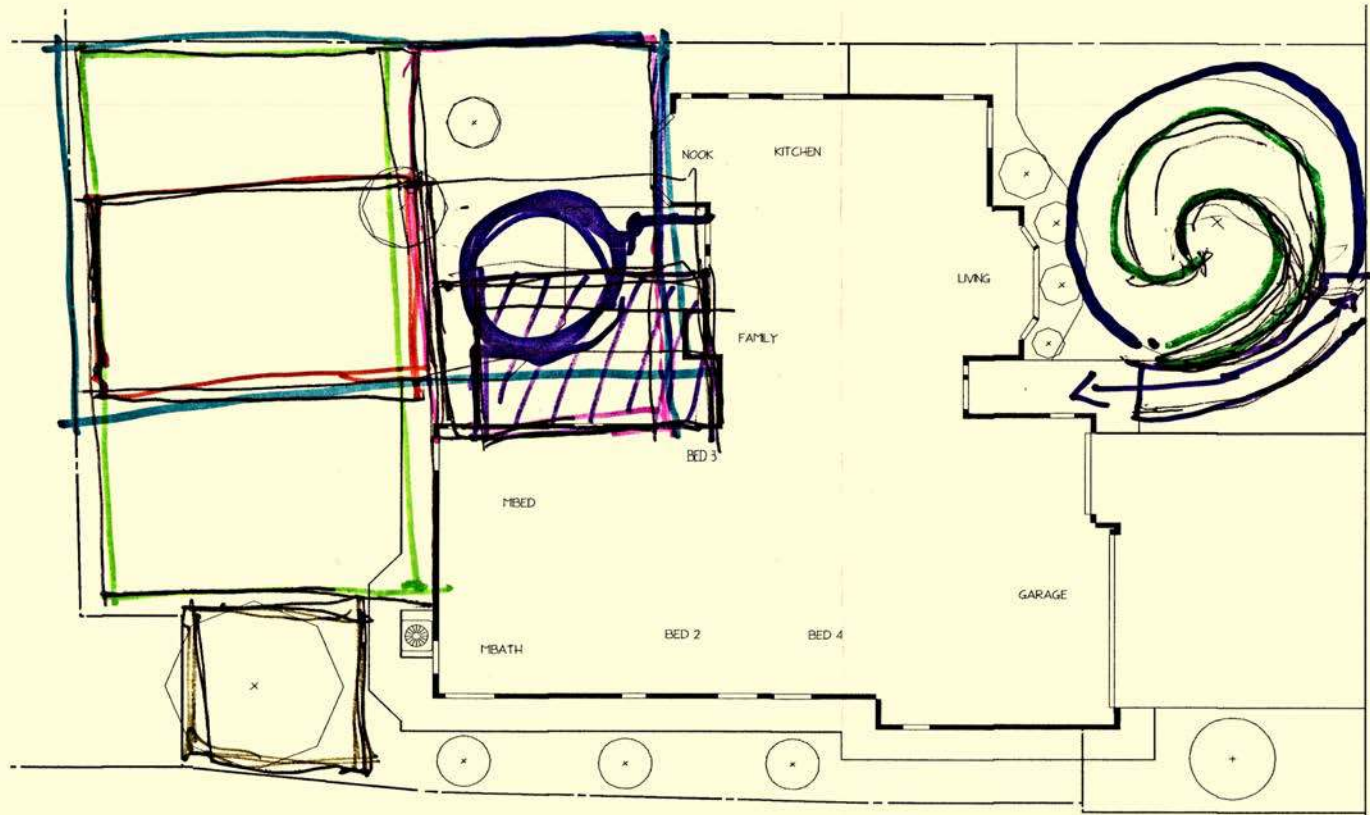
Use copy of base plan

- “Broad strokes”
- Approximate size & shape of features
- Generally define areas & uses
- Consider function & purpose of space
- Access & movement
- Transitions from one area to another
- Challenges (e.g., noise, drainage, slopes)



