WaterSmart Landscape
MAKEOVER SERIES

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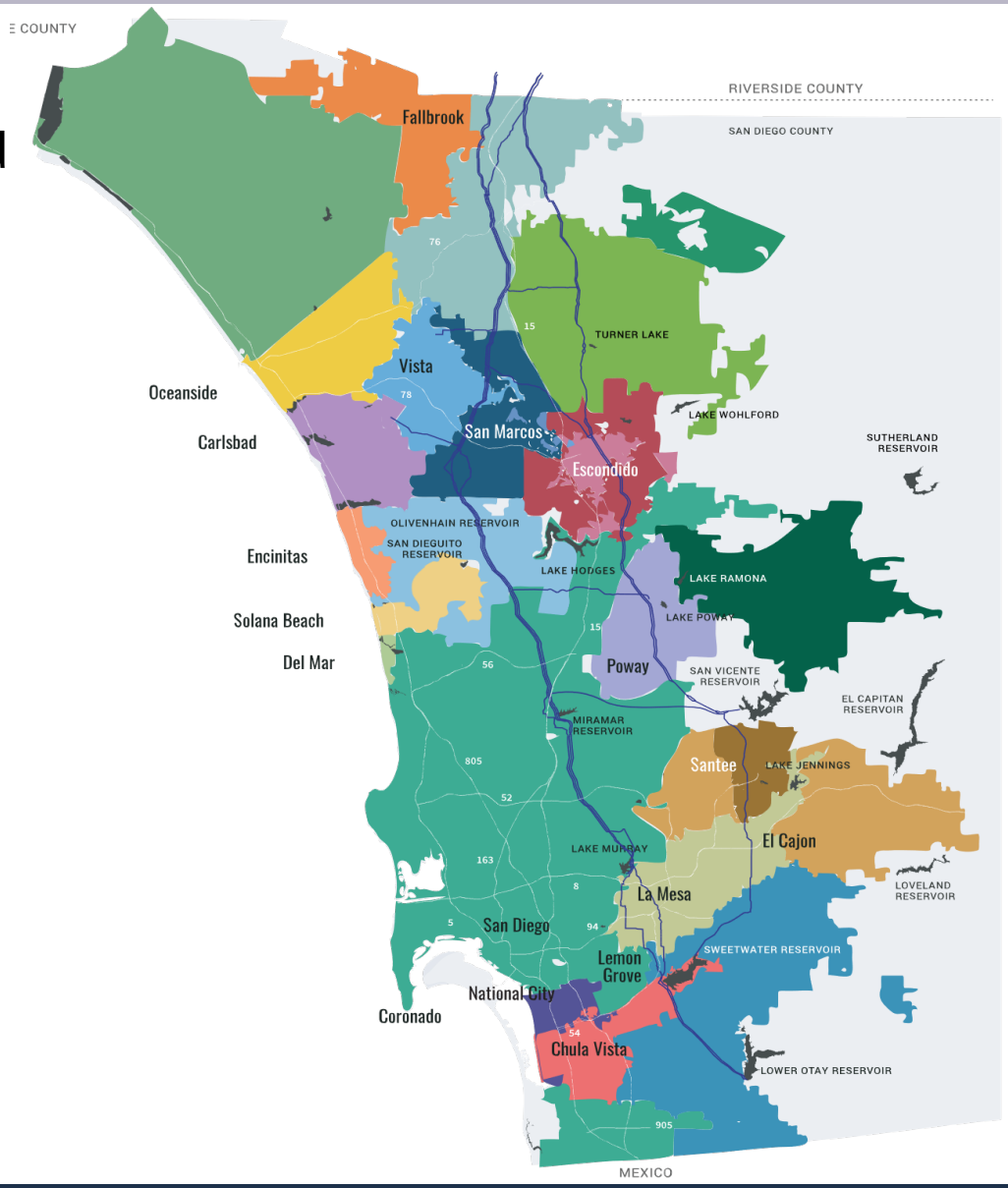
CLASS 1

LET'S GET STARTED


"Making The Revenant was about man's relationship to the natural world. Our production needed to move to the southern tip of this planet just to be able to find snow. Climate change is real, it is happening right now. We need to support leaders around the world…
Let us not take this planet for granted."

San Diego County Water Authority

- Wholesale water agency created by the State Legislature in 1944
- Serve 3.3 million people -- 97% of county's population -- through 24 member agencies and 310 miles of pipeline
- $220 billion economy
- Builds, owns, operates and maintains regional water infrastructure
- Provide about 75% of the water used across the



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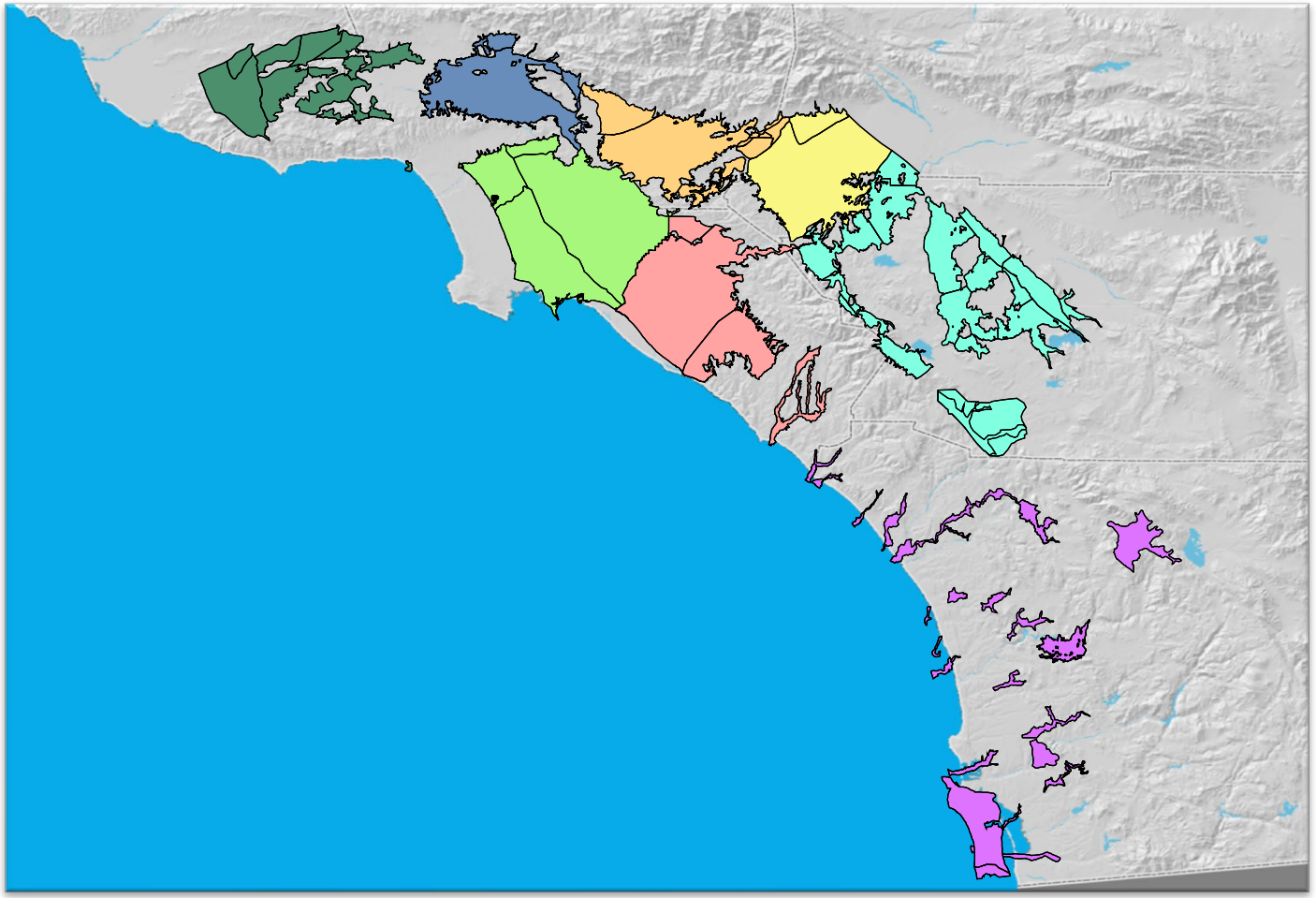
San Diego Has Few Natural Water Assets

Very Little Groundwater



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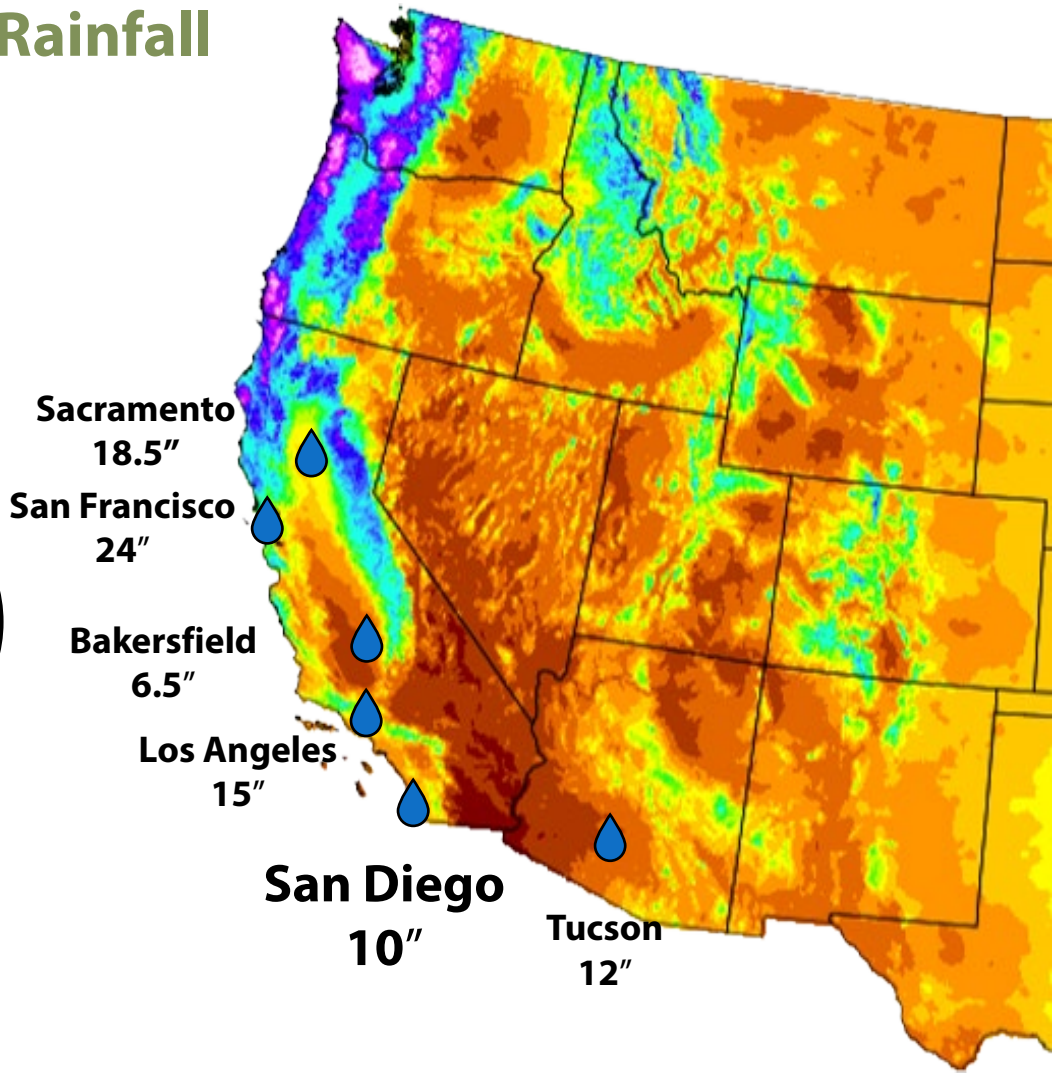
San Diego Has Few Natural Water Assets

Very Little Rainfall

1946



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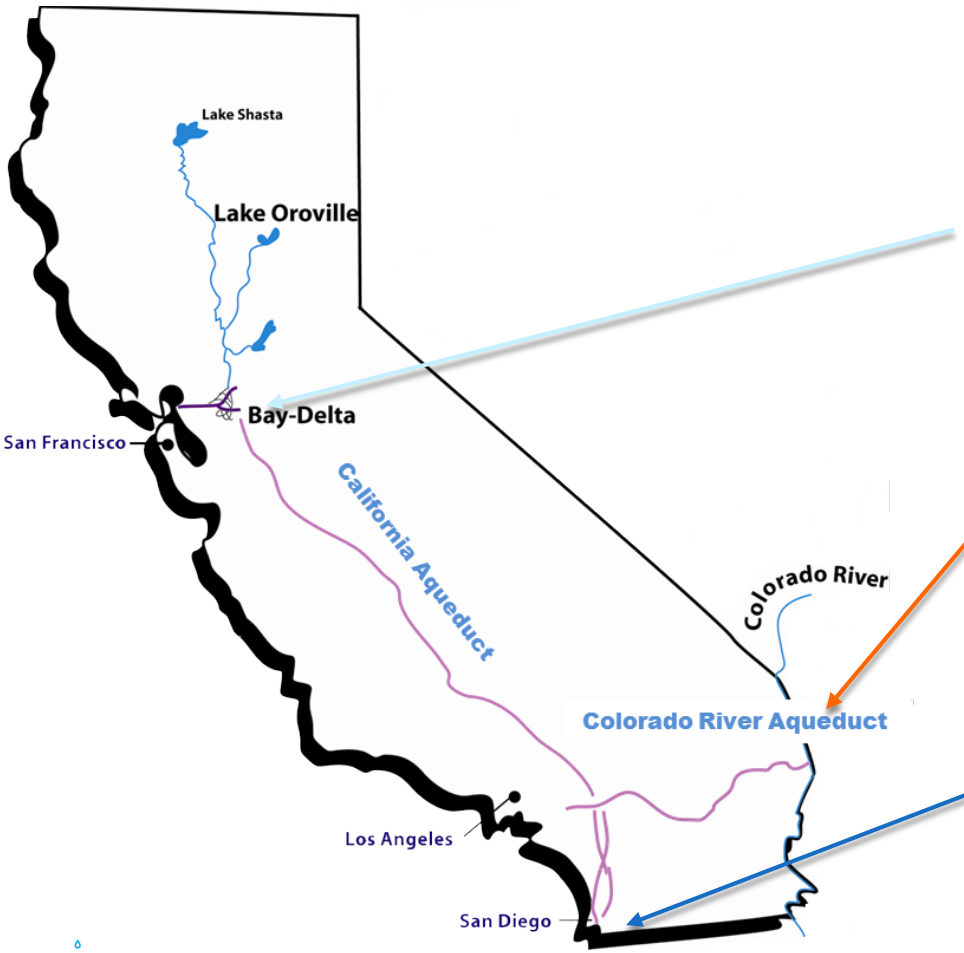
San Diego County's Water Sources



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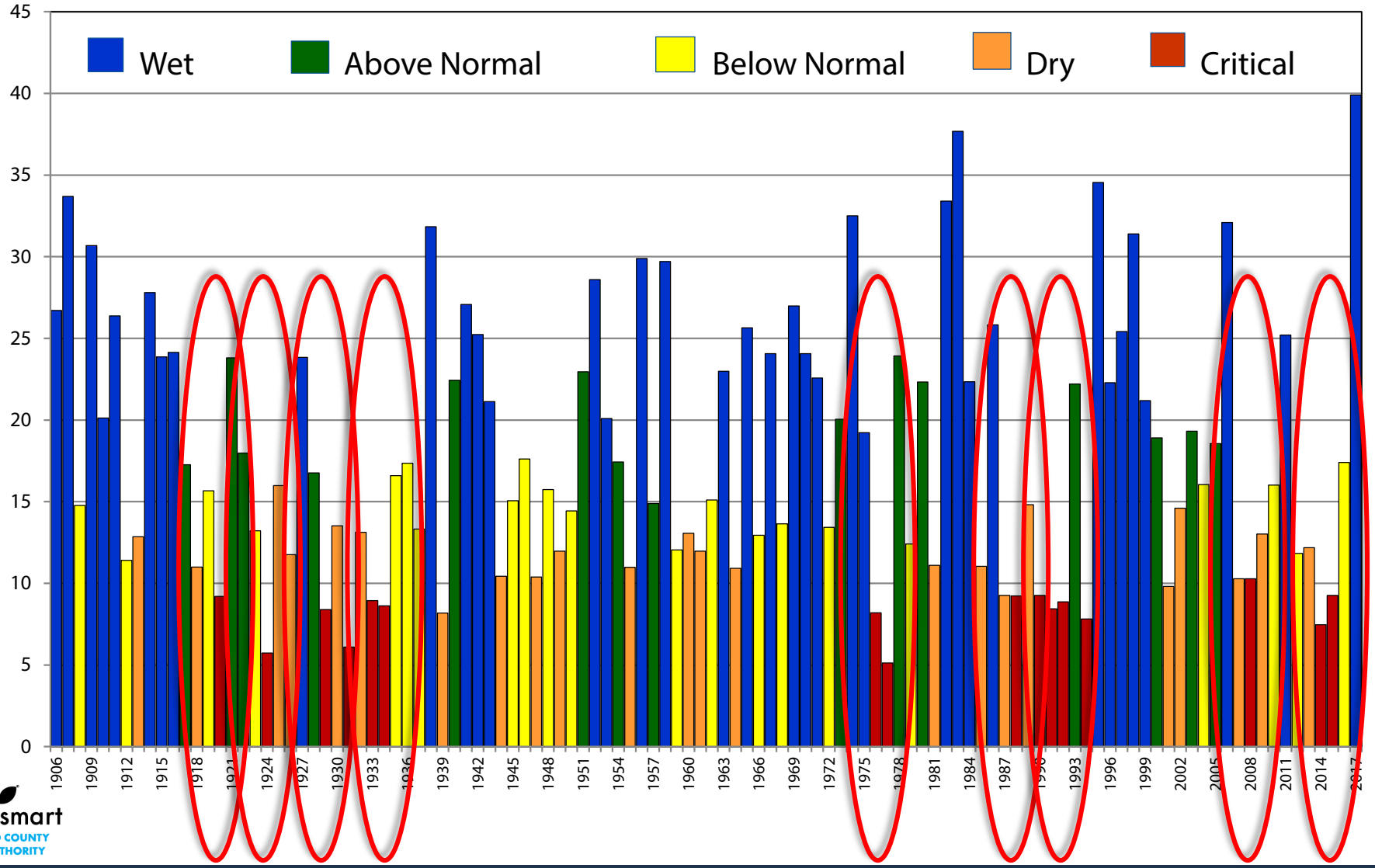
We’re at the End of Very Long Pipelines

