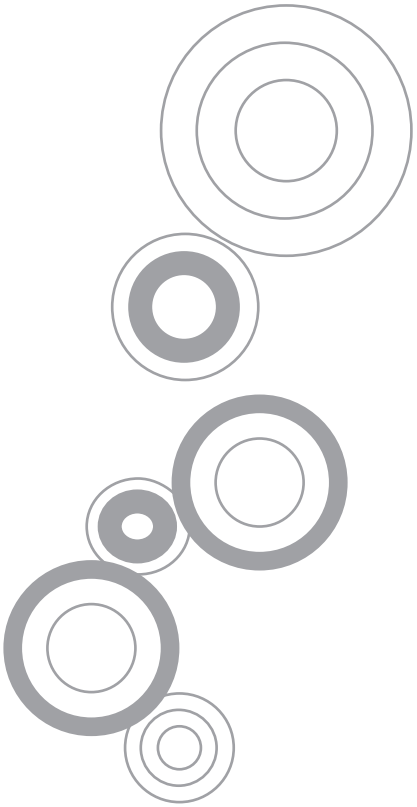
TREEPEOPLE

NATIVE PLANT GARDEN PROJECT TOOLKIT



TreePeople's School Greening Program

Native Plant Garden Project Toolkit

Who We Are

TreePeople

TreePeople is an environmental nonprofit that unites the power of trees, people and technology to grow a sustainable future for Los Angeles. Simply put, our work is about helping nature heal our cities. TreePeople's mission is to inspire, engage and support people to take personal responsibility for the urban environment, making it safe, healthy, fun and sustainable and to share the process as a model for the world.

Shifting Los Angeles From Grey to Green

TreePeople is helping to shift Los Angeles from using grey and polluting ways of handling our energy and water to using green nature-based solutions. We provide tools, programs, and education to empower Angelinos of all ages to participate in growing an ample tree canopy that cools hot urban neighborhoods and in retrofitting our landscapes to harvest rain and conserve and clean precious water. The result? A more secure local water supply, cleaner air, reduced carbon emissions, more habitat for birds, bees and animals, and a greener, healthier and more sustainable future for us all.

Founded by a Teenager!

TreePeople's founder, Andy Lipkis, was a teenager when he started the organization in the early 1970's. Since then, nearly two million trees have been planted in wilderness areas, neighborhoods and school campuses in Southern California by volunteers. We've continued to place young people at the center of our work by developing one of the largest environmental education programs in the United States. Our programs for youth create opportunities for leadership, community service and fun.

TreePeople's Project Toolkits for Groups

TreePeople's Project Toolkits are designed to assist teens, youth groups, youth group leaders, and teachers by providing instructions, tools, and support materials that not only teach about critical environmental issues in their community but provide the tools to take action to address them.

Native Plant Garden Project Toolkit

This tool kit explores the urban environment that is mostly covered in concrete, asphalt and non-native, thirsty landscapes. This exploration will help determine how your group can plant native plants to restore our watershed, by designing and installing a native plant garden.

How it works

STEP 1: LEARN

Conduct the Instant Expert activity.

- Use the Instant Expert Activity sheets for a fun and informative, hands-on activity to explore the topic of native plants and trees.

STEP 2: ASSESS

- Use the *Project Assessment Tool* to map and explore your site.
- Use your map and the *Native Plant Garden Project Readiness Survey* to determine what is needed to complete the project.

STEP 3: PLANT A NATIVE GARDEN

- Follow the guidelines to install a native plant garden at your site.
  - Choose Your Plants & Design Your Garden
  - Finalize Your Plans & Get Permission
  - Prepare For Your Event
  - Plant Your Garden
  - Maintain Your Garden

STEP 4: SHARE WHAT YOU DID

Share your project through TreePeople's various social media sites (see page 3) including the Project Toolkit Facebook Group and completing a final report.

HOW TO GET SUPPORT

If your group is planning to use this or another TreePeople Project Toolkit, and would like support, send an email to education@treepeople.org

TreePeople Support

TreePeople staff are available to support groups working on projects in the following ways:

- **Visit your group.**
  Once your group has completed Step 2, a TreePeople staff person can make a site visit to help launch your project.
- **Answer questions.**
  If your group has questions that are not answered in the Toolkit, TreePeople staff can help.
- **Stay connected.**
  We encourage your group to join us on Facebook and other social media (see instructions below) and stay connected. Share your group's process and learn what other groups are doing.
- **Event day support and acknowledgement.**
  Depending on your project, TreePeople staff can help provide event day support, tools, acknowledgement and more.