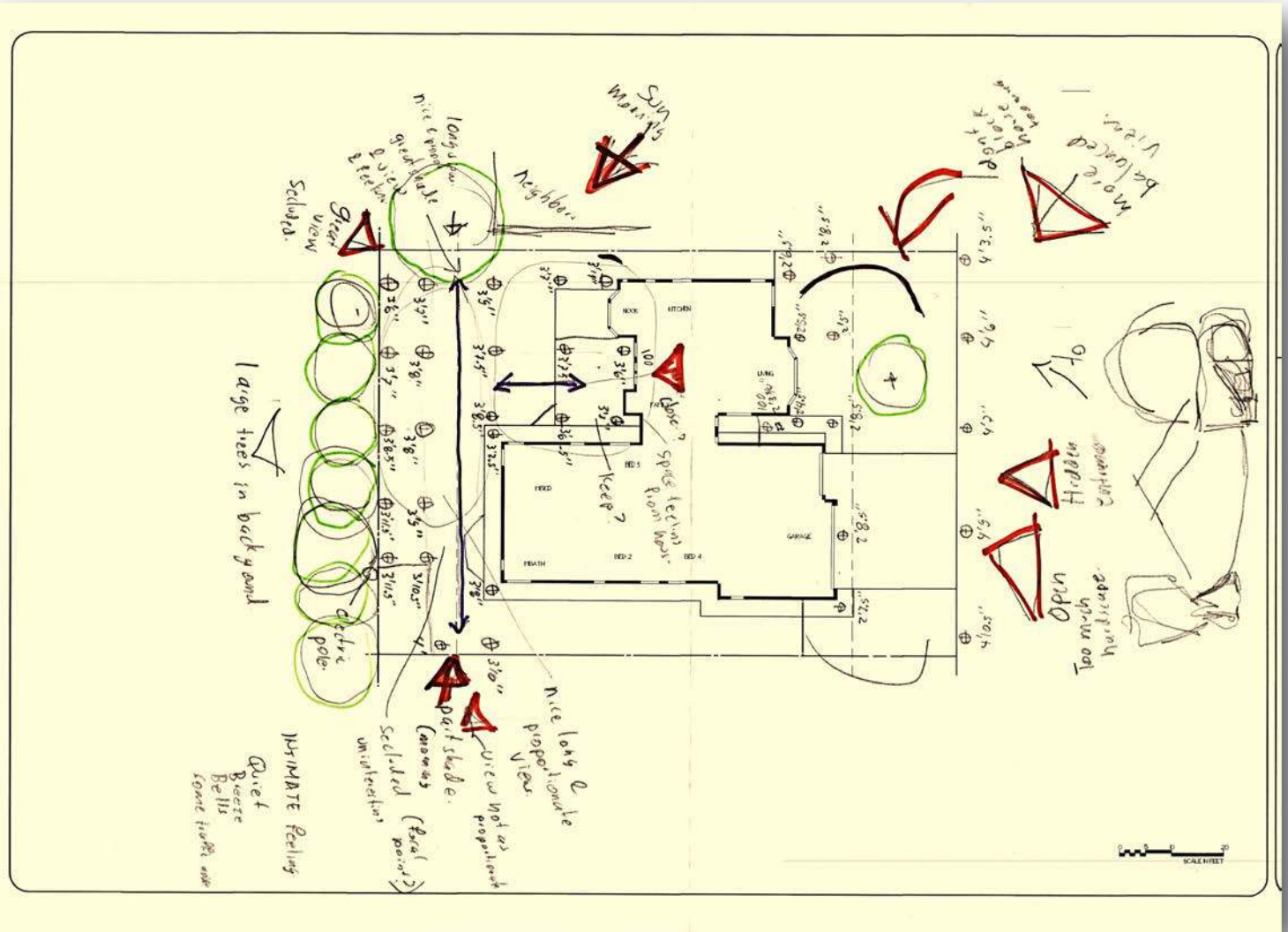


# Landscape Use & Flow Bubble Diagram





# Landscape Use & Flow Site Study





# Hardscape Access, Paths, Walkways

- Hardscape – Non-water consuming materials
- Curved & off-set paths slows pace
- Lends to leisurely, welcoming feeling
- Create destinations & garden “surprises”