Droughts are Common in California



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Supply Diversification

Conservation

Canal Linings

Reclaimed Water

San Diego County Water Authority

Our Region's Trusted Water Leader

Carlsbad Desal Plant

Potable Water Reuse

Local Surface Water

San Diego County 1990 vs 2018

Population

38%

Jobs

55%

Gross Domestic Product

83%

Potable Water Use

23%

Gallons per Capita

43%

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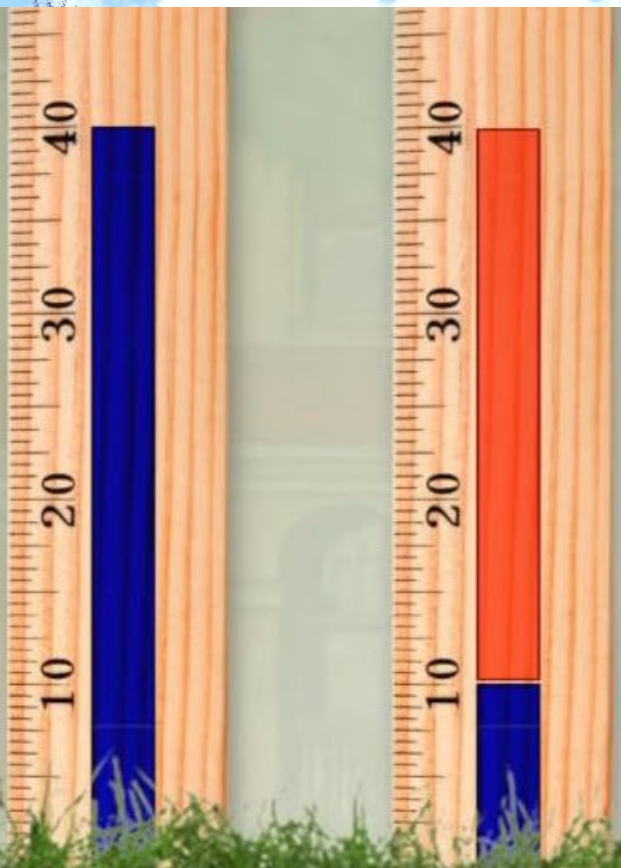
Grass Requires
40" of Water
a Year



Imported Water
Each Year

San Diego Averages
10" of Rain a Year


2339


840

Your Path t[illegible]art Landscape

1
Identify Your Landscape Target

2
Create a Plot Plan

6
Care for Your WaterSmart Landscape

5
Implement Your Plan

Free Videos On Demand
Learn Online How to Create A WaterSmart Landscape

Instructor-lead series of short lessons for home-owners on landscaping essentials:

- Build healthy soil
- Shape outdoor spaces
- Create curb appeal
- Irrigate like a pro

Available 24/7 – whenever and wherever you are!

Downloadable materials & other resources.

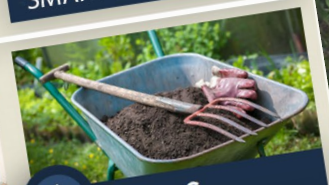
Step 1
IDENTIFY YOUR LANDSCAPE TARGET

Step 2
CREATE A PLOT PLAN

Step 3
EVALUATE YOUR SITE

Step 4
DESIGN YOUR WATER-SMART LANDSCAPE

Step 5
IMPLEMENT YOUR PLAN



Step 6
CARE FOR YOUR WATER-SMART LANDSCAPE


340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San Diego County
Water Authority

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Joni German

Water Resources Specialist
San Diego County Water Authority
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WaterSmart Landscape
MAKEOVER SERIES

CLASS 1

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Let's Get Started!

Housekeeping

Housekeeping:

Breaks: mid-class, after lab

Restrooms (please respect closed-off areas)

Please silence your cell phones

If you can't attend, contact us!

WaterSmart Series Contacts:

Michelle Landis, Project Manager

Leticia Perez Isaac, Project Coordinator

Rania Theodosi, Project Coordinator

Studio West Landscape Architecture + Planning

Email: **landscapemakeover@sdcwa.org**

Introductions

Please introduce yourself…

- **Name**
- **Geographic area**
- **Personal Goals**

Thank you!

Personal Goals

How many of you are here to …

- **Reduce your water use?**
- **Learn which plants to use?**
- **Get curb appeal?**
- **Get a planting plan?**
- **Learn how to retrofit irrigation?**
- **Reduce maintenance?**

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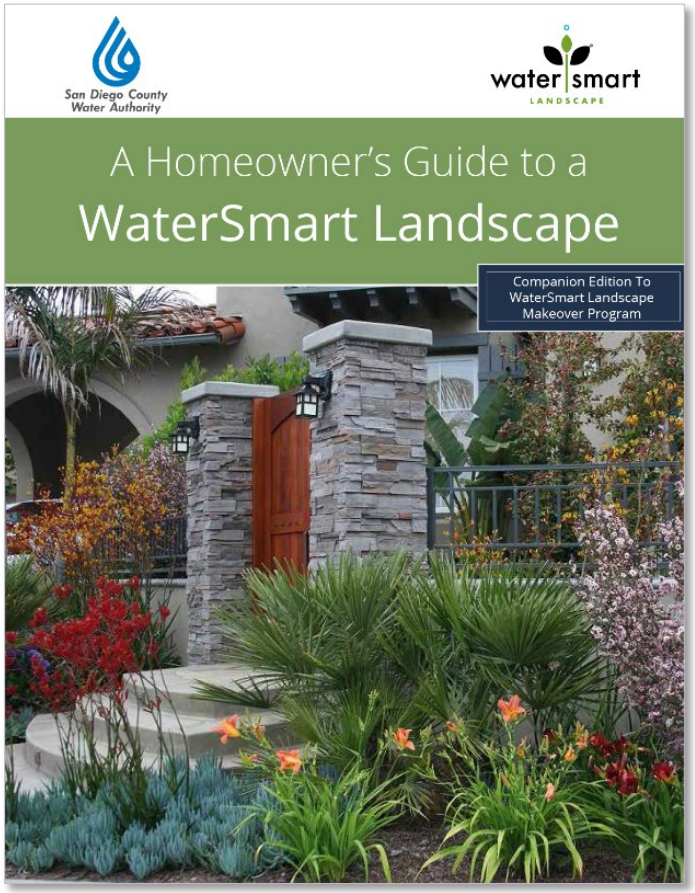
Course Goals

Learn the knowledge and skills necessary to convert a high-water-use turf area into a beautiful, WaterSmart landscape, including how to:

1. Identify Your Landscape Target
2. Create a Basic Plot Plan
3. Evaluate Your Site
4. Design Your WaterSmart Landscape
5. Implement Your Plan
6. Care for Your WaterSmart Landscape



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Class 1

Let's Get Started

Watersheds, Base Plan, Scale, Soil, Stormwater & Site Evaluation

Class 2

Shaping Spaces

Landscape Design Fundamentals, Plant Selection & Functional Design

Class 3

Make it Happen

Irrigation Design, Turf Removal, Implementation & Maintenance

Class 4

Design Coaching

LID, Planting and Irrigation Plans & Evaluations

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WaterSmart Landscape MAKEOVER SERIES

CLASS 1

Let's Get Started

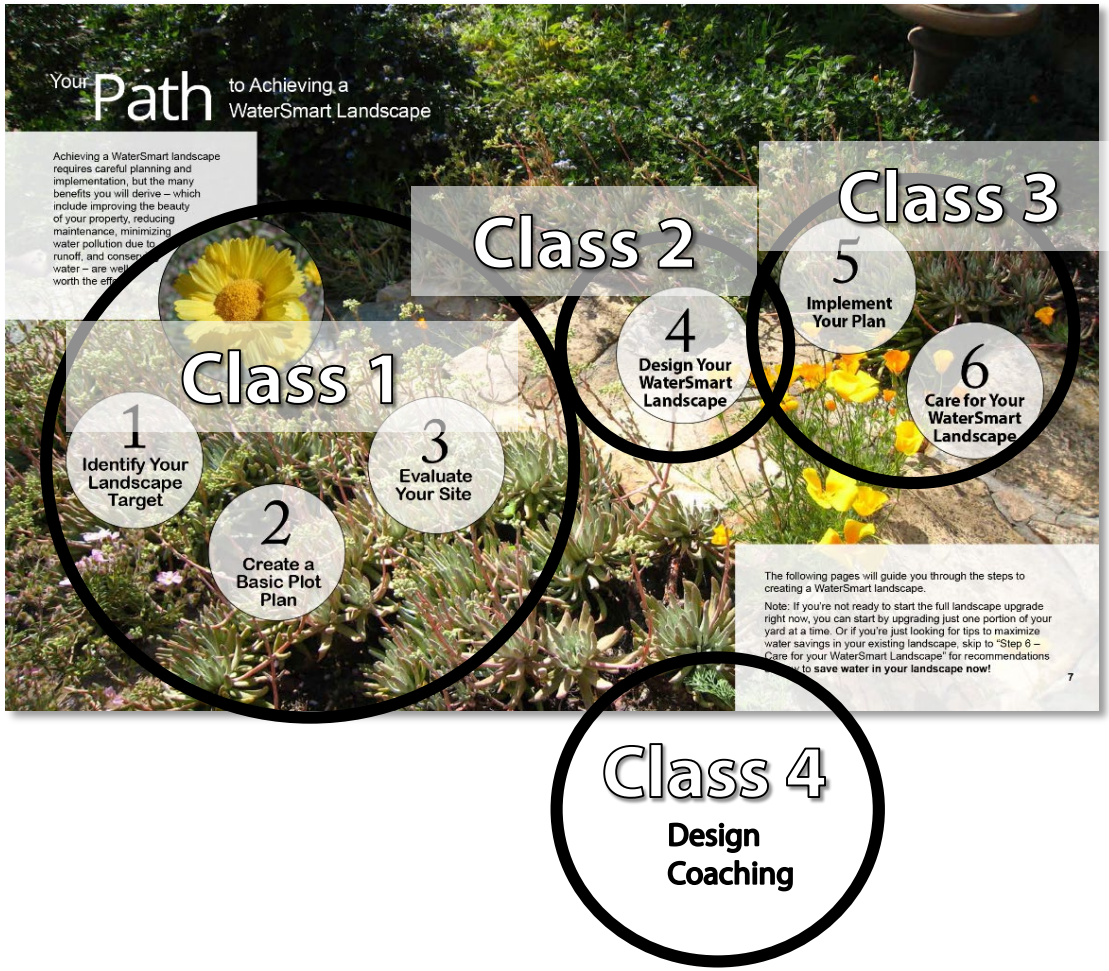
Learning Objectives

Water and San Diego County
Reasons to be WaterSmart

Course Orientation
Goals
Materials

Why Remove Turf?
Water Requirements
Rainfall in SD
Sample Projects

Steps to WaterSmart
1. Identify Your Target
2. Create a Plot Plan
3. Evaluate Your Site
    - Watersheds
    - First Flush
    - Soil
    - Managing On-Site Water
    - Techniques



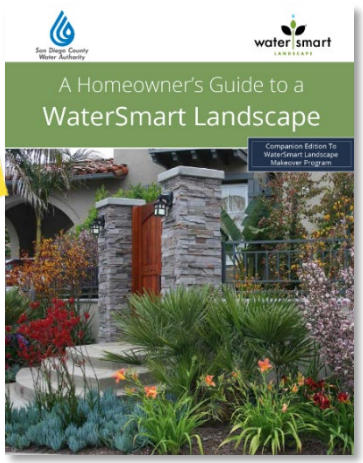
WaterSmart Landscape MAKEOVER SERIES

CLASS 1

Course Materials

- **Notebook**
  - Presentations
  - Homework and work sheets at end of each Class section
  - Support Materials: Reference material and some larger slides
  - Final Survey

Homework: Read thru Step 4



- **A Homeowner's Guide to a WaterSmart Landscape**
  - Details of entire process
  - Reinforces class material
  - WaterSmart Plant Palettes

- **Base Plans**
  - Class 1: L-1 Property with Details
    L-2 for Low Impact Development
  - Class 2: L-3 Planting Plan with fewer details
  - Class 3: L-4 Irrigation Plan
  - Class 4: Bring them ALL

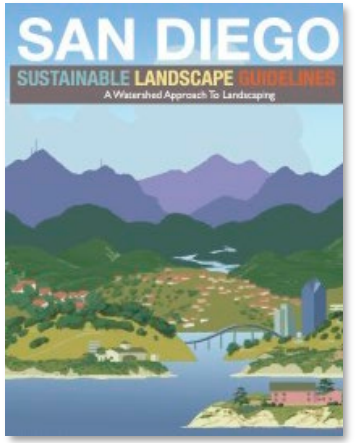
Available On-line Resources

https://landscapemakeover.watersmartsd.org/

- **Videos On Demand**

- **Sustainable Landscape Guidelines (SLP)**

SLP Bonus Reading: pages 1-45



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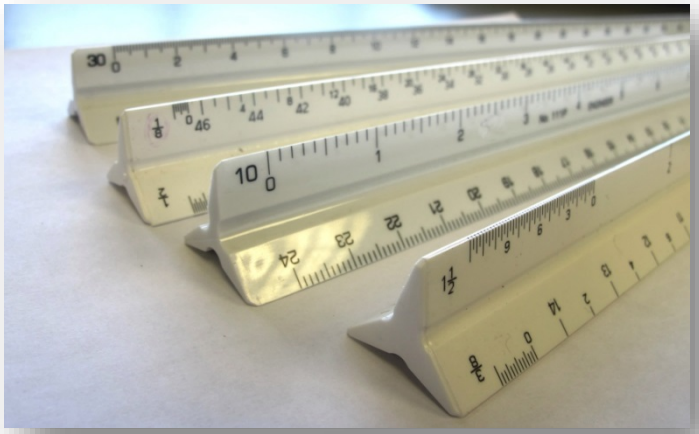
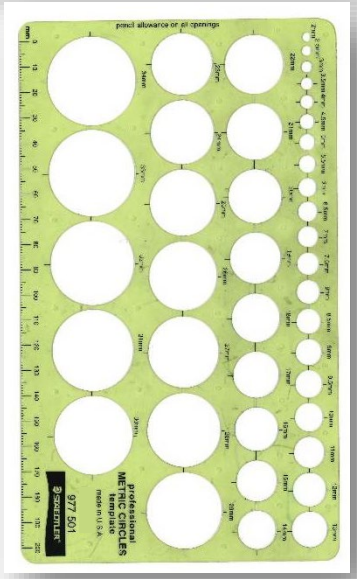
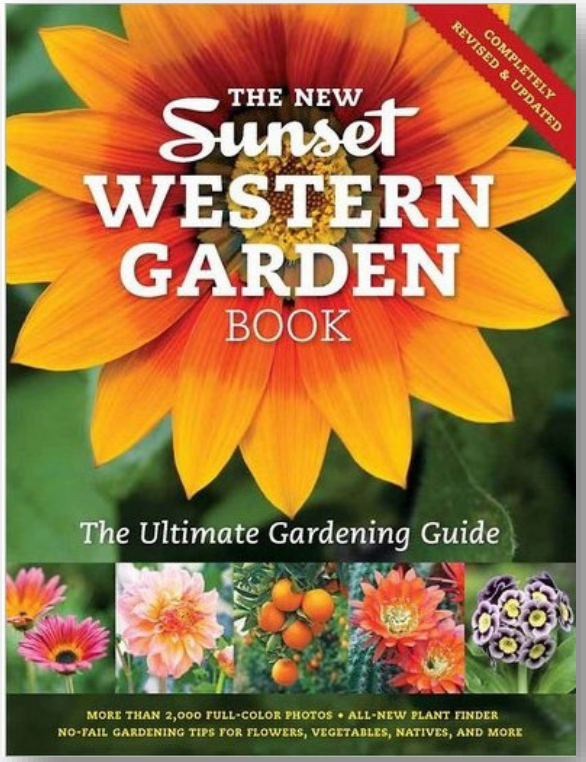


Scale



Circle Template



Reference:
Sunset Western Garden Book

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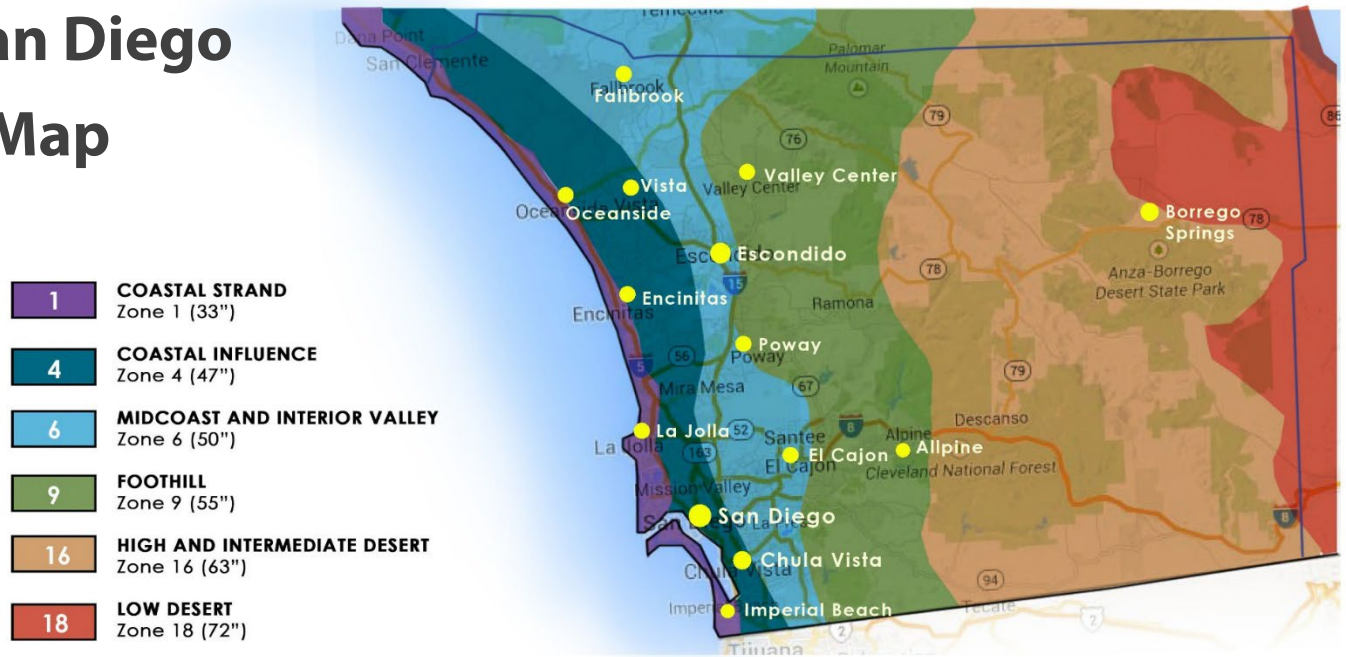
Why Remove Turf?