Stay Connected!

Facebook
Join our Project Toolkit Facebook Group to share experiences, post photos, ask questions, and find inspiration. This is a closed and private group. TreePeople will invite you to join. We also encourage setting up your own Facebook group and inviting your mentor to join. Registered TreePeople EcoClubs get an official badge for their profile.

Twitter
Follow us @tpyouthprojects for the latest news, upcoming workshops, events, tips, suggestions, nursery sales and more!

Pinterest
As you transform your school or community site check out our Pinterest page for inspirational photos of campus greening, rain gardens, native plants and more! pinterest.com/tpgreytogreen

Instagram
Along the way share your photos on Instagram. Be sure to tag #TreePeoplela

TreePeople Blog
Visit our TreePeople blog to stay connected with the TreePeople community and if you'd like, share your club's story for publication. blog.treepeople.org

TreePeople YouTube
Check out our How to Videos and more at youtube.com/user/TreePeople1

INSTANT EXPERT ACTIVITY
Learn the Value of Native Plants

Explore, Then Restore!

Procedure

1. Divide up into five working groups.

2. Each group has 15 minutes to do the following:
   - Receive one *Explore, Then Restore!* topic sheet with instructions and information on a land/native plant-related issue.
   - Read the information on the topic sheet. Learn about and discuss the specific topic related to land/native plants.
   - Using poster paper, answer and illustrate the answers to the questions listed on the topic sheet to create an infographic.

3. Once complete, each group presents their infographic, sharing what they have learned.

4. As a whole group, discuss the need to plant natives and how they will work with TreePeople and the Administration and Maintenance staff of their site to complete a project.

Other Options

- Read each *Topic Sheet* as a group and discuss.

MATERIALS

- Explore, Then Restore! topic sheets (copy pages 5 – 9)
- Poster paper – 1 per group
- Markers – 1 set per group

WORDS TO EXPLORE

Definitions for these and other words can be found in the glossary on page 45.

- absorption
- asphalt
- aquifer
- berm
- climate-appropriate
- compaction
- debris
- dependent
- dormant
- hardscape
- impervious
- import
- irrigation
- landscape
- mulch
- native
- non-native
- permeate
- percolation
- runoff
- semi-arid
- sustainability

START HERE!

No matter where you live, learn, work or play in Los Angeles, you are in a watershed – a land area that directs water from the mountains to a creek, river, lake or the ocean. Exploring the urban environment, we find it covered in concrete, asphalt and non-native thirsty landscapes that have significantly shifted the land's ability to capture, absorb, and store rainwater. As a result, we need to import water from faraway places, costing us millions of dollars. The need to restore the land is hard to ignore.

Your Instructions:

1. As a group, read and discuss the information on the right.

2. Use a large sheet of paper and markers to create an infographic that answers the following:
   - What should we know about the watersheds of Los Angeles?
   - Why are invasive, non-native plants a problem?
   - What is an action we can take in the mountains, at home and/or in our community to help the watershed?

Explore, Then Restore!

MOUNTAIN RESTORATION

- The mountains surrounding Los Angeles are part of a system of watersheds that supply water to our region. These include the Santa Monica and the San Gabriel Mountains. Soil health and water quality are dependent on a healthy watershed.

- Much of our local mountains are covered with non-native plant species that are invasive - they take over and replace native species. These non-natives are more flammable which increases the liklihood of wildfire. Wildfire hurts the watershed by destroying habitat, causing erosion and runoff .

- Native plants are important to the watershed. They have deep root systems that help them survive wildfire, go long periods without water, and substantially increase the ability of soil to absorb and retain water.

- In the mountains, restoration is essential to ensure recovery of the land and sustainability of the watershed. This includes removing invasive, non-native plants, and planting natives. Planting native plants and trees, such as oaks, at home and in the community also help the watershed.

START HERE!

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Your Instructions:

1. As a group, read and discuss the information on the right.

2. Use a large sheet of paper and markers to create an infographic that answers the following:
   - What do we need to know about grass and other irrigated landscapes?
   - Why is this a problem?
   - What is an action we can take in at home and/or in our community to help?