# Hardscape Access, Paths, Walkways

- Straight paths & walkways quicken pace
- Goal is to get from point A to point B
- Utilitarian uses, can still be attractive







# Hardscape Access, Patios, Walkways





# What Existing Materials Can Be Re-used?

- Reduce construction waste
- Reuse, recycle, repurpose



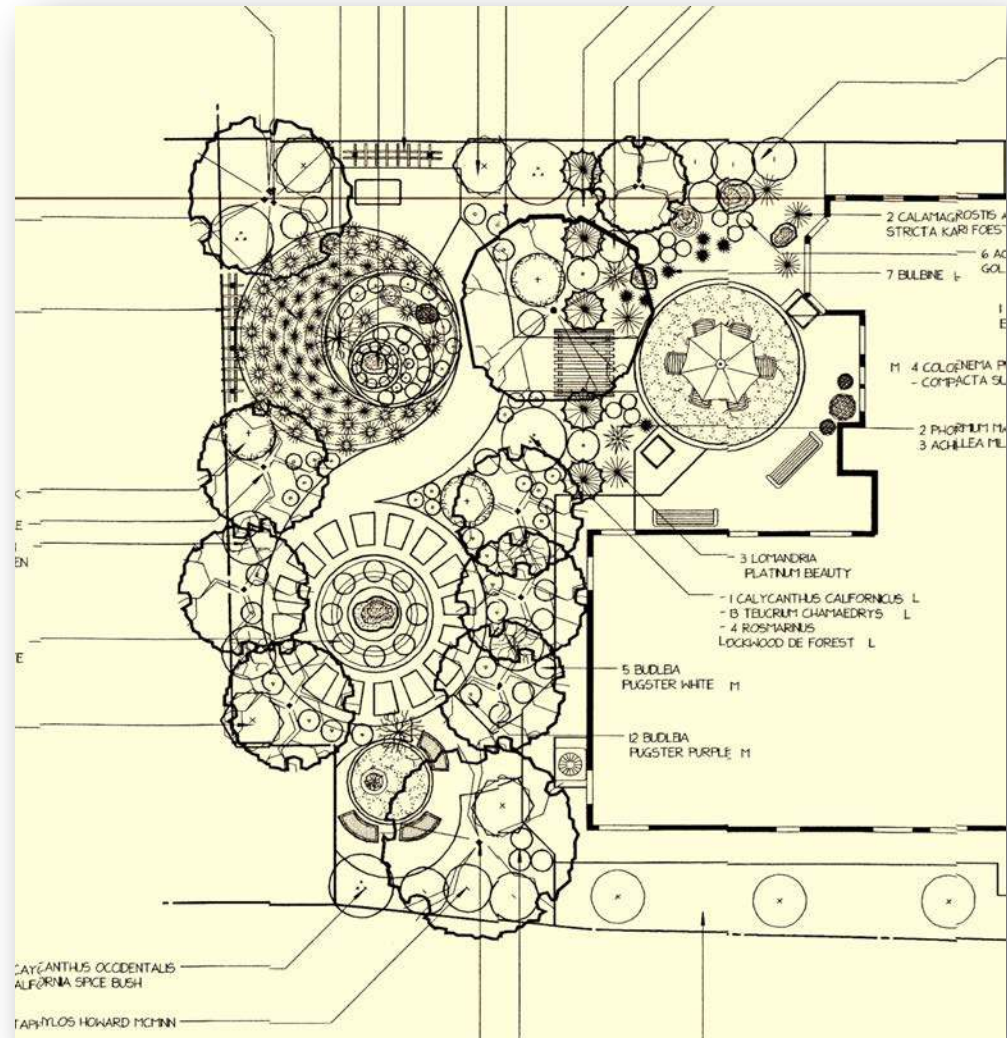




# Softscape

Softscape - Living, water-consuming materials

- Give plants room to grow to maturity
- Draw in at full size
- More about plants in Right Plant, Right Place class