Average ETo in San Diego Integrated Zone Map



Monthly Average Reference Evapotranspiration by ETo Zone (inches/month)

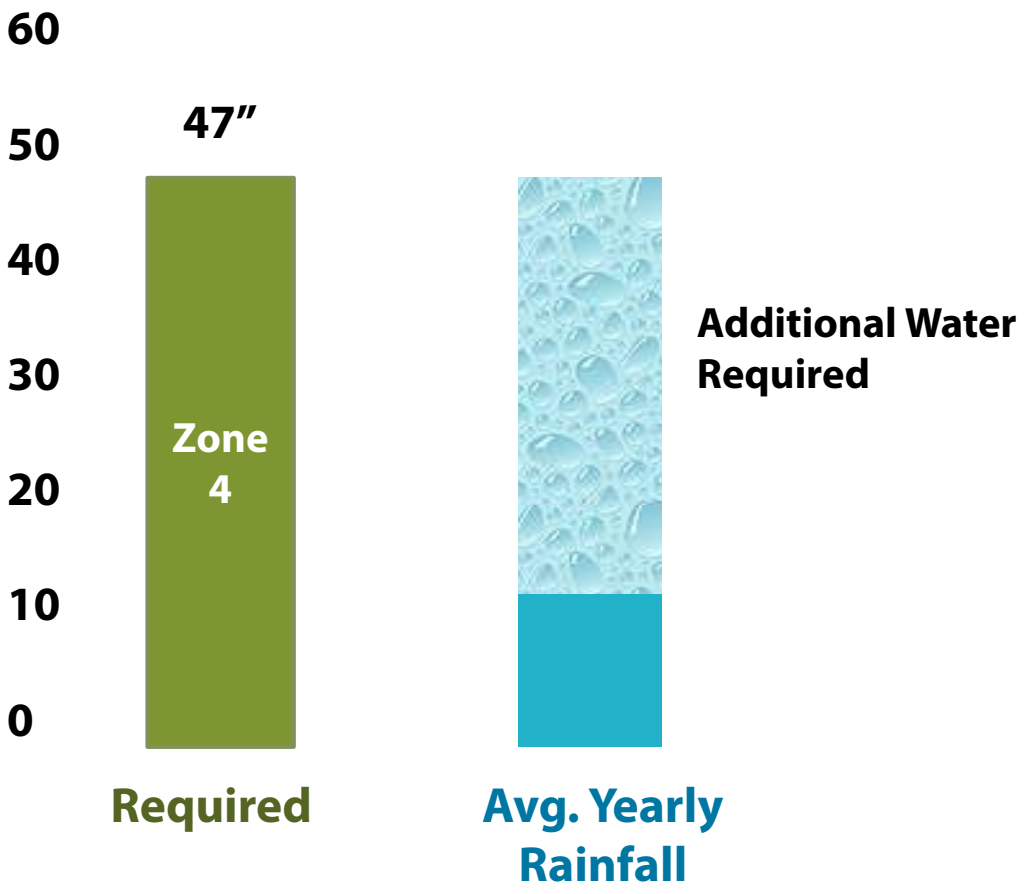
Zone	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	0.93	1.40	2.48	3.30	4.03	4.50	4.65	4.03	3.30	2.48	1.20	0.62	32.9
4	1.86	2.24	3.41	4.50	5.27	5.70	5.89	5.58	4.50	3.41	2.40	1.86	46.6
6	1.86	2.24	3.41	4.80	5.58	6.30	6.51	6.20	4.80	3.72	2.40	1.86	49.7
9	2.17	2.80	4.03	5.10	5.89	6.60	7.44	6.82	5.70	4.03	2.70	1.86	55.1
16	1.55	2.52	4.03	5.70	7.75	8.70	9.30	8.37	6.30	4.34	2.40	1.55	62.5
18	2.48	3.36	5.27	6.90	8.68	9.60	9.61	8.68	6.90	4.96	3.00	2.17	71.6

Map zones determined by analysis of United States Department of Agriculture (USDA) 2012 'Plant Hardiness Zone Map', California Irrigation Management Information System (CIMIS) 'Reference Evapotransporation Zone Map' (2012) and Sunset Western Garden Book 'The West's Climate Zones' data (2012). Geographic Information Systems (GIS) data layers of terrain and roadways were also used in creation of this zone map illustration

Why Remove Turf?

Regional Perspective

Turf's Water Needs vs. Annual Rainfall



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Why Remove Turf?

Regional Perspective:

Turf's Water Needs vs. Annual Rainfall

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Why Remove Turf?

Regional Perspective

- **Easy water savings!**
- **Landscapes can easily be retrofitted for water efficiency.**
- **Some skills and technical knowledge are necessary.**
- **Our goal is to educate you to succeed!**

Case Study

Before Installation

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Case Study

After Installation

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Case Study

6 months after installation

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Case Study

One year after installation

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Case Study

Two years after installation

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Case Study

Close Up Details

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WaterSmart Landscapes

Before

After

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WaterSmart Landscapes

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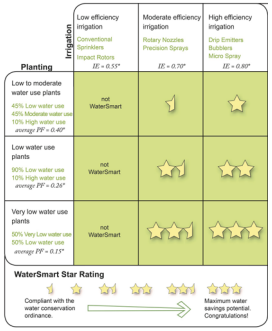
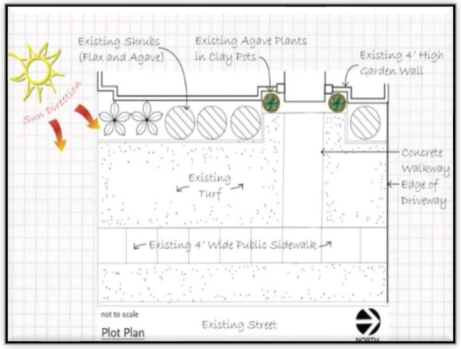
Steps to WaterSmart Landscape
Design Process Overview

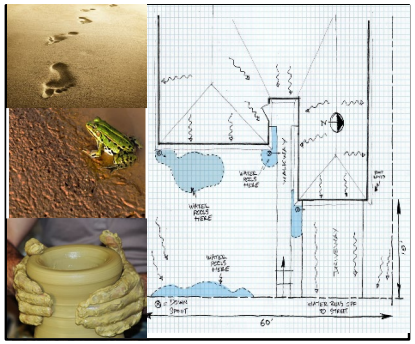
Identify Your Target



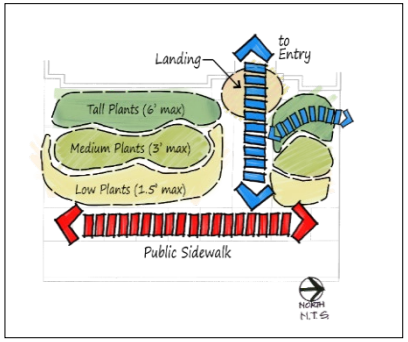
Base Plan



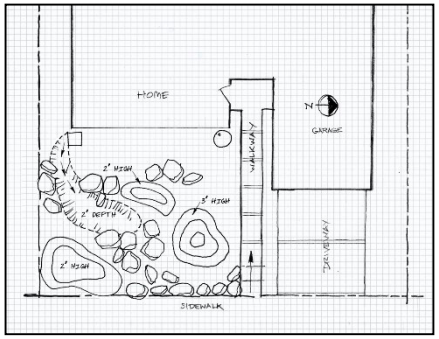
Soil & Site Analysis



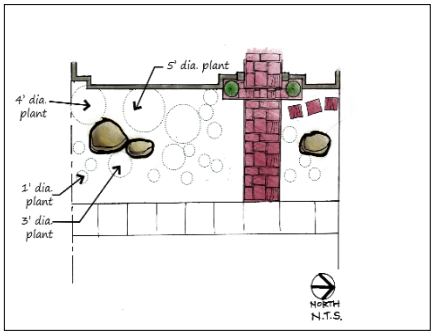
Bubble Diagram Functional



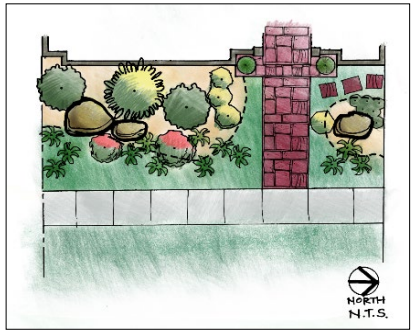
LID Plan



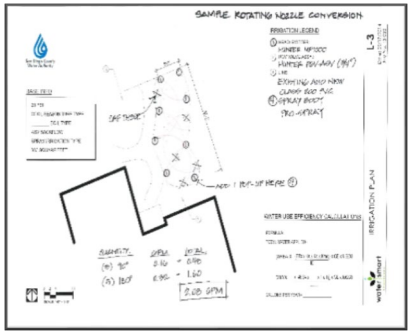
Hardscape & Preliminary Planting Plan



Finished Planting Plan



Irrigation Plan



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Steps to WaterSmart Landscape
Implementation Overview

Demolition

Contouring

Soil Prep

Irrigation

Plant Placement

Installed

Maintained

Two Years Later

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IDENTIFY YOUR LANDSCAPE TARGET

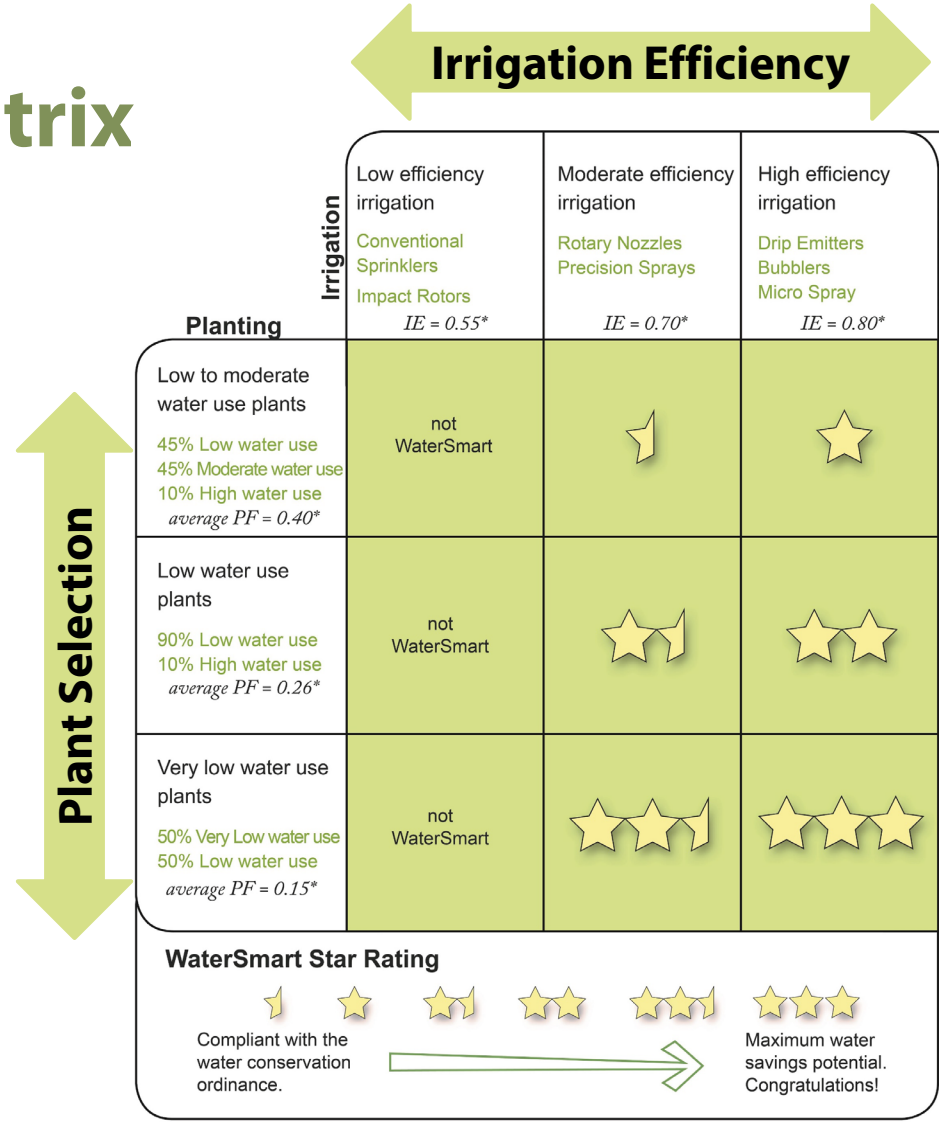
If you don't know where you're going, anywhere will do.

Landscape Target Factors:

- **Turf Area**
- **Plant Selection**
- **Irrigation Efficiency**

IDENTIFY YOUR LANDSCAPE TARGET

WaterSmart Matrix



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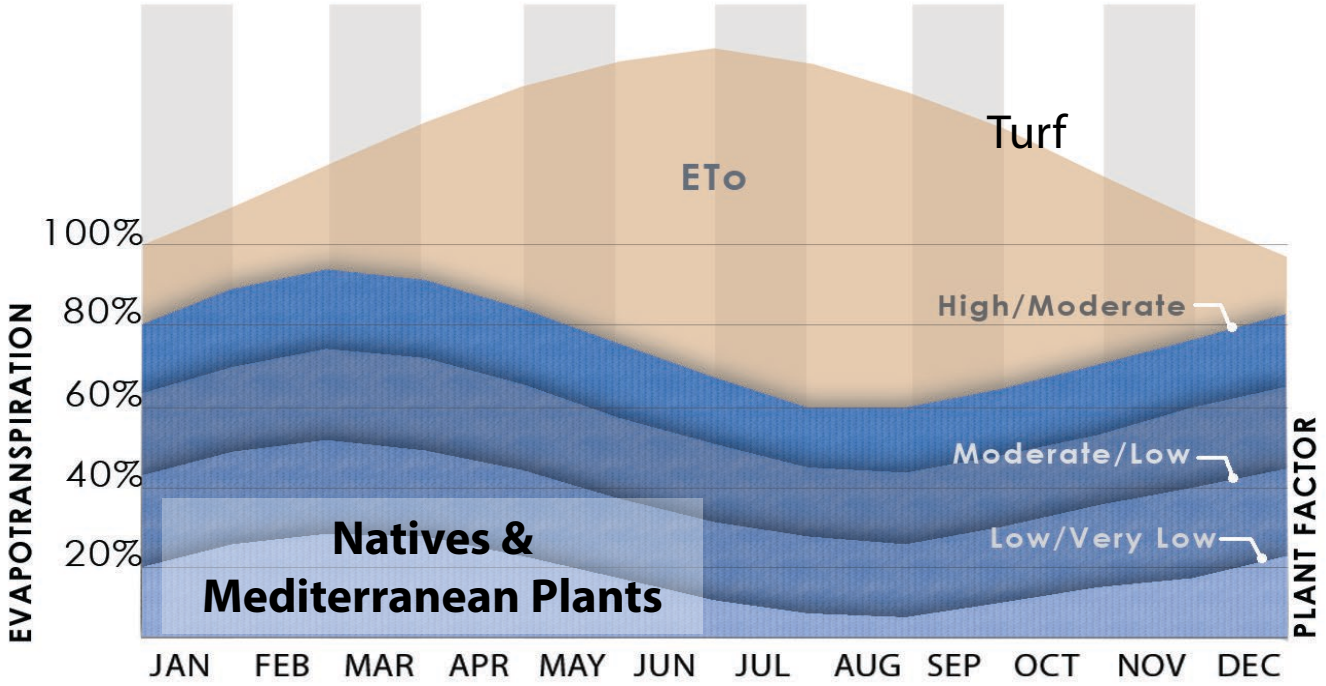
IDENTIFY YOUR LANDSCAPE TARGET

Plant Selection



Source: *Landscape Plants* for California Gardens by Bob Perry

PLANT FACTOR- represents the estimated percent or portion of supplemental water needed relative to the **Eto** value of particular location

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IDENTIFY YOUR LANDSCAPE TARGET

Irrigation Efficiency

Low
(High Precipitation)
Conventional
Overhead Spray Heads

Medium
(Low Precipitation)
Rotating Stream Nozzles
Large Rotors

High
Pressure Compensating Drip Irrigation
Bubblers

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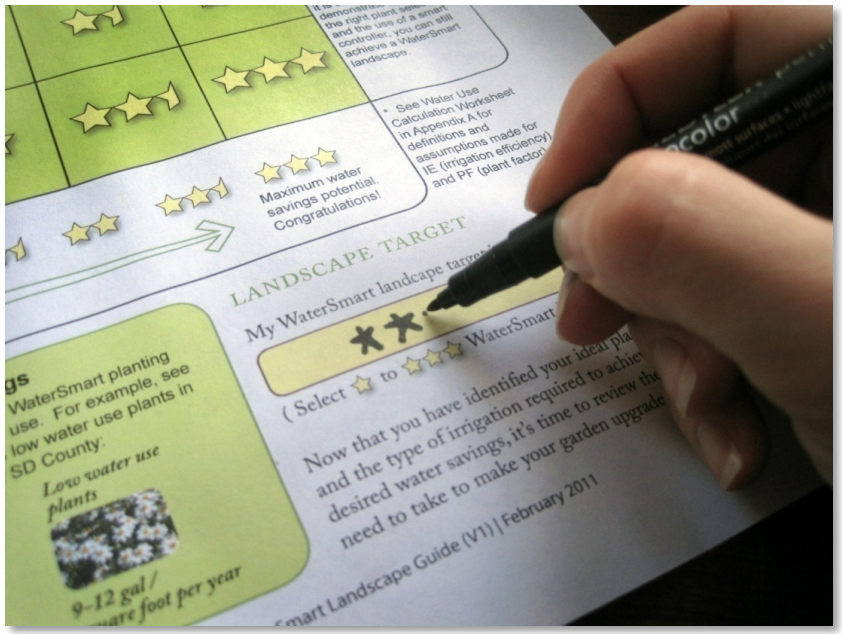
IDENTIFY YOUR LANDSCAPE TARGET