Explore, Then Restore!

FACTS ABOUT GRASS

- In Los Angeles, about half of our drinking water is used for irrigating landscapes.
- According to the Public Policy Institute of California, per square foot, 3 gallons of water each month is used for watering grass lawns alone.
- These non-native grass lawns tend to be shallow-rooted, requiring watering a few times a week. For the average lawn, that is about 72,000 gallons of water per year!
- Typically, the soil beneath the dense, shallow roots is compacted. Compaction results in poor water absorption and unhealthy soil lacking in oxygen, water and nutrients.
- By removing some or all grass in our landscapes and replacing it with native plants, climate-appropriate grass and mulch, we have the potential to reduce water needs by 75% and create healthier soil that allows water to permeate into the ground.

START HERE!

No matter where you live, learn, work or play in Los Angeles, you are in a watershed – a land area that directs water from the mountains to a creek, river, lake or the ocean. Exploring the urban environment, we find it covered in concrete, asphalt and non-native thirsty landscapes that have significantly shifted the land's ability to capture, absorb, and store rainwater. As a result, we need to import water from faraway places, costing us millions of dollars. The need to restore the land is hard to ignore.

Your Instructions:

1. As a group, read and discuss the information on the right.

2. Use a large sheet of paper and markers to create an infographic that answers the following:
   - What do we need to know about the climate of Los Angeles?
   - Why are non-native plants a problem?
   - What is an action we can take at home and/or in our community to help?

Explore, Then Restore!

NATIVE PLANTS

- Los Angeles is characterized as a semi-arid Mediterranean climate of mild, wet winters, and hot, dry summers with little to no rain at all.
- Most of the landscape of Los Angeles includes non-native plants and grasses that require lots of water, especially during the summer when there is no rain.
- Most native plants from Mediterranean climates such as ours are adapted to conserve water. Some characteristics include: thick, small, waxy leaves to resist evaporation and deep, spreading roots.
- During the summer, when there is no rain, native plants often go dormant and don't need watering.
- Planting natives at home and in the community requires less water, looks beautiful, supports wildlife, creates healthy soil, and is easier and cheaper to maintain.

START HERE!

No matter where you live, learn, work or play in Los Angeles, you are in a watershed – a land area that directs water from the mountains to a creek, river, lake or the ocean. Exploring the urban environment, we find it covered in concrete, asphalt and non-native thirsty landscapes that have significantly shifted the land's ability to capture, absorb, and store rainwater. As a result, we need to import water from faraway places, costing us millions of dollars. The need to restore the land is hard to ignore.

Your Instructions:

1. As a group, read and discuss the information on the right.

2. Use a large sheet of paper and markers to create an infographic that answers the following:
   - What should we know about the watersheds of Los Angeles?
   - Why is concrete and asphalt a problem?
   - What is an action we can take at home and/or in our community to help restore the land?

Explore, Then Restore!

CONCRETE AND ASPHALT REMOVAL

- The watersheds of Los Angeles direct water through the landscape and help supply us water by feeding aquifers – natural underground spaces where water is stored. A watershed functions best when the land acts as a sponge to filter, absorb and store water.

- Los Angeles is approximately 45% impervious - covered in buildings, concrete and asphalt. 75% in dense urban areas. This causes rain to travel across the hardened landscape, sending precious water through the storm drain system straight to the ocean, picking up pollution along the way.

- When the land is paved over, rainfall is unable to soak into the ground. As a result, most of our water is wasted, requiring the City of Los Angeles to import more than 85% of its water supply from distant sources.

- Removing concrete and asphalt where possible and replacing it with trees, mulch, natives and permeable surfaces allows us to capture more rainwater and reduce our need to import water.

START HERE!

No matter where you live, learn, work or play in Los Angeles, you are in a watershed – a land area that directs water from the mountains to a creek, river, lake or the ocean. Exploring the urban environment, we find it covered in concrete, asphalt and non-native thirsty landscapes that have significantly shifted the land's ability to capture, absorb, and store rainwater. As a result, we need to import water from faraway places, costing us millions of dollars. The need to restore the land is hard to ignore.