# Efficient Irrigation Hydrozoning

- Separate valves (when possible) for
  - Trees
  - Lawn
  - Edibles, fruit trees, etc.
  - Potted plants
  - Mature plants being kept
  - Plants that rely on seasonal rainfall & little, if any, supplemental water (once established)



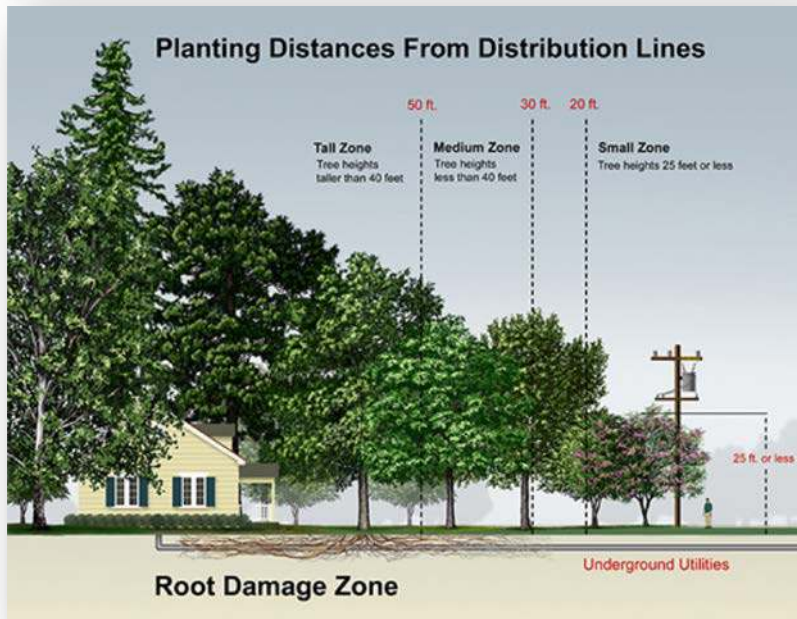


# Fire-Wise Plant Spacing

- Place plants individually (sparse planting) with space between them or small groups of plants with open spaces between groups
- Don't place shrubs right next to trees & decks (remove potential for "fuel ladders")
- Create wide paths between plant areas with permeable hardscape

Refer to  
ReadyforWildfire.org,  
California Department  
of Forestry  
& Fire Protection

# Location of existing Trees



- When placing, look up, look down, & look out
- Deciduous trees on west & southwest side of house
- Consider solar panels, height & shade from tree
- Consider distance from structures, underground, & overhead utilities
- DO NOT top trees



# Location of Existing & New Plants

- Consider mature height & width
- Give plants room to grow
- Allow time for plants to get established
- Performance & growth based on length of growing season, timing & amount of rainfall, winter lows, summer highs, wind, & humidity