WaterSmart Star Rating

Homework: Determine Your Star Rating



New regulations eliminate anything less than one star

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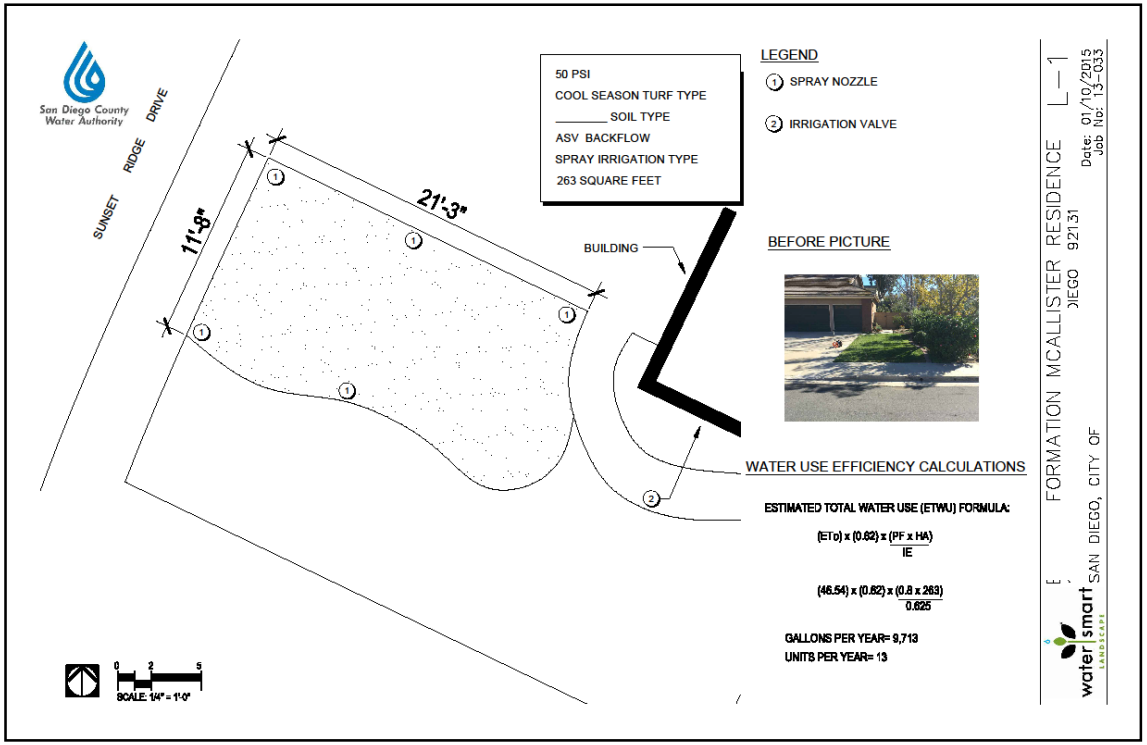
CREATE A BASIC PLOT PLAN

Basic Plot Plan L-1
provided for you

- Bird's Eye View
- Drawn to scale
- Locates house and permanent features
- North Arrow
- Irrigation system info
- Dynamic PSI
- Turf - Cool / Warm Season
- ETWU (Estimated Total Water Use) for turf



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CREATE A BASIC PLOT PLAN

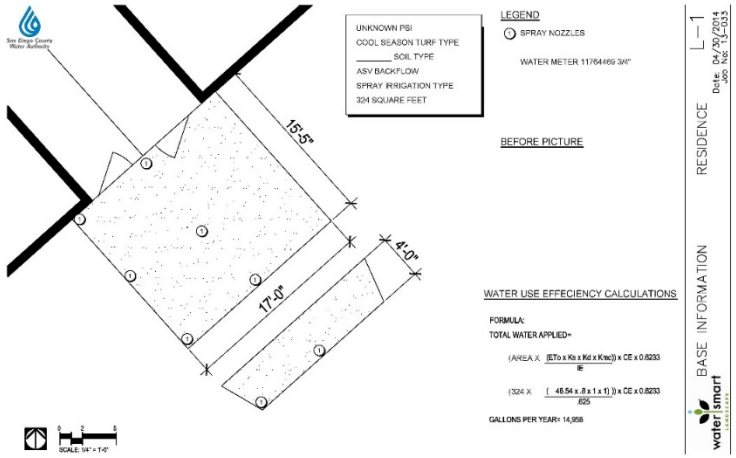
Scale

Architectural

Standard Size Properties

1/4 Scale: 1/4″ = 1′ or 1” = 4’

1/8 Scale: 1/8″ = 1′ or 1″ = 8′

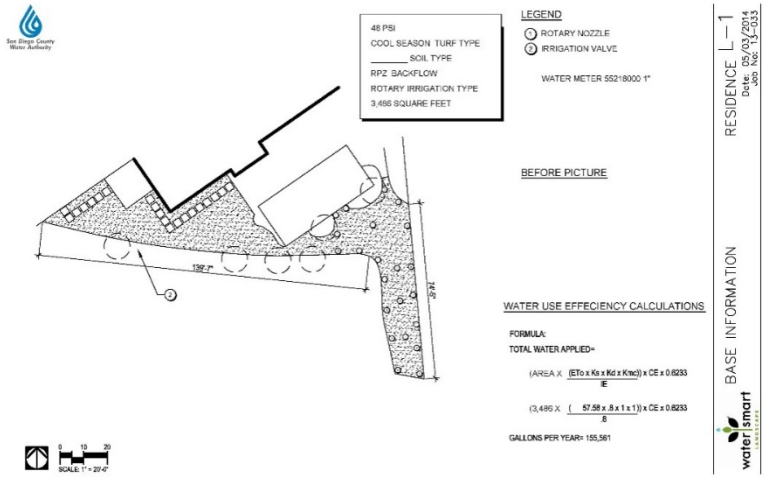


Engineering

Large Size Properties

1/10 Scale: 1” = 10’

1/20 Scale: 1″ = 20′



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CREATE A BASIC PLOT PLAN

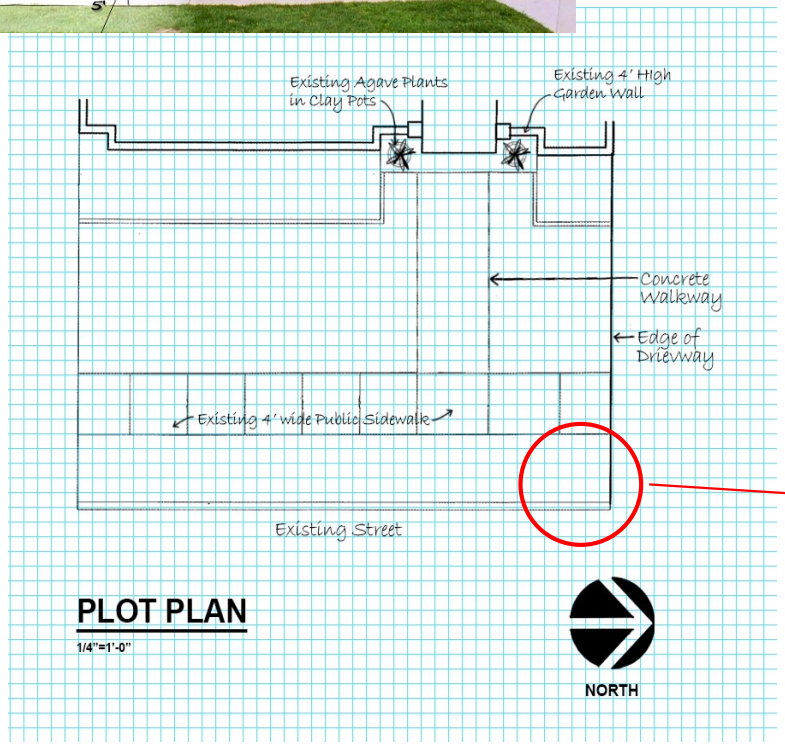
Measure your property

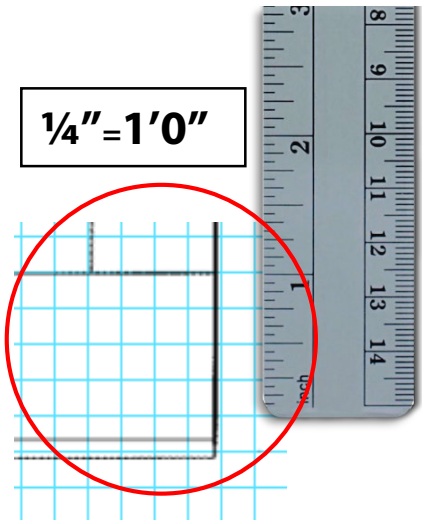
- Start with one dominant point to measure from (i.e. a wall corner)
- Locate features that stay (walls, hardscape, trees, fences, etc.)
- Alternate: use outside source (property description, Google Earth)

Create a Basic Plot Plan

Using Graph Paper

- Select grid paper to match scale
- Draw in scale on grid paper
- Align "0" and measure
- Add Legend:
  - Scale
  - N arrow





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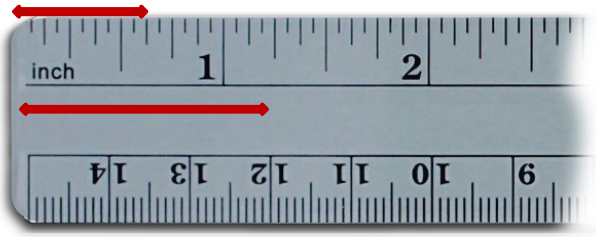
Measuring in Scale

Architectural Scale: 1/8" or 1/4" Scale

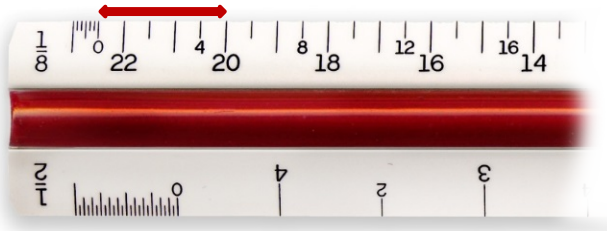
For example…measuring 5' in scale

Standard Inch Ruler of 1/8" = 1'0" Scale

Standard Inch Ruler of 1/4" = 1'0" Scale



Architectural Scale of 1/8" = 1'0" Scale



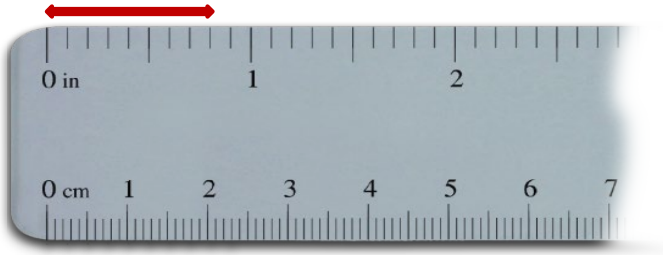
Architectural Scale of 1/4" = 1'0" Scale

Measuring in Scale

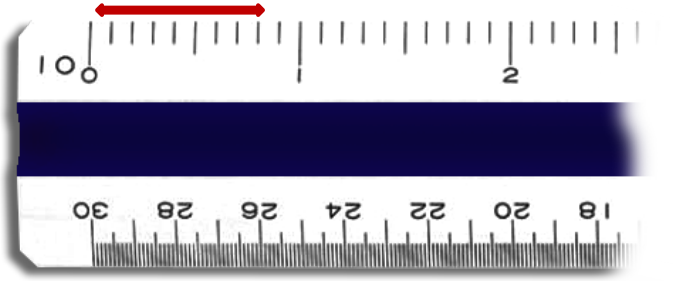
Engineering Scale: 1/10" or 1/20" Scale

For example…measuring 8' in scale

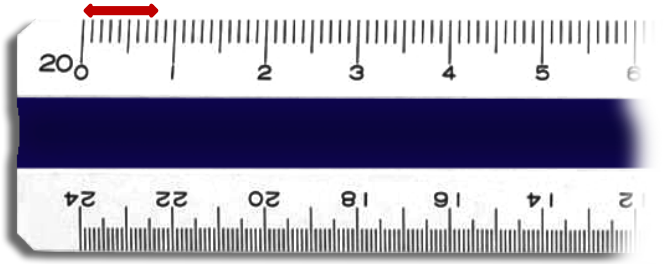
Decimal Ruler 1/10" = 1'0"



Engineering Scale 1/10" = 1'0"



Engineering Scale 1/20" = 1'0"



CREATE A BASIC PLOT PLAN

Without putting it on paper

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CREATE A BASIC PLOT PLAN

Without putting it on paper

Flag Method

- Plan & measure for mature plants
- Rearrange as needed
- Count to create plant list
- Plant according to flags

Soil: Why Do We Care?

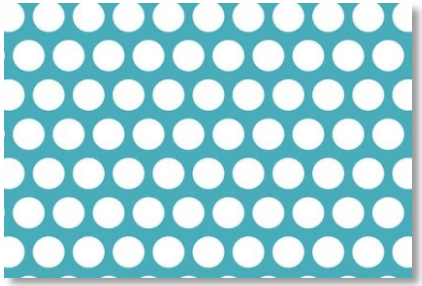
- Soil can cleanse water
- Soil can store water
- Soil influences everything related to water
  - Infiltration
  - Holding capacity
  - Movement
  - Irrigation scheduling

Evaluate Your Site

- **Mineral**

- **Organic**

- **Pore Space**



Evaluate Your Site

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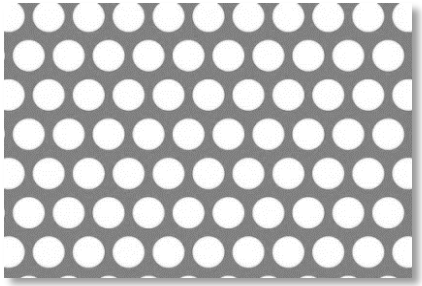


Soil Texture

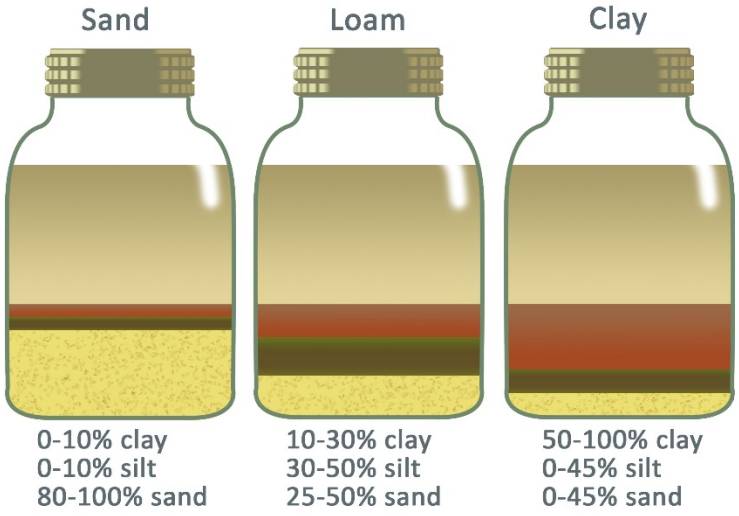
Particle Type		Water Movement (Drainage)	Water Holding	Nutrient Holding
Sand 		Fast	No	No
Silt 		Medium	Medium	Medium
Clay		Slow	Yes, once wet	Rich!
Loam Mixture of all particle types		Medium	Yes	Yes

Determining Soil Texture

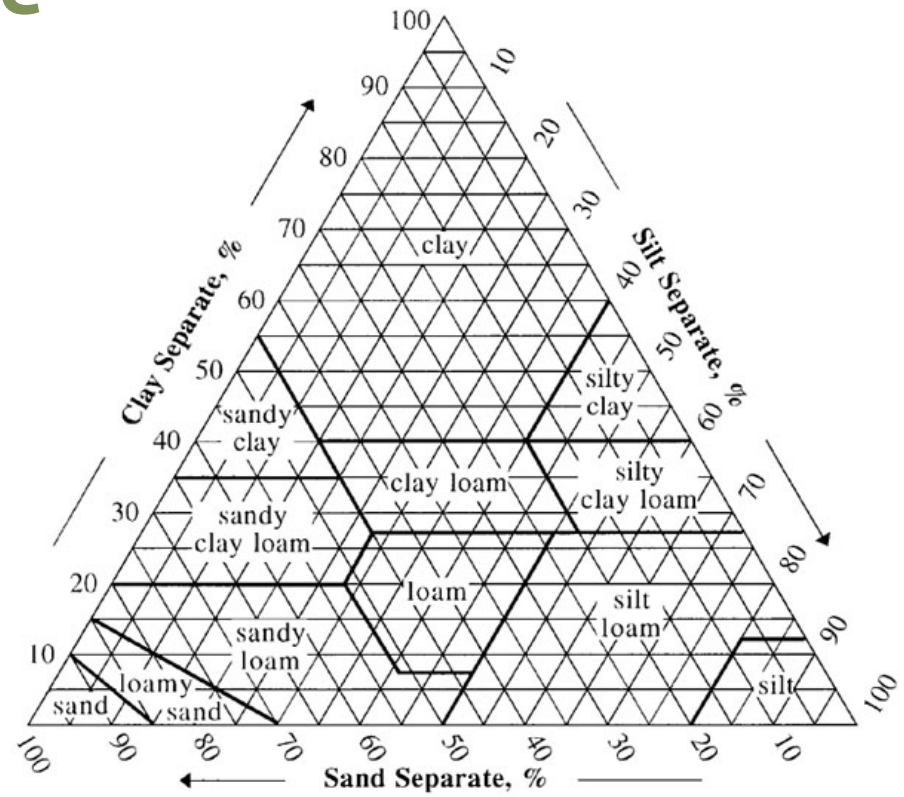
Soil Sampling: Dig a hole

- Remove mulch or surface matter
- Dig 12”x 12” x 12” hole
- Take sample from side of hole, at least 6” down