Your Instructions:

1. As a group, read and discuss the information on the right.

2. Use a large sheet of paper and markers to create an infographic that answers the following:
   - What should we know about mulch?
   - Why is a lack of mulch a problem?
   - What is an action we can take at home and/or in our community to help restore the land?

Explore, Then Restore!

MULCH

- In a natural forest, fallen leaves, branches and bark accumulate to form a layer of organic matter—or mulch—over the ground. The mulch feeds the ground with nutrients as it decays and also acts like a sponge to help the soil absorb and hold water. This allows more water to seep through the soil to replenish groundwater supplies.
- In the city, the bare ground is routinely cleared of leaves and other debris that falls from trees. This results in soil that is dry, hard and unhealthy for trees and plants.
- Mulch can be obtained for free from tree-trimmers and various sites throughout Los Angeles.
- By using a layer of mulch three to four inches deep on bare soil and around trees and plants means you use less water, improve the health of soil, and restore the land.

MAP AND ASSESS YOUR SITE

Create a map to find sites for a garden

MATERIALS

- Site Assessment Tool (copy pages 11 – 12)
- Map of the site
- Pencil

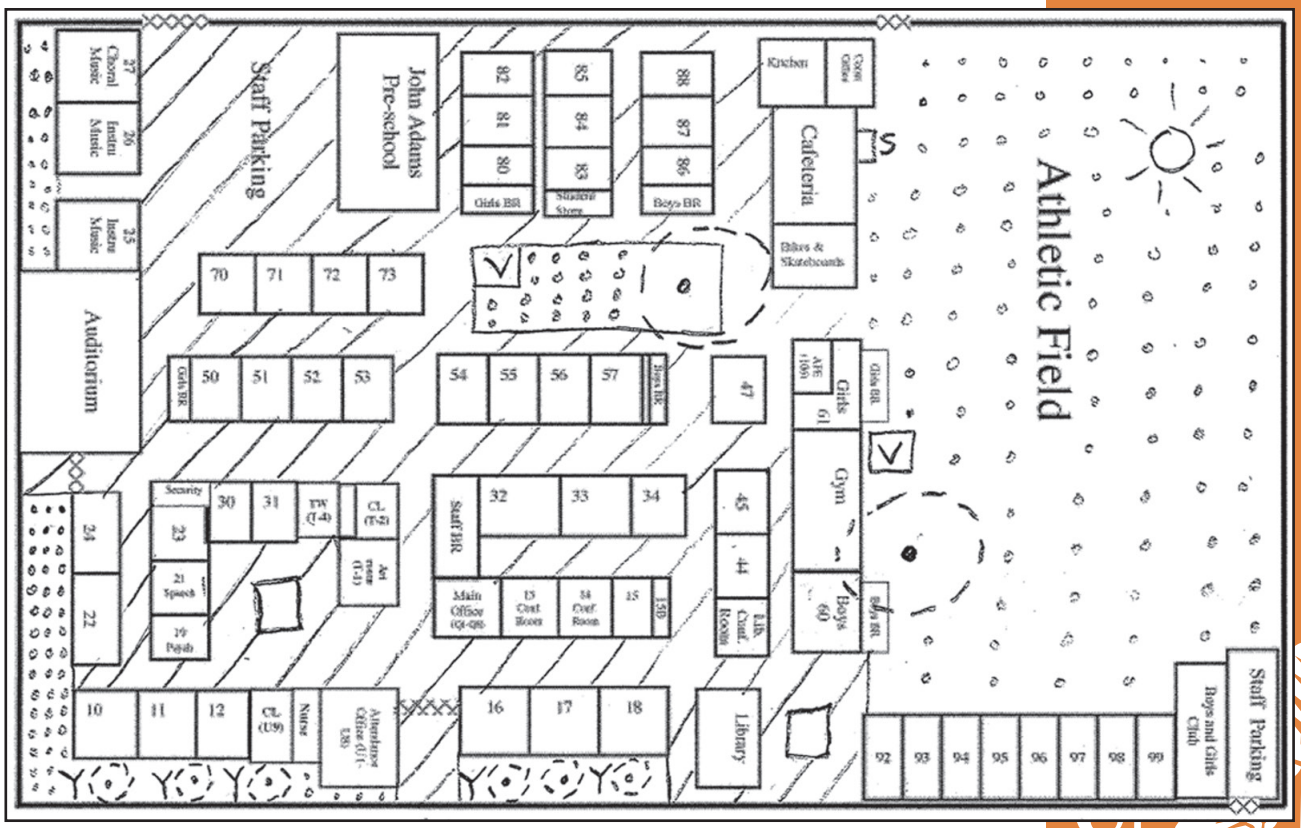
Site Assessment Tool

Procedure

1. Work as one large group or divide up into working groups when assessing and mapping your site.

2. Create a map of the site by doing one of the following:
   - Use an existing map, removing any unnecessary information.
   - Download a map of the site from on-line.
   - Create your own map using a large sheet of paper.