*Loropetalum*, Fringe Flower





# *Static Color is Unchanging*



Designer & Contractor  
Gary Kernick  
Change of Seasons

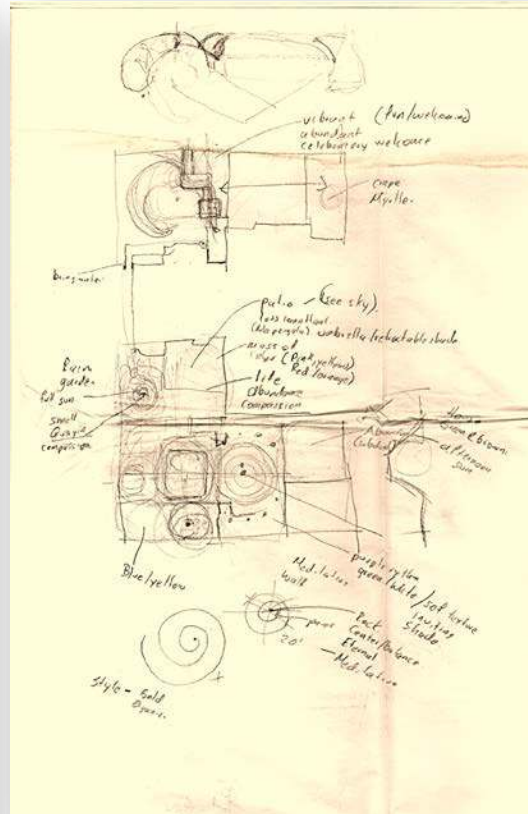


# *Transient Color* Changes throughout Seasons

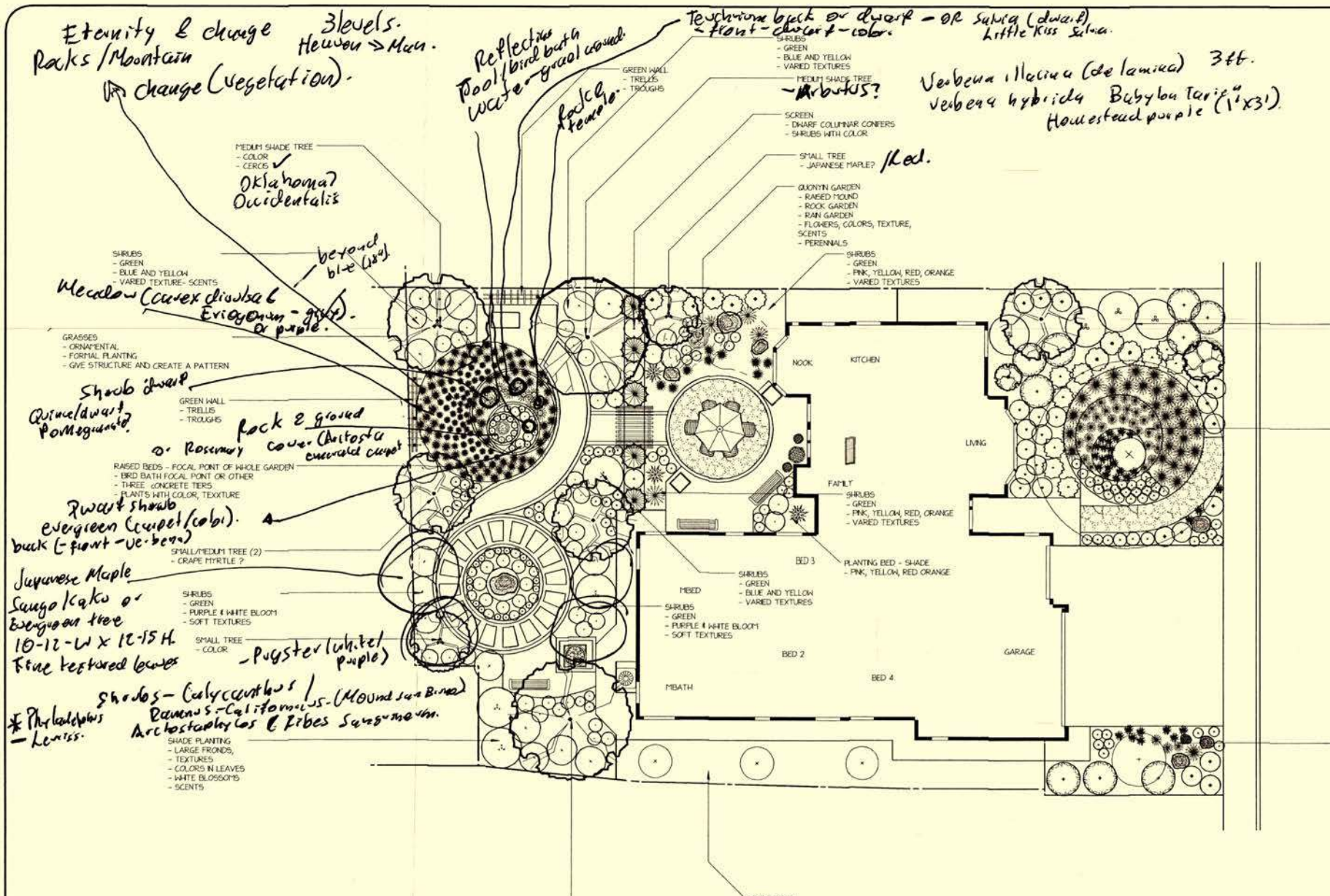




# Preliminary Landscape Sketch



- The fun part begins
- Putting it all together



Preliminary Landscape Sketch



# Resources at Your Fingertips [apldca.org](http://apldca.org)

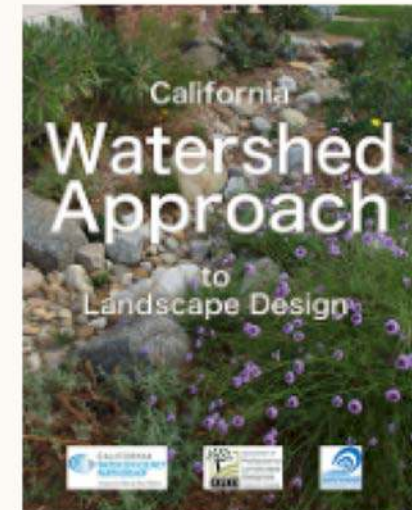


Find a  
**Designer**

Full Address	within 50 mi	Go
California	Designer Name	

## Our Newest Handbook

Download *California Watershed Approach to Landscape Design*, which was made possible through a collaboration with Green Gardens Group (G3), California Water Efficiency Partnership (CalWEP), and Surfrider Foundation.



Association of Professional Landscape Designers  
California Chapter ~~ [apldca.org](http://apldca.org)



# The New California Landscape



### 1 RIGHT AS RAIN

- Rain garden
- Ultra sustainable
- Stormwater management
- Resource efficient

### 2 NEAT AND PETITE

- Small scale landscape
- Emphasis on recycled materials

### 3 WHOLESOME HABITAT

- Worthy of Natural Wildlife Federation designation — Provides water, shelter, food & hiding spots for wildlife
- Family-friendly/habitat
- Water feature
- Edible garden
- Composting, recycling