Determining Soil Texture



Jar Testing for Soil Texture



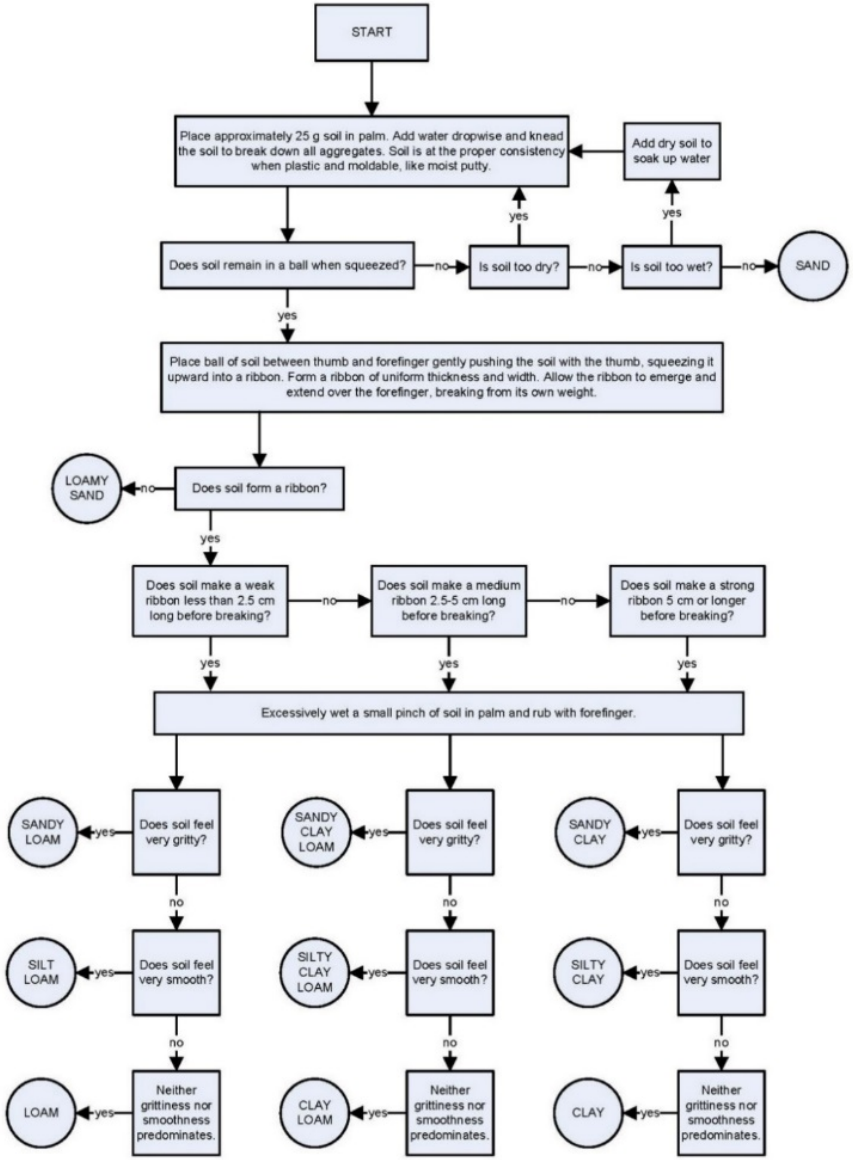
USDA Soil Texture Pyramid

Determining Soil Texture

Want more?

Find the "Thien Feel Test" online.

Taken from USDA-NCRS (Modified from S.J. Thien. 1979. *A flow diagram for teaching texture by feel analysis.* Journal of Agronomic Education. 8:54-55.)



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Determining Soil Texture

Thien Feel Test

1. Wet the soil sample to playdough consistency. Make a ball and poke it.
   - *Does it fall apart?*
   - *Does it hold together?*
2. Squeeze the ball into a ribbon of soil. How big is it?
   - *Less than 1 inch?*
   - *Between 1 inch and 2 inches?*
   - *More than 2 inches?*
3. Wet it excessively and feel it.
   - *Is it slippery?*
   - *Is it gritty?*

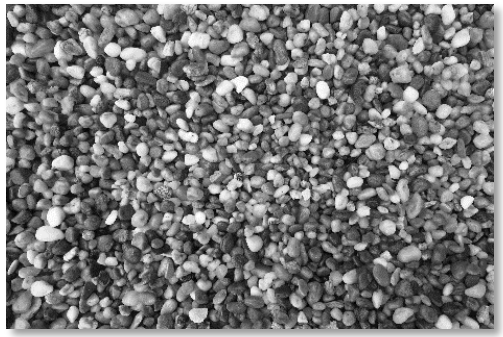
Back in 15 minutes!

Lab Time

Break

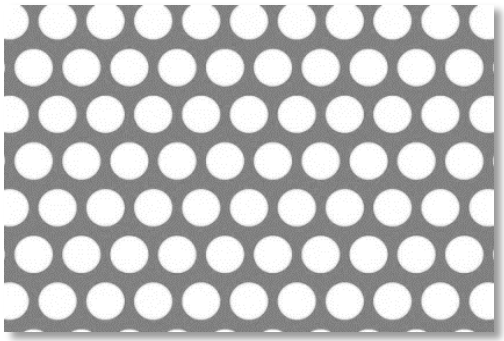
Evaluate Your Site

- Mineral



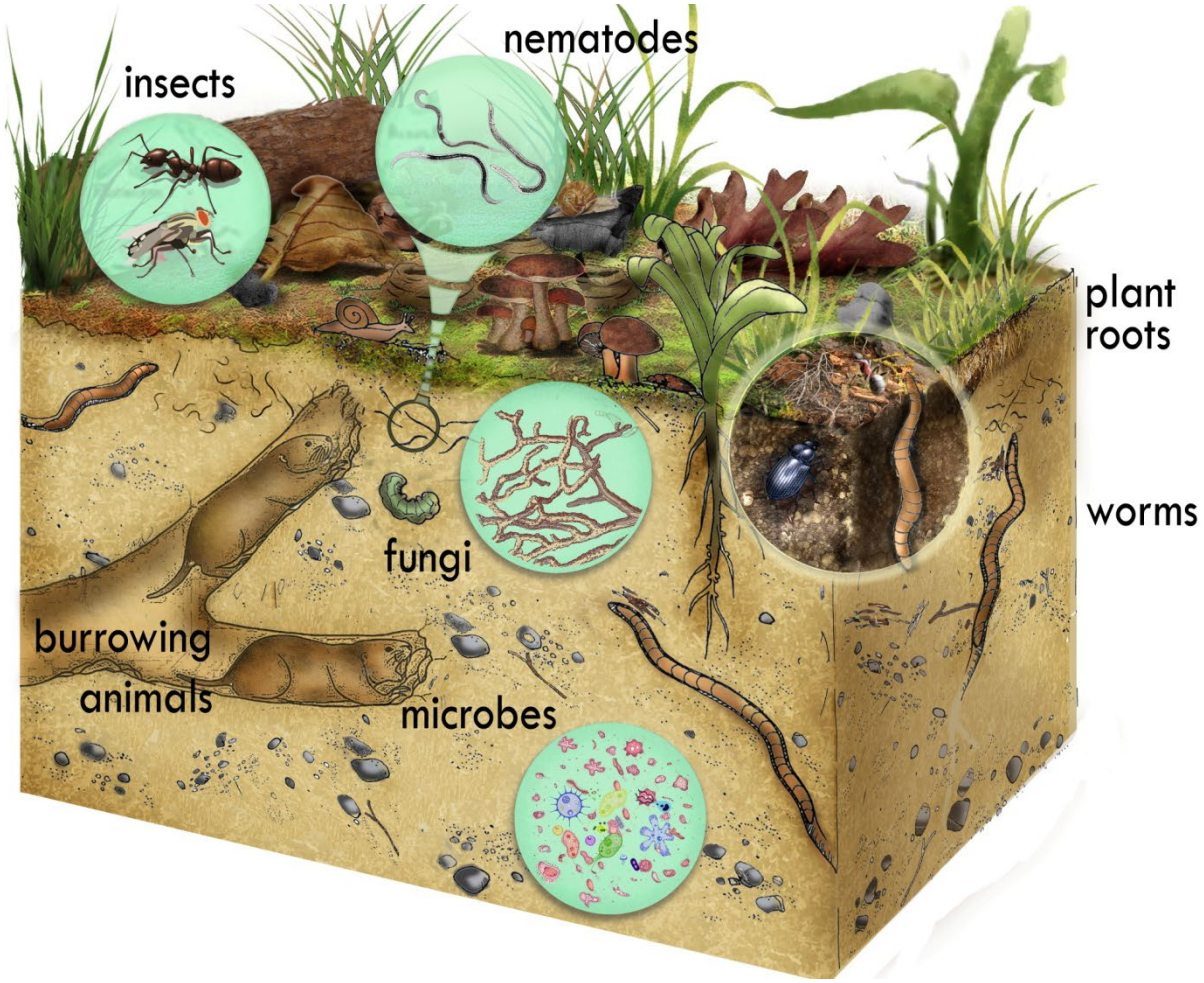
- **Organic**

- Pore Space

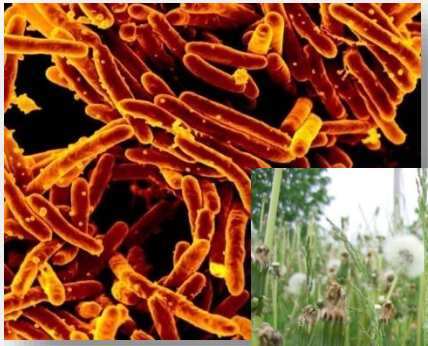


Sustainable Soil

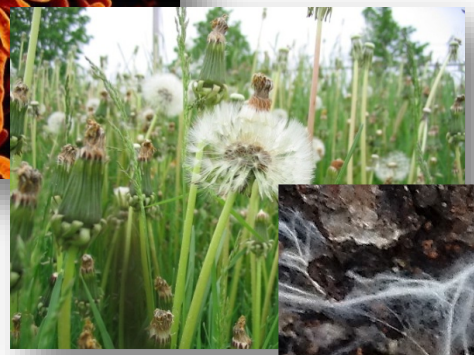
- Soil Food Web
- Organisms build soil
- Encourage them with proper organic matter, moisture, oxygen, etc.



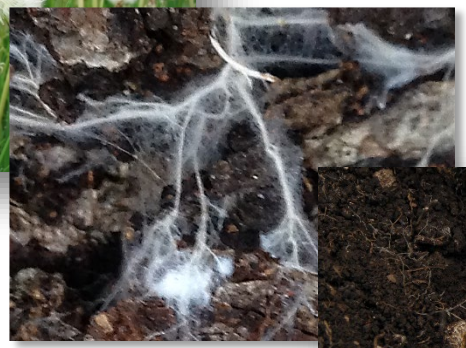
Evaluate Your Site



Bacteria



Weeds



Fungi

Worms

Plants

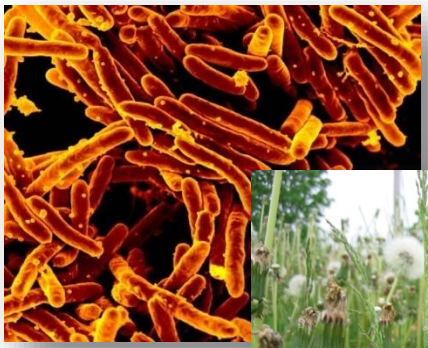
Soil Food Web

Suggested reading:
Teaming with Microbes by Lowenfels & Lewis

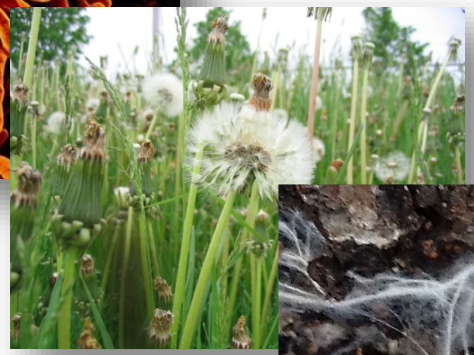
Evaluate Your Site

Soil Food Web

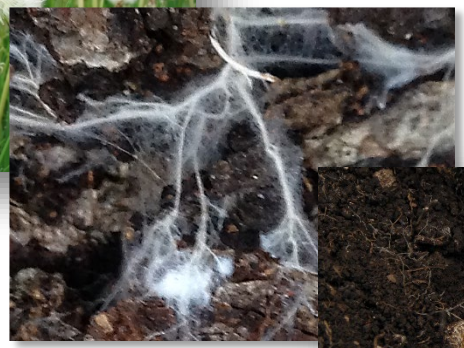
Suggested reading:
Teaming with Microbes by Lowenfels & Lewis



Bacteria



Weeds



Fungi

Worms

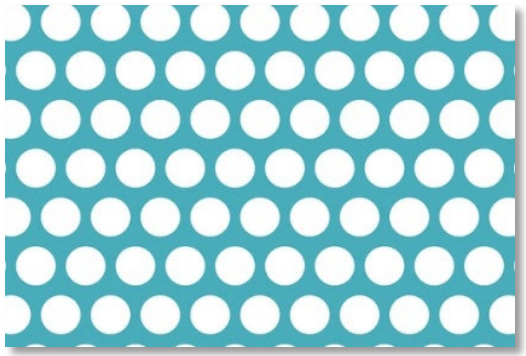
Plants

Evaluate Your Site

- Mineral

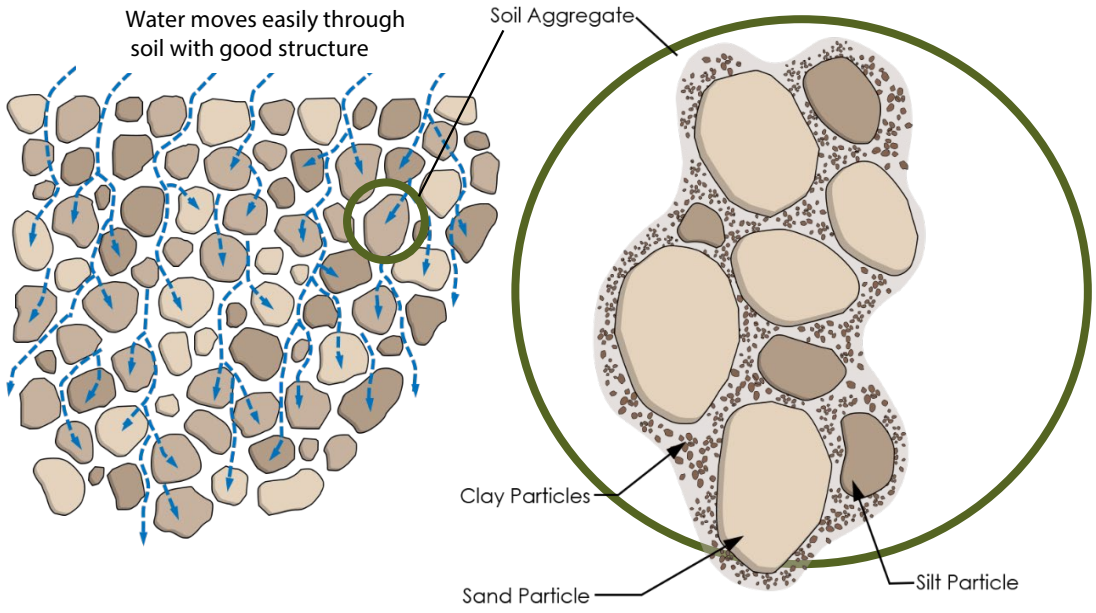
- Organic

- **Pore Space**



Soil Aggregation

- Created by bacteria, fungi and humic acid from organic matter
- Allows water
  - infiltration & percolation
  - storage

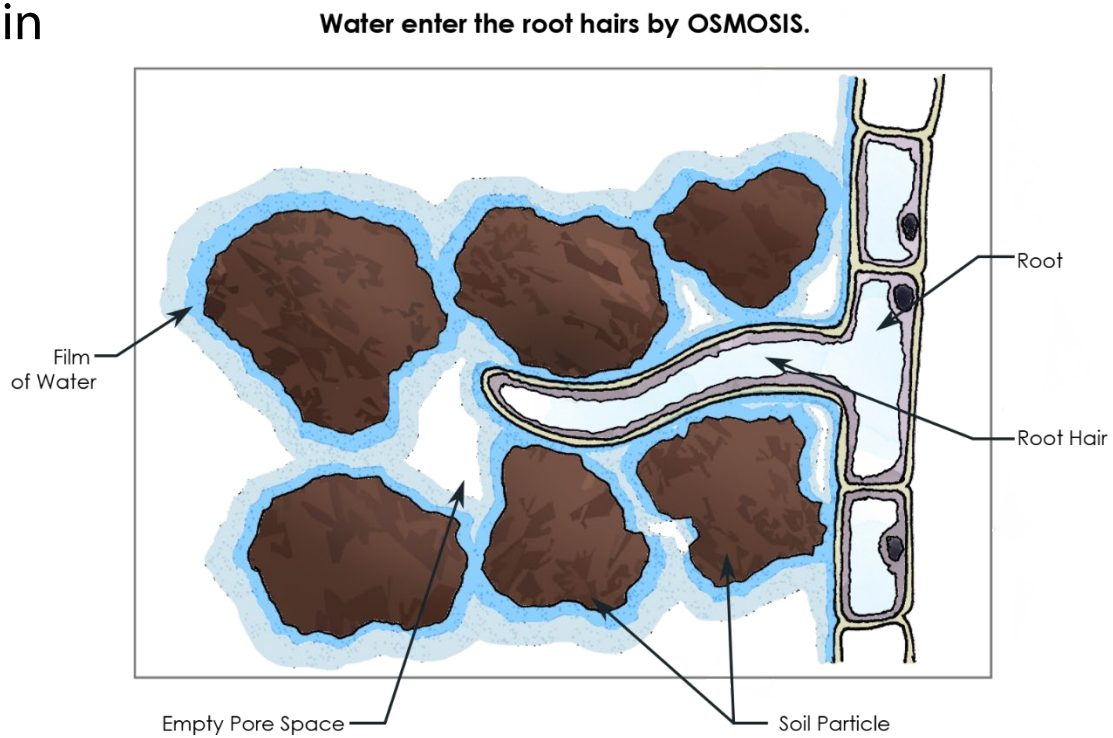


Soil Aggregation

- Creates soil pores which contain

OWL:
Oxygen
Water
Life

- Purifies runoff water
- Creates water holding capacity



Water Uptake by Plant Roots

Soil Compaction

Urban Compaction

Compaction Remediated

Evaluate Your Site

Organic Matter

- Reverses compaction
- Improves root penetration
- Improves plant success

Remediating Compaction

- Add organic matter
- Build the health of the soil food web
- By the way … ADD ORGANIC MATTER!
  - ***IN*** *the ground:* compost for soil amendment when planting
  - ***ON*** *the ground:* mulch after planting