3. Using the *Site Assessment Tool*, follow the instructions to identify specific elements of your site and include them on your map.



Sample Map

TreePeople | Site Assessment Tool

The best place to start in growing a more sustainable landscape is by learning how to look at your site. Your goal will be to map and assess your site as the first step in determining your project.

Follow the steps to determine the details of your site.

1. Create a map of your site

Draw a general outline of your site, including any streets. You can make a simple sketch or use a Google map.

- Orient and draw the map so that North is at the top of the page and South at the bottom.
- Include the outline of major buildings.

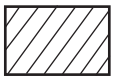
2. Add the following to your map

☐ Hardscape

This will be used for site information.

These include:

– Parking lots
– Walkways
– Driveways
– Patios
– Any other areas of concrete and/or asphalt

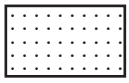
- Mark these with diagonal lines. 

☐ Landscape

This will be used to determine places that may be converted into a native plant garden.

These include:

– Turf/Lawn
– Shrubs
– Gardens
– Areas of bare/compact soil

- Mark these with dots. 

☐ Existing Trees and Tree Wells

This will be used to determine current trees and potential areas for a native plant garden.

- For existing trees: draw a circle for the trunk and a dashed line for the drip line (the area the branches reach over the landscape). 
- For empty tree wells: draw a square. 

☐ Recreational/Unused Areas

This will be used to determine areas that may be used for a native garden or avoided.

These include:

- – Playgrounds and sports fields
- – Vegetable gardens
- – Picnic areas
- – Vacant spaces

- Label the area indicating what it is used for.

☐ Utilities

This will be used to determine where digging can occur.

If it is not obvious, then wait for help from a TreePeople mentor and/or Facilities Manager.

- Label the area with the type of utility (water/gas/electric).

☐ Water Sources

This will be used to determine where water can be retrieved to provide water for the garden.

These include:

- – Spigots (for attaching a hose)
- – Valves (for attaching a quick coupler quill)

- Mark spigots with “S”.
- Mark valves with a "V".
- Label any other sources of water that can be used to fill buckets.

Spigot

☐ Areas of Sun Exposure

This will be used to determine areas that get full sun.

- Mark these with a sun.

Water valve

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REVIEW YOUR PROJECT
Do you have what you need?

Native Plant Garden Project Readiness Survey

1. Using the map of your site and the *Native Plant Garden Project Readiness Survey,* thoughtfully answer the questions to determine if you are ready to start the project, and if not, what needs to happen.

2. Consider the following:
   - Location: If you have potential locations for your project, mark these on your map and share with appropriate Stakeholders (Principal, Site Maintenance staff, etc.). This also includes your TreePeople Mentor who will give additional recommendations.
   - Available Resources: Do you have the materials or money raised to complete the project? If not, consider raising additional funds or ask for resources from local stakeholders. Discuss this with your TreePeople Mentor.
   - Permission: It is extremely important that the group has permission to do the project.
     – Make sure you have the support of an adult to assist your group through this part of the project.
     – There will be additional permission that must be obtained for planting projects on Los Angeles Unified School District property. This may also apply to other School Districts as well.
   - Commit To Care: It is important to consider the amount of time and commitment it will take to care for native plants/ trees until they are established.

3. Once the group has determined project readiness, you are ready to choose your plants.

MATERIALS

- Native Plant Garden Project Readiness Survey (copy page 14)
- Map of the site
- Pencil

TreePeople | Native Plant Garden Project Readiness

To determine project readiness, use your assessment map to answer questions about your site and then additional questions to determine its feasibility.

Plant a Native Plant Garden

☐ Do You Have Location For A Native Plant Garden?