### 4 RECREATION DESTINATION

- Sophisticated
- Perfect for entertaining & parties
- Recreation / horseshoe pit
- Carefree landscape

SHOW ME MORE

## Eco-Friendly Landscape Design Plans for The New California Landscape

- Drought-tolerant
- Low water-use
- Easy care
- Low maintenance
- Save money, reduce pollution & waste

### Eco-Friendly Landscape Design Plans for The New California Landscape

**FREE** Four Complete Landscape & Irrigation Plans

- 75 Plant Profiles
- Irrigation Equipment
- Guided Verbal Tours of Plans
- **Interactive Designs:** See plants, features, & learn about water-saving irrigation equipment and practices

**Visit Download Learn**

to region residents

#### How can I participate?

Click on one of the landscapes above to learn



# As Your Plan Develops...

Remember, Today's RFL Landscape is...

- Functional
- Maintainable
- Environmentally Sound & Resource Efficient
- Cost Effective
- Visually Pleasing
- Watershed Friendly





CITRUS  
HEIGHTS  
WATER  
DISTRICT

# Questions & What's Next?

June 11, 6:30 p.m.  
Putting Your Green Plan Together

Cheryl Buckwalter

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Martin Carrion van Rijn

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Landscape  
Symphonies

design - construction - maintenance

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