Compost Soil Amendment
IN ground

Mulch
ON ground

Soil Amendment

- Use compost when planting
- Small particles, usually less than ¼”
- Mix compost with backfill soil
  - 30% most plants
  - 15% natives in disturbed soil
- Available in bags or bulk

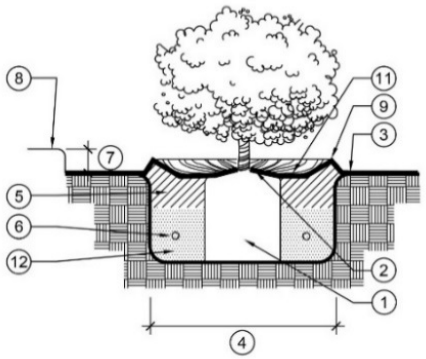
Compost for soil amendment

Soil Amendment

Planting

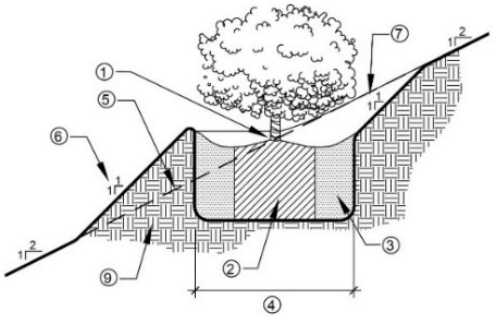
- Dig hole 2 x wide
- Fill hole with water before planting
- Loosen or slice roots
- Plant crown above soil level

Use amended soil mixture to backfill planting hole



1. ROOTBALL.
2. CROWN-1" ABOVE FINISH GRADE.
3. FINISH GRADE.
4. 2 X ROOTBALL DIA.
5. BACKFILL MIX (SEE SPECS.).
6. PLANT TABLETS (SEE SPECS.).
7. 2" MAX. DEPTH.
8. TOP OF PAVING.
9. 4" HIGH WATERING BASIN.
10. UNDISTURBED NATIVE SOIL.
11. PROVIDE 2" MULCH LAYER. IN ALL SHRUB AREAS.
12. NATIVE SOIL BACKFILL

D SHRUB PLANTING DETAIL
NO SCALE



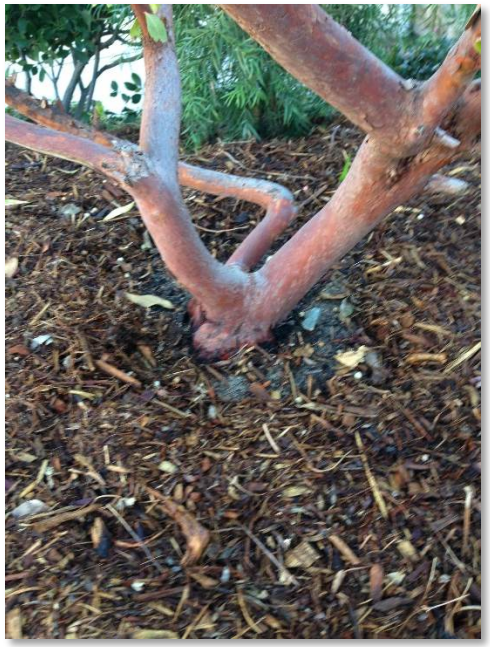
1. SET CROWN OF ROOTBALL. EQUAL TO ORIGINAL GRADE.
2. ROOT BALL.
3. PLANT SHRUBS PER DETAIL C2, SHEET L-423.
4. PLANT PIT 2X ROOTBALL WIDTH.
5. LINE OF ORIGINAL 2:1 SLOPE.
6. 1:1 DOWNHILL FILL
7. 1:1 UPHILL CUT

NOTE:
ALL SHRUB BEDS LESS THAN 3:1 SLOPE SHALL RECEIVE A 3" LAYER PREMIUM MEDIUM GRIND SHREDDED REDWOOD BARK MULCH.

G SLOPE SHRUB PLANTING DETAIL
NO SCALE

Mulch

- Blanket over soil surface
- Continues to feed the soil as it breaks down
- Adds organic matter in areas already planted
- Prevents
  - ✓ Erosion
  - ✓ Evaporation
  - ✓ Weeds
  - ✓ Compaction



Mulch Application

- After planting, lay 4" layer on top of soil
- Leave open space around plant stem or crown
- Add additional mulch when areas are thin
- Rule of thumb: 1¼ CY covers about 100 sq ft at 4" depth

Brush Mulch

Chipped Mulch

Mulch Types

Longevity: Wood Chips or Bark

Wood Chip Mulch

Colored Wood Chip Mulch

Bark Nuggets

Okay for pathways, but **not** for beds or slopes

NOT good for soil health or slopes

Mulch Types

✓ **Soil Building**: chipped tree trimmings or coarse compost

- Texture varied particle sized
- Water passes through
- Holds in place on slopes and in wind

Brush or Chipped Mulch

Chipped Mulch

Blended Mulch

Soil Building

Products at Miramar Greenery

Material Type	Description	Price/Cubic Yard (incl. tax & loading)
City Resident Self-Loading Composted 4" Mulch	Up to 2 cubic yard	FREE
1/2" Compost	10 week processing of yard waste and food waste, screened to 1/2"	$12
4" Mulch	2 week processing of yard waste only	$ 5
2" Mulch - ***Preferred Mulch***	2 week processing of brush and branches (no curbside material)	$12
Coarse Chips (2" Compost Overs) (some plastic contamination)	10 week processing of yard waste & food waste, screen to 1/2" - 2"	$ 5
~~Natural Wood Chips~~ ***Fine for Paths***	~~Logs ground to 2" - 4" and screened to remove fines~~	~~$24~~
~~Natural 1/2" Fines~~	~~Logs ground and screened to 1/2"~~	~~$24~~
~~Plain Wood Chips~~ ***Fine for Paths***	~~Dimensional lumber ground to 2" - 4"~~	~~$24~~
~~Colored Wood Chips: red & brown~~	~~Dimensional lumber ground to 2" - 4" and colored with non-toxic dye~~	~~$34~~

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~~Abcdefg~~ Do not use for sheet mulching
Recommended

How does your soil handle water?

- Organic matter remediates compaction
- Percolation and infiltration effected by
  - ✓ Soil texture
  - ✓ Soil aggregation
  - ✓ Layers of compaction or rock

Soil Drainage and Percolation Test

(Homeowner's Guide)

Day 1

1. Dig one cubic foot hole (12"x12"x12")
2. Fill the hole with water to saturate the soil
3. Let drain overnight

Homework: Soil testing

Day 2

1. Lay a stick over the hole
2. Refill the hole with water to the level of the stick
3. Wait one hour
4. Measure how far the water level has dropped to determine the infiltration rate per hour

Tip: Use the soil from the hole to do a worm count & test the texture of your soil

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Drainage Test

Here's a simple way to evaluate your soil drainage.

Dig a hole 12 inches wide x 12 inches deep, putting the soil to the side to be used for the Squeeze Test and the Worm Test.

Fill the hole with water and let it drain overnight.

Use a stick to span the hole from the top of the stick to the bottom of the pit. Measure the distance again in one hour.

Soil Drainage and Percolation Test

Inches per hour	Drainage	Solutions
Less than 1"	Slow	Add organics Select tolerant plants Create mounds
1"- 3"	OK	
More than 3"	Fast	Add organics Select tolerant plants Create mounds

Sustainable Soil

Soil organics

↓

Soil aggregation

↓

Percolation

↓

Water storage

↓

Stormwater management

What is a Watershed?

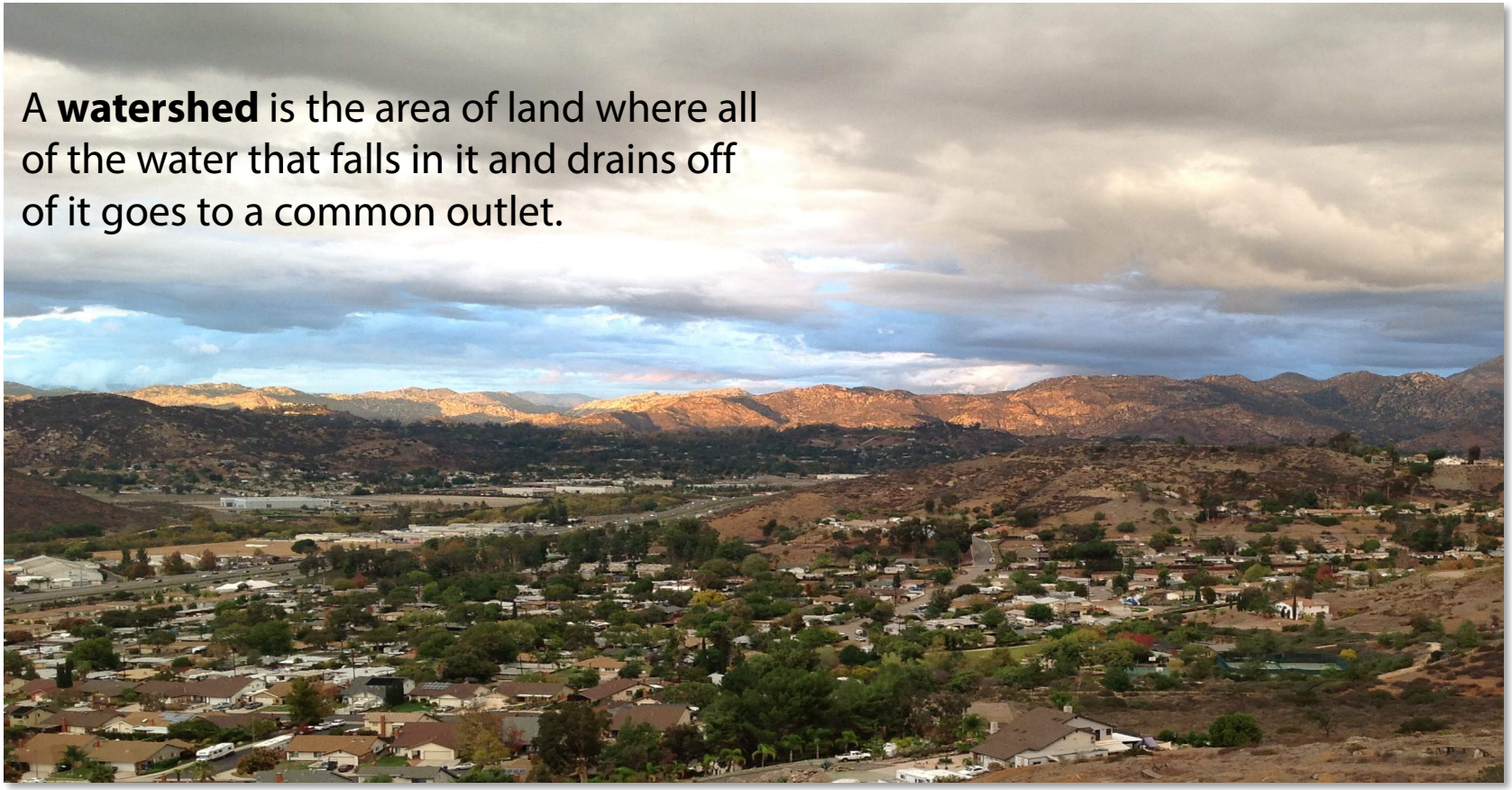
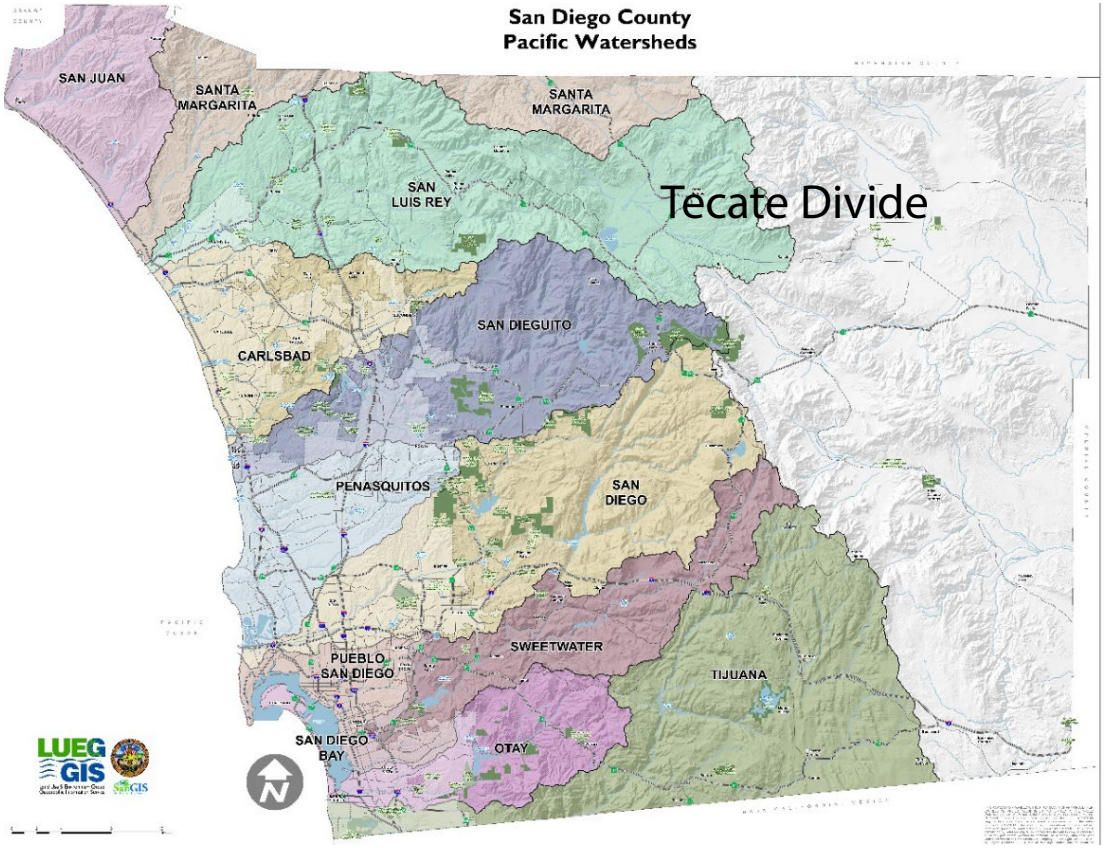


Photo: http://sandiegohomesforsale.com/communities/lakeside

You Live in a Watershed

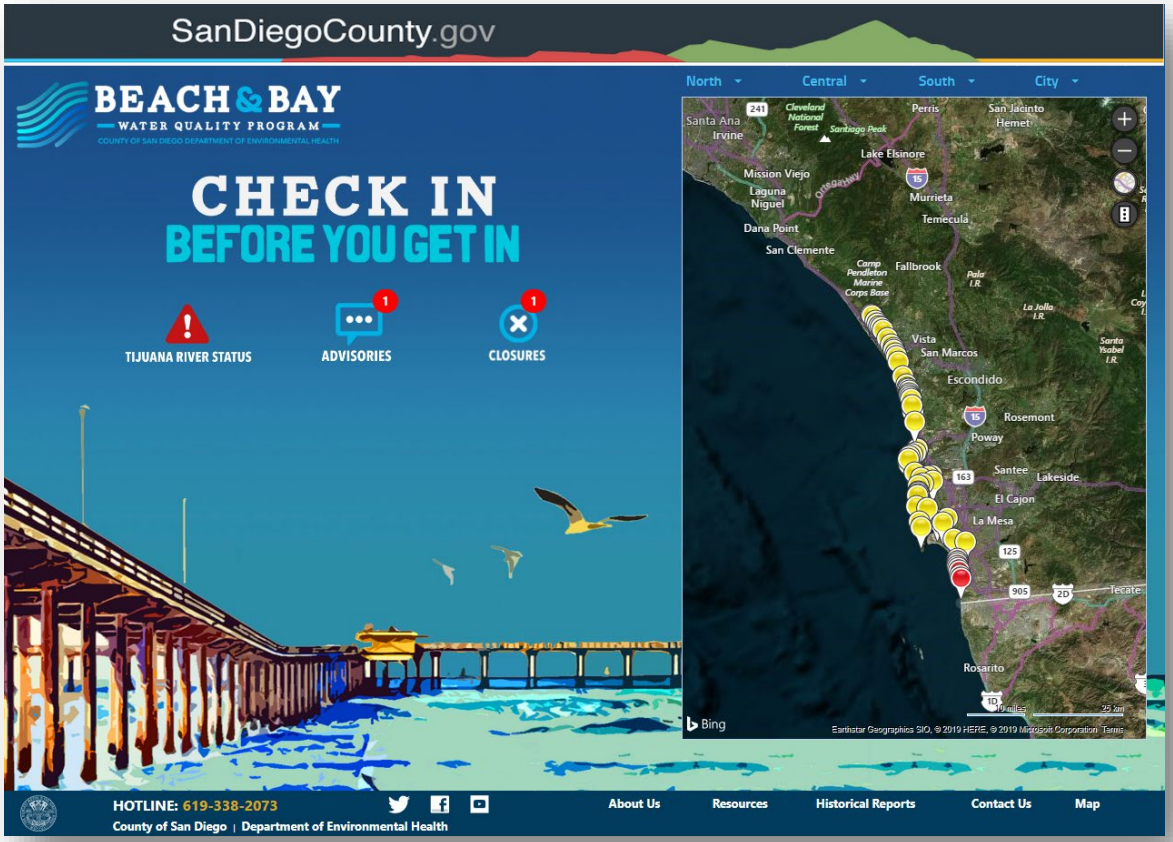
- San Diego has 11 westward draining watersheds
- Find your watershed at **ProjectCleanWater.org**