Look at your map. Are there areas that can be revitalized by native plants? Look for:

- Small lawn areas that can be reduced and/or replaced with native plants.
- Existing gardens or planters with water-needy plants that can be replaced with natives.
- Small areas of bare soil that can be planted with natives.
- Empty tree wells that can be planted with a native tree or plants.
- Area around the school marque that can be enhanced by native plants.

Do any of these areas:

- Receive at least 6 to 8 hours of sunlight daily, required for most native plants?
- Have a water source nearby?
- Avoid sports fields or other areas of heavy traffic where they may become trampled?
- Avoid underground utilities where it is safe to dig and plant?

☐ Do You Have Available Resources?

Depending on the size of your project, you will need the following:

Native plants	$3 - $30 per plant depending on size and type
Mulch	Free
Tools for planting event	Borrow for free from TreePeople

☐ Do You Have Permission?

Whether you want to create a native plant garden at a school or a privately owned location you will need to have permission.

– Make sure you have the support of an adult to help your group through this process, and who can insure there is general support for a tree planting or tree care project.

– Guidelines for getting permission are provided in this Toolkit on page 32.

☐ Can You Commit To Care?

A new garden requires care for the next year or two to get established.

– Can you work with school/maintenance staff to put together a maintenance plan for the garden?

– TreePeople offers technical assistance workshops for schools on how to provide on-going native plant care.

CHOOSE YOUR PLANTS
Creating a Plant Wish List

There are important questions to answer, that ensures your group chooses the right plants for the site. This includes:

- What is the soil type for the site?
- What is the climate zone for your area?
- Do you want evergreen or deciduous plants?
- What is the sun exposure for the site?

Follow the instructions on page 16 - 18 to answer these questions.

Fill out the chart below with your answers. Once complete, you will use the chart and the Recommended Low Water Use California Native Plants list (page 20), to help choose the right plants for your site.

Circle all that apply:

1. Soil Type

Clay
(Soil texture results were: clay, clay loam, sandy clay loam; sandy clay; silty clay loam; or silty clay)

Sand
(Soil texture results were: sand; loamy sand; sandy loam; sandy clay loam; or sandy clay)

Loam
(Soil texture results were: loam, loamy sand; sandy loam; sandy clay loam; sandy clay; silt loam; clay loam; silty clay; or silty clay loam)

2. Climate Zone

11 18 19 20 21 22 23 24

3. Evergreen or Deciduous/Semi Deciduous

Evergreen | Deciduous/Semi Deciduous | No preference

4. Sun Exposure

Sun | Partial Sun | Shade

What is the Soil Type?

In the location identified for your garden you will need to evaluate the soil. First you need to determine if the soil drains properly. If not, the location is not appropriate for a native plant garden. Next, you need to determine the type of soil to help choose the right plants for the location.

Soil Drainage Test

Follow the instructions to determine if the soil will drain properly.

- Dig a hole in the identified area – 6 inches to one-foot deep.
  - The hole should be wide enough so the level of the water can be seen easily.
- Fill the hole with water and let it completely drain.
- Fill the hole with water again and note the starting time.
- Note how long it takes for the water to completely disappear (5 minutes, 30 minutes, 1 hour, etc.)
  - If the water is draining slowly, note how much water is draining each 30 minutes. (1/2 inch every 30 minutes, etc.)

Soil Test Results

- 0 – 4 minutes: You have fast-draining soil. This area is fine for native plants.
- 5 – 15 minutes: Soil drainage is good. This is an ideal area for native plants.
- 16 – 60 minutes: If soil is draining at least 1 inch per hour, the area is fine for native plants.
- More than 6 hours: **This is NOT an ideal area for a native plant garden. Try another site, or choose plants that will grow in clay.**

MATERIALS

- Trowel or shovel
- Bucket or hose
- Water
- Watch
- Pencil
- Paper

Soil Texture Test

Follow the instructions below to determine the type of soil.

– Add this information to the chart.

START

Place a handful of soil (with no organic matter or rocks) in your palm. Add a few drops of water and knead soil to break down all the chunks. Soil is at proper consistency when it feels moldable, like moist putty.

Add dry soil to soak up water

YES

Does the soil stay in a ball when squeezed?

NO → Is the soil too dry? NO → Is the soil too wet? NO → **SAND**

YES

Using your thumb, gently push and squeeze the soil over your index finger, creating a ribbon of soil. Try to create the ribbon with uniform thickness and width. Allow it to extend and break from its own weight. Can you form a ribbon with the soil?

NO → **LOAMY SAND**

YES

Does soil make a weak ribbon < 1" before breaking?

NO → Does soil make a medium ribbon 1-2" long before breaking?

NO → Does soil make a strong ribbon >2" before breaking?

YES

Thoroughly wet a pinch of soil in the palm of your hand. Rub it with your index finger.

Does soil feel really gritty? YES → **SANDY LOAM**	Does soil feel really gritty? YES → **SANDY CLAY LOAM**	Does soil feel really gritty? YES → **SANDY CLAY**
NO → Not gritty or smooth? YES → **LOAM**	NO → Not gritty or smooth? YES → **CLAY LOAM**	NO → Not gritty or smooth? YES → **CLAY**
NO → Does soil feel really smooth? YES → **SILT LOAM**	NO → Does soil feel really smooth? YES → **SILTY CLAY LOAM**	NO → Does soil feel really smooth? YES → **SILTY CLAY**

HI

% SAND

LO

% CLAY

HI

What is the Climate Zone?

Climate zones are areas defined by seasonal temperature, rainfall, humidity, altitude and coastal influence.

- Los Angeles County Sunset climate zones vary from 11-24. Because of this broad range, it is important to know the climate zone of your area to provide the best conditions for the tree(s).
- To find the climate zone:
  – Consult a Sunset Western Garden book.
  – Go online at http://www.sunset.com/garden/climate-zones/
- Add this information to the chart.

Evergreen, or Deciduous?

Consider the following when choosing whether you want an evergreen, deciduous/semi-deciduous plant, or either:

- **Evergreen**: Evergreen plants keep leaves all year.
- **Deciduous/Semi Deciduous**: Deciduous plants lose their leaves in fall or winter. Semi deciduous only drop part of their leaves for a short period of time.
- Add this information to the chart.

What is the Sun Exposure?

Look at the site map and determine whether the site is:

- In full sun - it receives at least 6 full hours of direct sunlight.
- Partially shaded - it receives 3 - 6 hours of sun each day, preferably in the morning and early afternoon.
- Shaded - it receives less than 3 hours of direct sunlight each day, with filtered sunlight during the rest of the day.

Create a Plan

MATERIALS

- Paper
- Pencil
- Recommended California Native Plant List (pages 22)
- Color copies of the Plant Template sheet
- Scissors
- Glue

A variety of climate-appropriate and native plants can be used in your garden space. Selecting the right type of plants for the area and the right number of plants is important.

1. Make a scale drawing of the space you have chosen.
   - Using quadrille graphing paper (4 squares per inch), measure the length and width of your space using a scale of: 4 square = 2 feet.

2. Research and choose plants by using TreePeople's Recommended Low Water Use California Native Plants list.
   - First, choose plants with similar water needs. Either low to very low water needs or moderate to low water needs. The plant list is arranged by water need. Look at the Plant List key for more detailed information.
   - Next, use your completed **chart** with additional details, to narrow down the choices and determine the right plants for the site.
   - Once you have a list of potential plants, look for photos of the plants on-line to get an idea of what they look like, and their color.

3. Group the plants and design your garden.
   - Using the Plant Templates on page 27 - 31, which are scaled to the mature width of the plants, cut out multiple copies of the plants you have chosen.
   - Using the plant cut outs, group plants considering the following:
     - What height you want your major shrubs to be. You want to consider their mature size and what they might block or shade in the future.
       - The templates indicate whether the plant is low, medium or high in height (reference the KEY or the plant chart for specifics.
     - Taller plants should go behind shorter plants.
   - Groundcovers, spreading plants, larger shrubs and trees are listed on page 31 with instructions for inclusion on your garden plan.

4. Finalize your plan.
   - Either trace around the dots or adhere them to the page.
   - Create a key for your plan that indicates the plants you have chosen.

5. Share your design.
   - Share your design with school administration.
   - This plan will be used as part of the Permission process on page 48.