You Live in a Watershed

The benefits of using a watershed approach to landscaping:

- ✓ Improves our environment
- ✓ Protects our waters
- ✓ Preserves our coast
- ✓ Reduces beach closures from pollution
- ✓ Saves water in landscape
- ✓ Saves energy used in water transport
- ✓ Preserves groundwater



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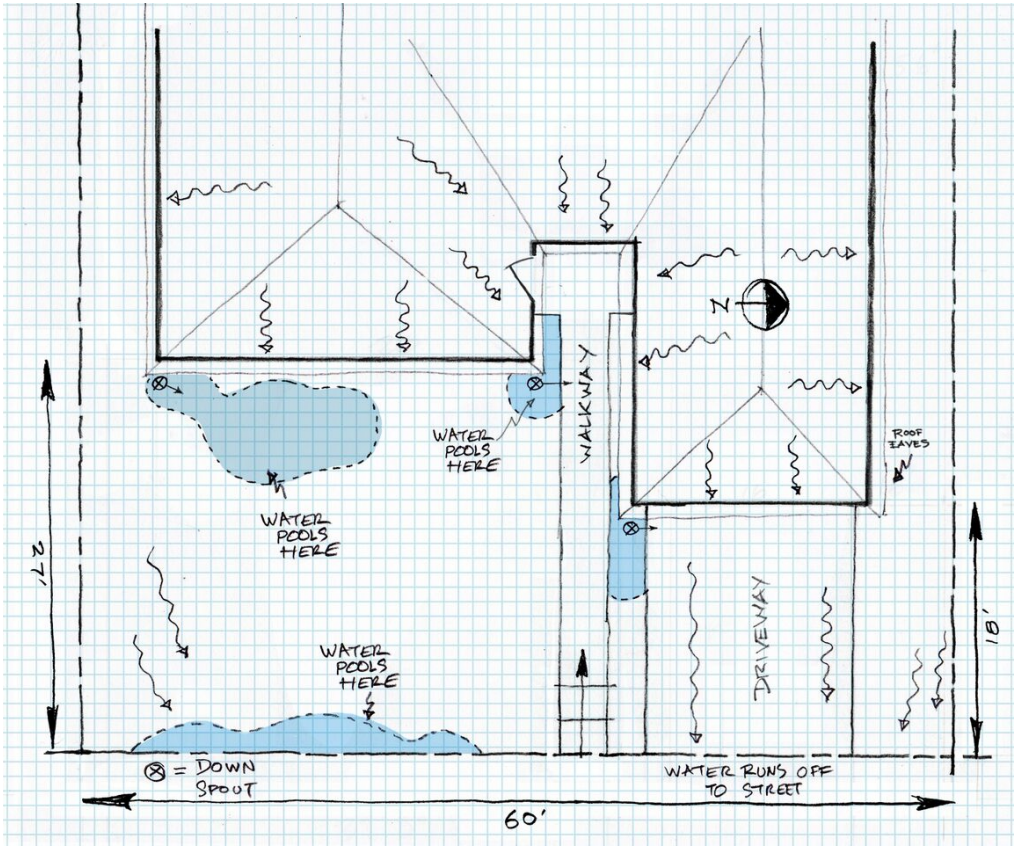
Your Yard is a Mini-Watershed!

Map your drainage

- Where does it flow from?
- Where does it flow to?

Gutter → Storm Drains → Ocean



The First Flush

Can the polluted water be cleaned?
YES! Healthy soil breaks down pollutants.

Can the water be utilized?
YES! It can be stored in your soil, rain barrels and cisterns.

Old Town San Diego

First Seasonal Flush

Subsequent Storm Event

STEP THREE

Evaluate Your Site

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How can water capture work for you?

LID= Low Impact Development = Retain Stormwater

- Use rainwater instead of irrigation water
- Store the water in your soil

How can water capture work for you?

Question #1:

How much water do I plan for?

Answer:

- **Site Observations (class 1)**
- **Determine your collection area and landscape feature (class 2)**

Evaluate Your Site

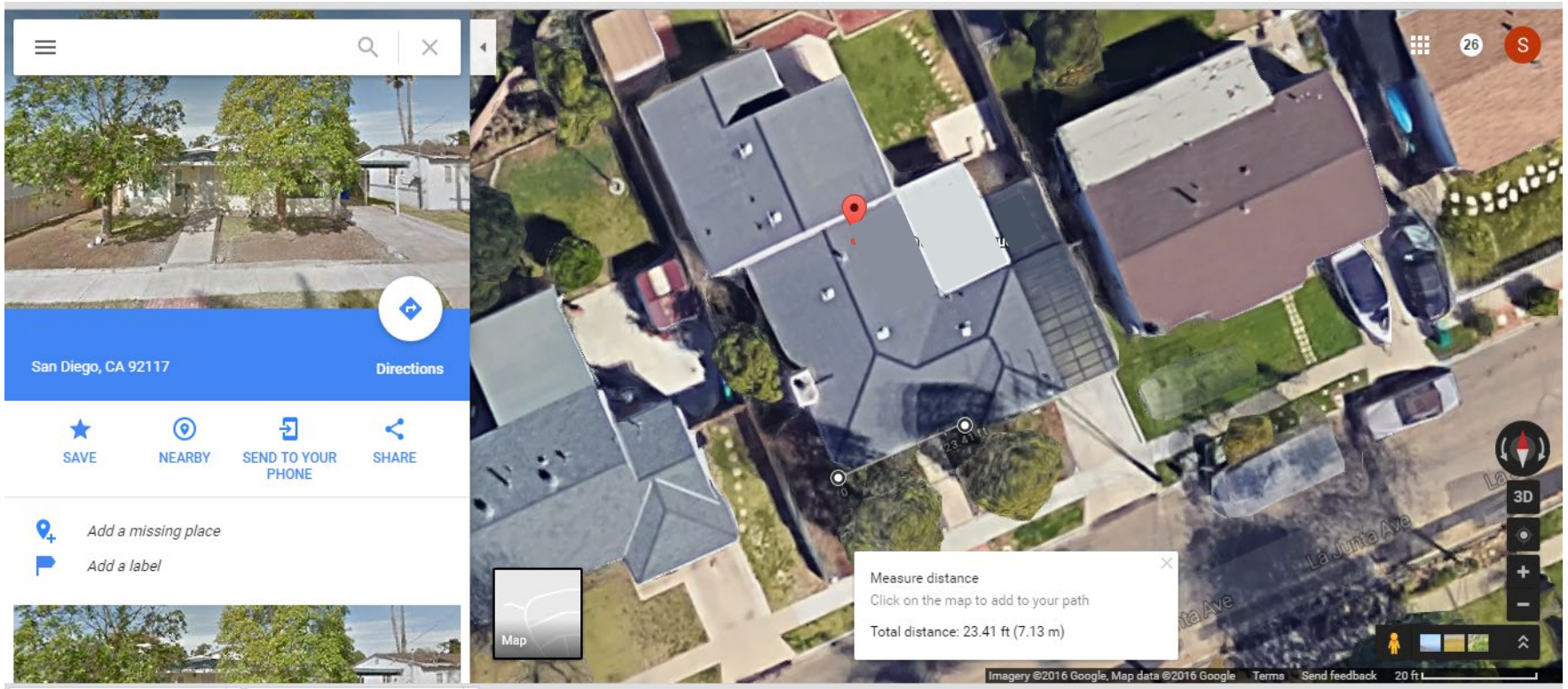
Question #1: How much water do I plan for?

- **Evaluate your mini-watershed**
- **Explore your yard with new eyes**

EVALUATE YOUR SITE

Question #1: How much water do I plan for?

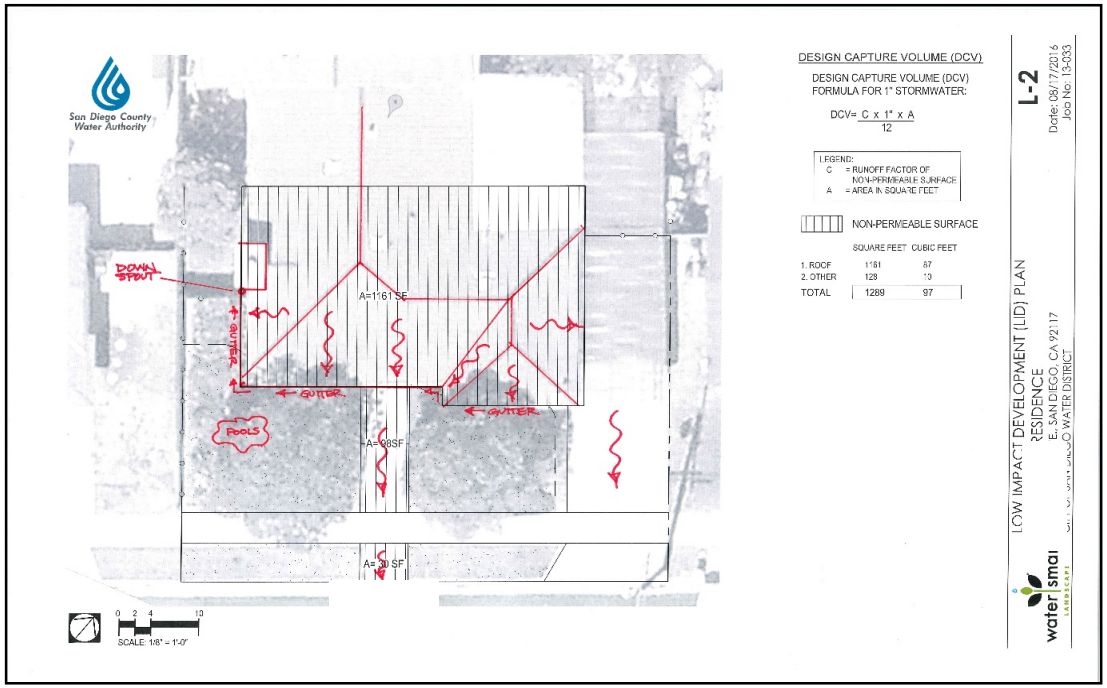
- **Use Google Earth to see your roof lines**



EVALUATE YOUR SITE

How do I plan for runoff water?

- **Make notes on your LID Base Plan (L-2)**
- **Show water flow direction, gutters, downspouts, puddles, ridgelines & slopes**



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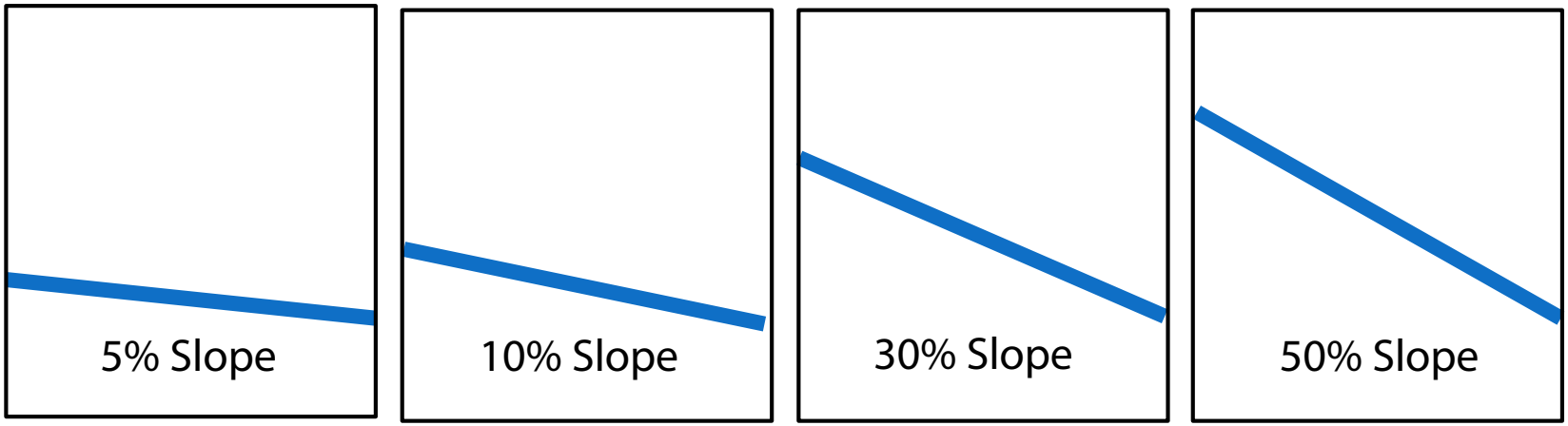
Evaluate your site

Estimating Slopes & Hillsides



- Estimate your slope on your L-2 plan for your site evaluation
- Use soil-building mulch type (brush mulch, chipped mulch with specified texture) on all slopes
- Decomposed granite (DG) used only on slopes less than 5%

Evaluate your site

Estimating Slopes & Hillsides

How steep is your slope?

Run = Horizontal distance

Rise = Vertical distance

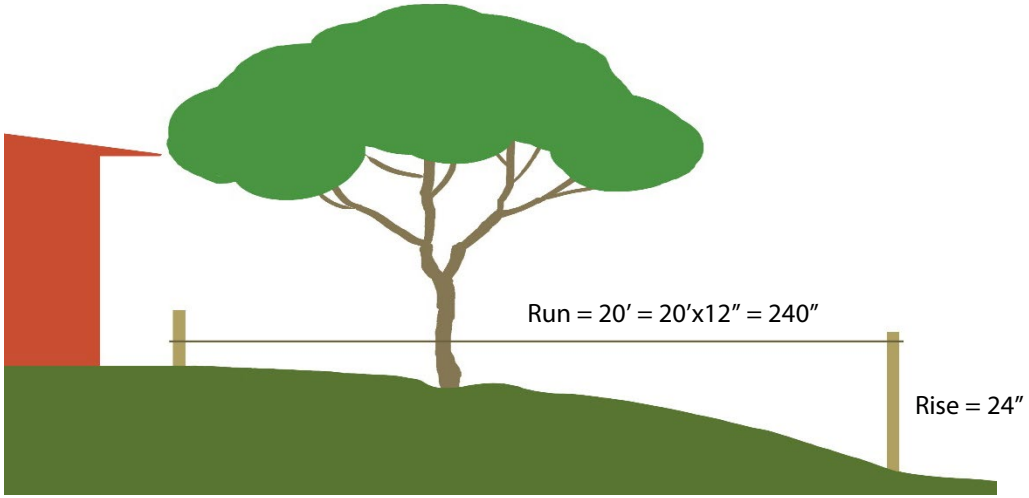
Slope = (Rise /Run)* 100

Example:

Rise = 24″

Run = 20′ = 20′x12″ = 240″

*Slope = (24″/240″)*100 = 10%*



Utilities

Locate and plan to avoid conflicts

Locate the water meter and utility boxes

Locate overhead utility lines

Architectural Style and Materials

Can provide inspiration for your re-envisioned landscape

Architectural styles, colors and
materials are repeated in these designs

Views – Enhance or Screen

Explore your yard with new eyes

Views to distant features, like these mountains, can be emphasized

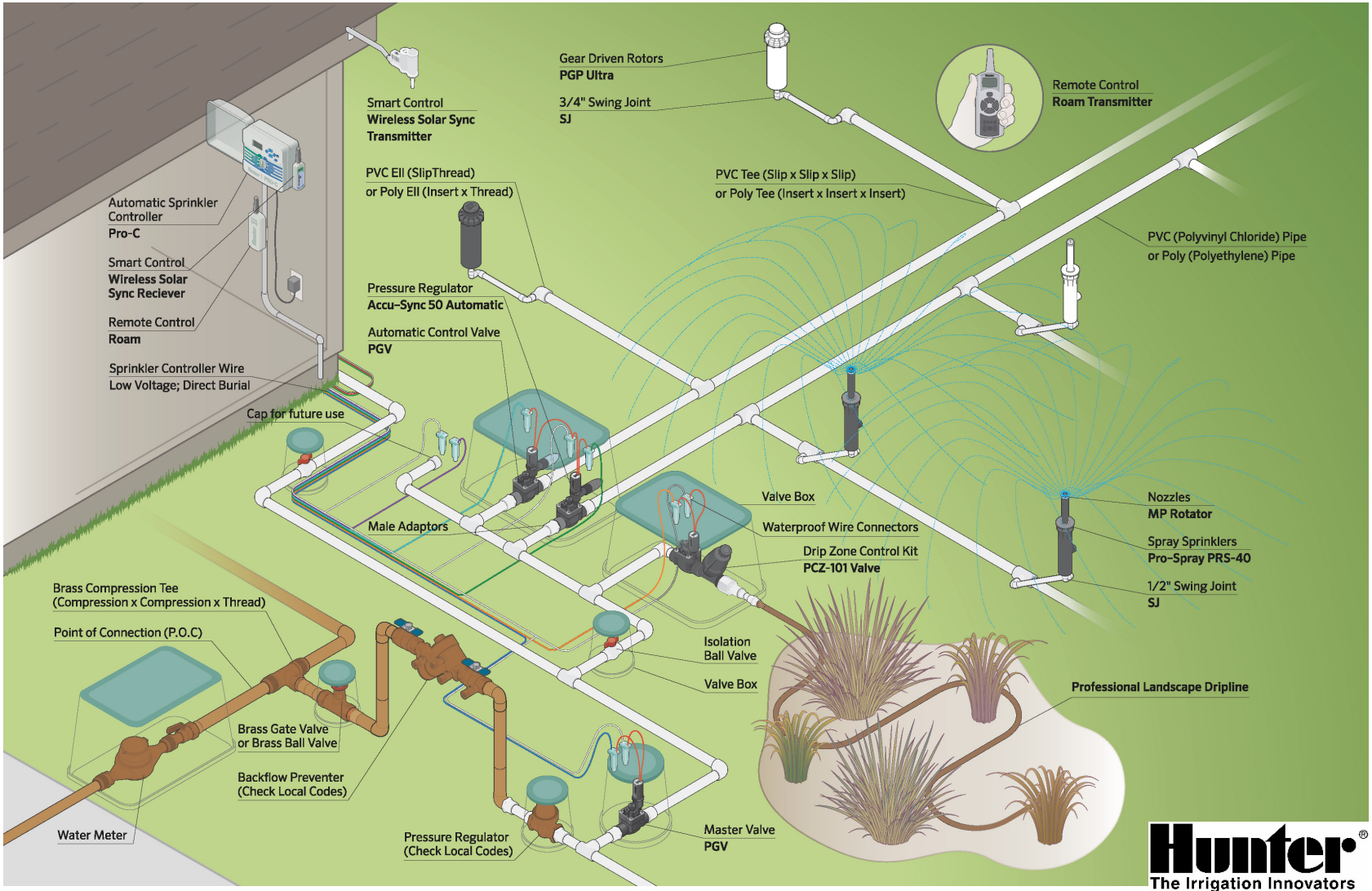
Undesirable views can be screened

Existing Trees

Well placed mature trees:

- Add value to the property
- Provide climate adjustments to your property and the region

Anatomy of an Irrigation System



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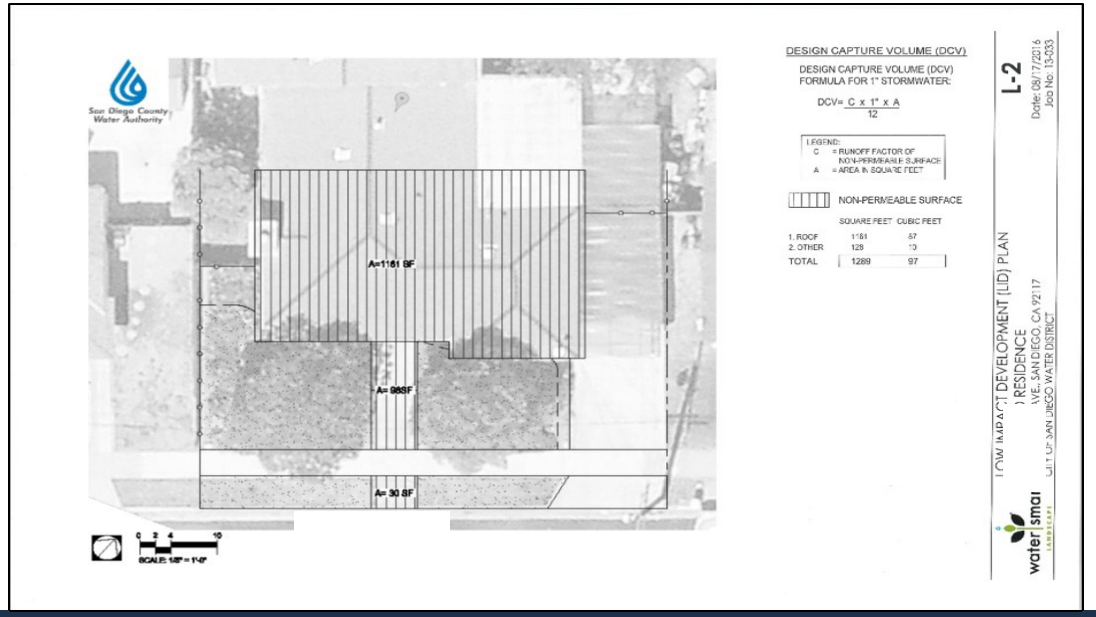
Hunter®
The Irrigation Innovators

Site Observations

Homework: Site observations

LID= Low Impact Development = Stormwater Infiltration

- Where does it flow from?
- Where does it flow to?
- Gutter → Storm Drains → Ocean
- Record observations on your LID L-2 plan



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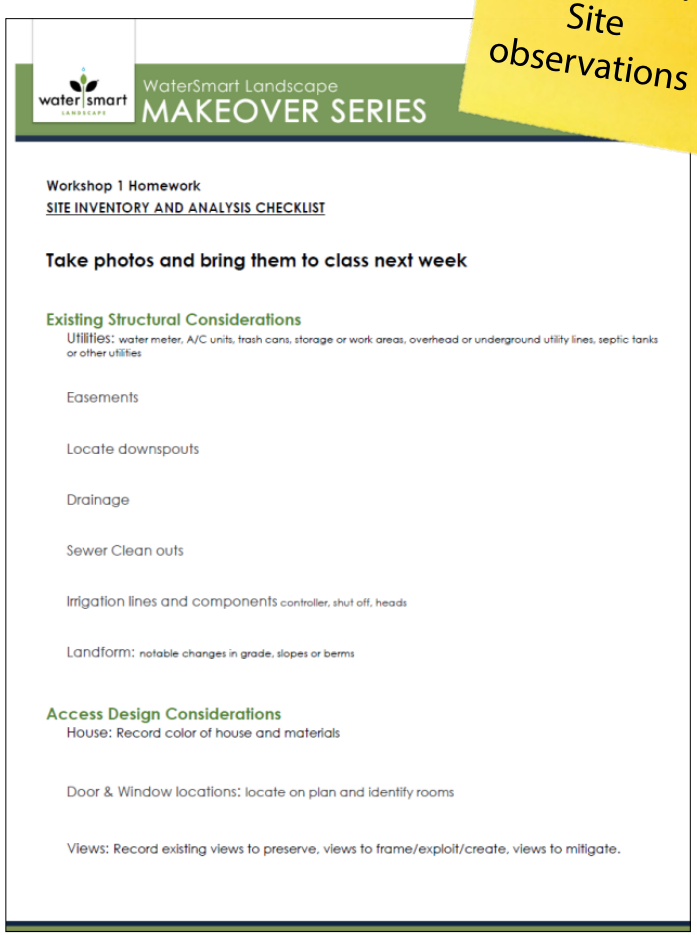
EVALUATE YOUR SITE

Site Observations

- **Starting point of a successful design**
- **Take photos**
- **Assess existing situation**
  1. Drainage conditions
  2. Structural conditions
  3. Design considerations
     - House style
     - Views and screening
     - Existing trees & plants
     - Functional
       - Use patterns
       - Prevailing wind
       - Necessary shade

Homework: Site observations



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WaterSmart Landscape
MAKEOVER SERIES

Workshop 1 Homework
SITE INVENTORY AND ANALYSIS CHECKLIST

Take photos and bring them to class next week

Existing Structural Considerations
Utilities: water meter, A/C units, trash cans, storage or work areas, overhead or underground utility lines, septic tanks or other utilities

Easements

Locate downspouts

Drainage

Sewer Clean outs

Irrigation lines and components controller, shut off, heads

Landform: notable changes in grade, slopes or berms

Access Design Considerations
House: Record color of house and materials

Door & Window locations: locate on plan and identify rooms

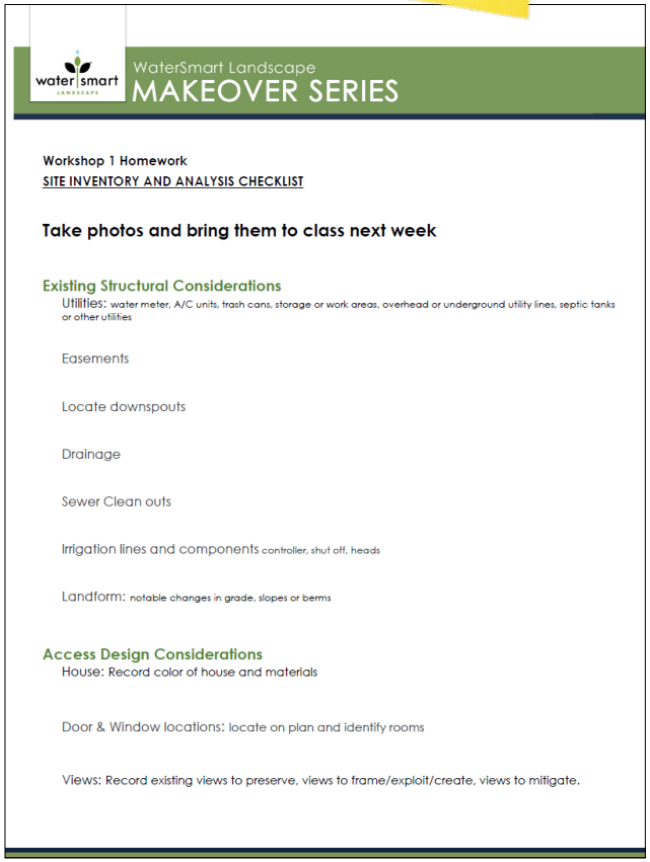
Views: Record existing views to preserve, views to frame/exploit/create, views to mitigate.

EVALUATE YOUR SITE

Site Observations

- **Starting point of a successful design**
- **Take photos**
- **Assess existing situation**
  1. Stormwater conditions
  2. Structural conditions
  3. Design considerations
  4. **HOA requirements**

Homework: Site observations



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WaterSmart Landscape
MAKEOVER SERIES

Workshop 1 Homework
SITE INVENTORY AND ANALYSIS CHECKLIST

Take photos and bring them to class next week

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- **Starting point of a successful design**
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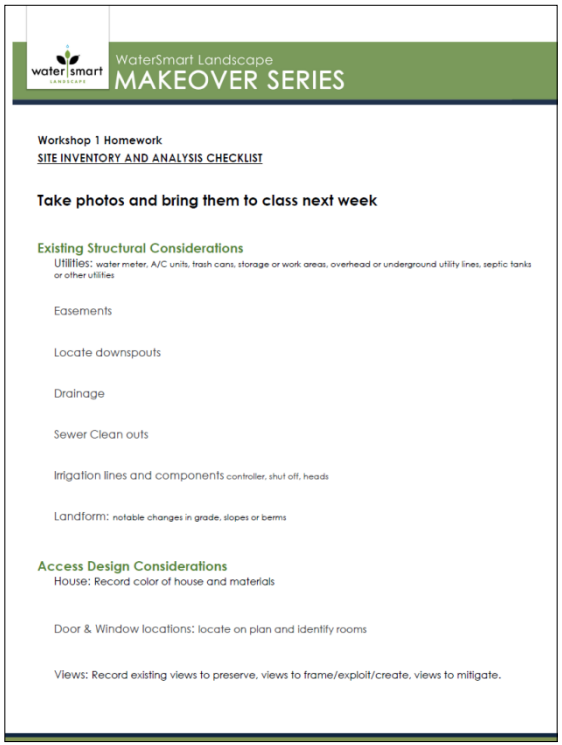
- **Assess existing situation**
  1. Stormwater Conditions
  2. Structural Conditions
  3. Design Considerations
  4. HOA requirements
  5. **Growing Conditions**
     - Soil type
     - Exposure: sun/shade/wind
     - Wet/dry patterns

Homework: Site observations



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Homework for Class 2

Read

- ❑ ***A Homeowner's Guide to a WaterSmart Landscape*** Steps 1-4

Conduct

- ❑ A soil drainage test
- ❑ An LID analysis based on your L-2 base plan
- ❑ A site analysis and complete the questionnaire

Homework sheets are located at the end of the Class 1 section in your notebook

Identify

- ❑ Your star rating 

Apply for

- ❑ Turf replacement rebates at *SoCalWaterSmart.com*

Watch

- ❑ **Videos On Demand** episodes 1 through 8 at *landscapemakeover.watersmartsd.org*

For more technical information, refer to the **Sustainable Landscape Guidelines** online at *landscapemakeover.watersmartsd.org/resources*

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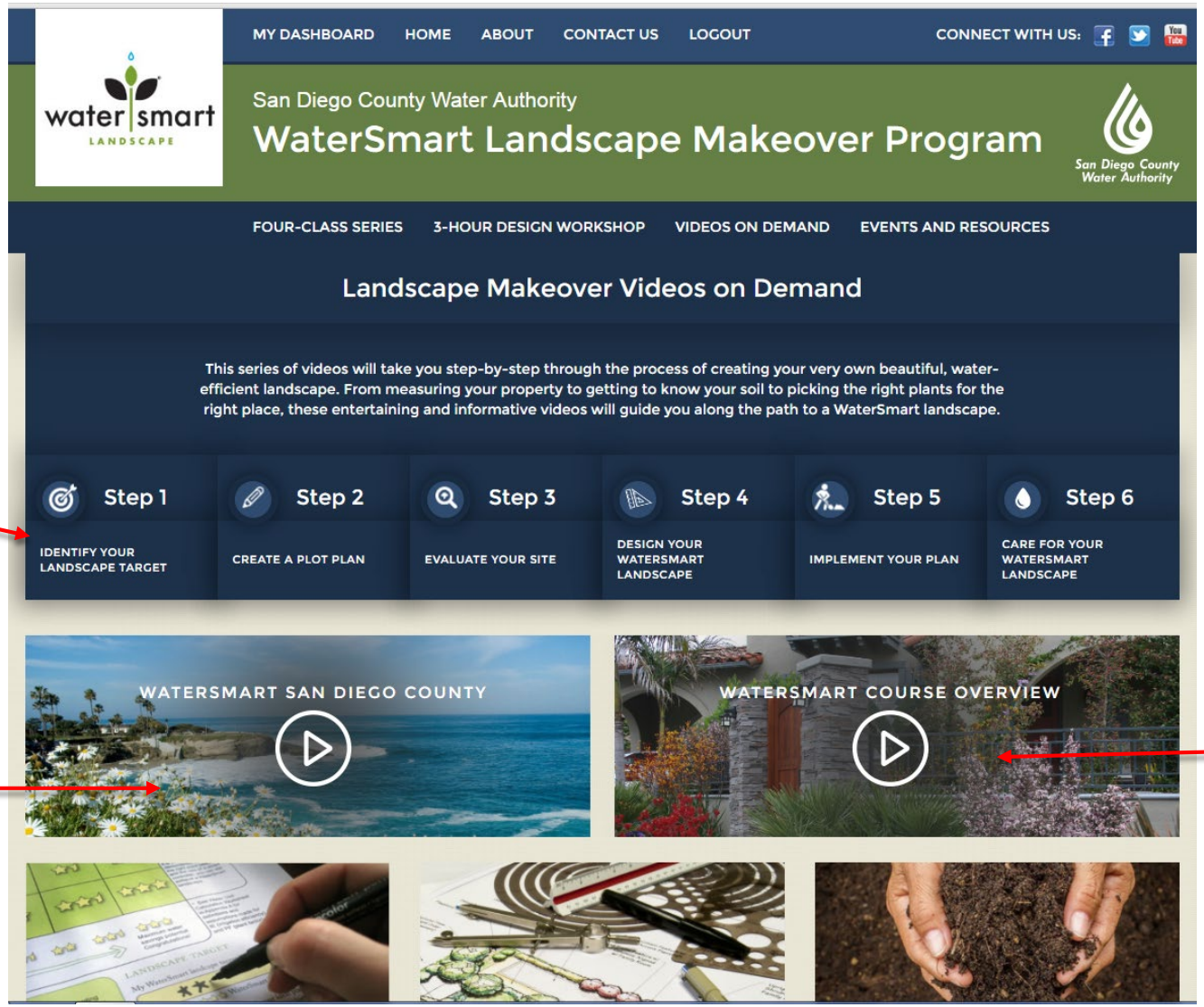
Landscape Makeover Videos On Demand

Follow Steps 1 – 6 for additional episodes



Episode 1

Episode 2

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landscapemakeover.watersmartsd.org

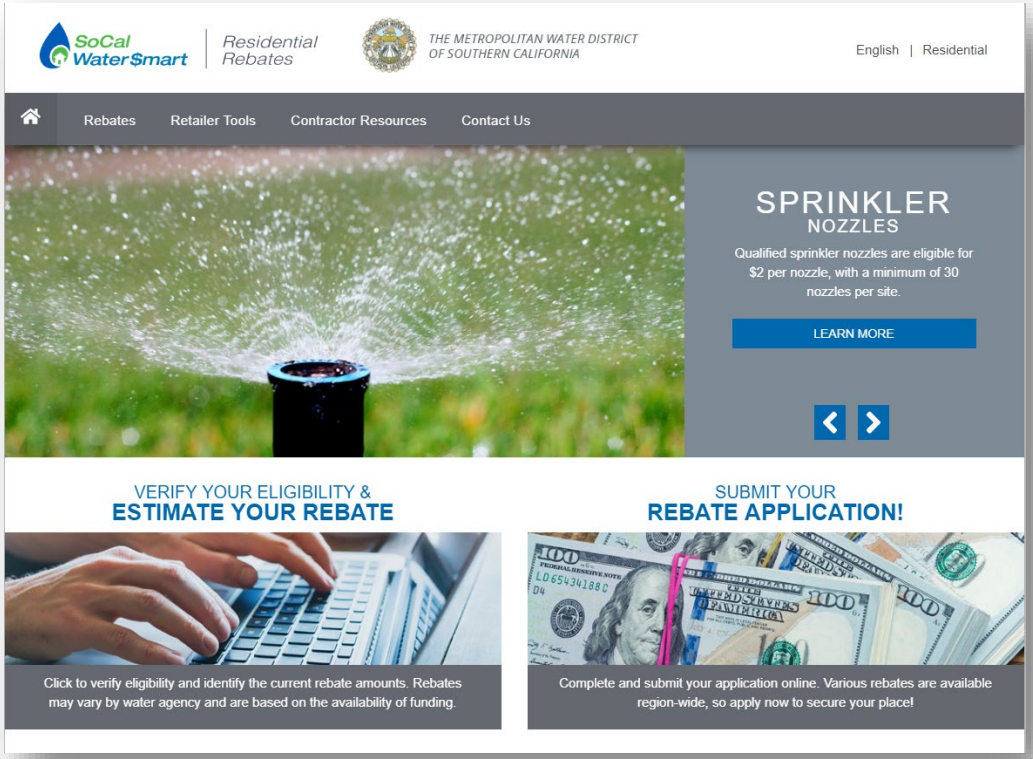
Landscape Rebates & Incentives

SoCalWaterSmart.com

- **Turf removal**
- **Rotating sprinkler nozzles**
- **Weather-based irrigation controllers**
- **Rain barrels & cisterns**
- **Soil moisture sensor systems**

Homework:
Check out Rebates

Note:
To qualify for a turf rebate, DO NOT remove your turf until you receive a Notice to Proceed



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Class 2 – Shaping Spaces

Learning Objectives

Landscape Design

Functional Planting

Shape Your Space

Design Factors

Plant Selection

Putting It All Together

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QUESTIONS?