Recommended Low Water Use California Native Plants

KEY

Soil Type

C = Clay L = Loam S = Sand WD = Well drained

Climate Zone

- Refers to the climate zones in the Sunset Western Garden Book.
- Zones for the Los Angeles area range from 18 (lower areas of the San Fernando Valley, such as Arleta, North Hollywood, Van Nuys and Woodland Hills) to 24 (areas near the coast that have marine influence such as El Segundo, Hawthorne, Mar Vista and Santa Monica).
- The majority of the L.A. basin is zone 22.
- www.sunset.com/garden/climate-zones/sunset-climate-zone-los-angeles-area-00418000067298/

Evergreen, Deciduous, Semi-Deciduous

E = Evergreen. Plants with leaves all year.
D = Deciduous. Plants that drop all their leaves for the winter, or summer if drought-deciduous.
Semi D = Semi-deciduous. Plants that may drop all their leaves in a cold year or only some in a warmer year or if they are closer to the coast. They often drop their leaves in spring instead of fall.

Sun Exposure

S = Sun. Needs at least 6 full hours of direct sunlight.
P = Partially Shaded. Needs 3 - 6 hours of sun each day, preferably in the morning and early afternoon.
SH = Shaded. Needs less than 3 hours of direct sunlight each day, with filtered sunlight during the rest of the day.

Plants with Low to Very Low Water Needs (very low water needs in summer)

Scientific Name	Common Name	Soil Type	Sunset Climate Zone	Evergreen Deciduous / Semi-Deciduous	Sun Exposure	Plant Size (height x width)	Notes
Artemisia californica 'Canyon Grey'	Canyon Grey California sagebrush	WD; C,L,S	11, 18-24	E	S	1' x 10'	A groundcover form of our native sage-brush. Fragrant silver-grey finely divided leaves. Drops leaves in extreme heat.
Artemisia californica 'Montara'	Montara California sagebrush	WD; C,L,S	11, 18-24	E	S	2' x 3-5'	A groundcover form of our native sage-brush with a mounding habit. Fragrant silver-grey finely divided leaves. Drops leaves in extreme heat.
Bouteloua gracilis	Blue grama grass; Mosquito grass	C,L,S,	11, 18-24	D	S-P	2' x -1'	A warm season (winter dormant) bunch grass that spreads. Summer to fall flowers at ends of stems, hang at 45 degree angles and look like eyelashes. Can be used as turf or a small accent plant.
Cercocarpus betuloides	birch-leaf mountain mahogany; western mountain mahogany	C,L,S	18-24	E	S-P	8-15' x 8-15'	Large upright shrub can be pruned to allow room for understory plants. 1" toothed leaves. Yellow spring flowers. Spiral, white, seed "tails" attached to seeds. Very low water needs, but can take more water.

Plants with Low to Very Low Water Needs (very low water needs in summer) continued

Scientific Name	Common Name	Soil Type	Sunset Climate Zone	Evergreen Deciduous / Semi-Deciduous	Sun Exposure	Plant Size (height x width)	Notes
Dudleya hassei (D. virens hassei)	Catalina Island dudleya	C,L,S	19-24	E	S	4-12" x 12-15"	A succulent that forms clumps of finger-like blue-green 4" stems. White and yellow flowers on 10-12" stems. Not for the hottest inland areas.
Eriogonum crocatum	Saffron buckwheat; Conejo buckwheat	WD; C,L,S	18-24	E	S	1' x 2'	Wooly grey leaves. Bright chartreuse-yellow flower heads late spring to summer. Short-lived (3-4 years), but can reseed. Butterflies and beneficial insects love it.
Eriogonum fasciculatum	California buckwheat	C,L,S	11, 18-24	E	S	4' x 4'	White to light pink flower heads from spring to summer turn rust-colored in fall. Small needle-like leaves. Very easy to care for. Butterflies and beneficial insects love it.
Eriogonum giganteum	Saint Catherine's lace	WD; C,L,S	18-24	E	S-P	3-6' x 6'	Full sun near the coast, part shade inland. Fuzzy white-grey leaves. Large, white flat-topped flower heads from spring to summer turn rust-colored in fall. Butterflies and beneficial insects love it.
Eriogonum grande rubescens	island buckwheat; red buckwheat	WD; C,L,S	18-24	E	S-P	1--2' x 1-3'	Bright clusters of pink-red flowers from spring to fall. Leaves white and wooly underneath. Full sun near the coast, part shade inland. Butterflies and beneficial insects love it.
Eriogonum umbellatum	sulfur buckwheat	WD; L,S	11, 18-24	E	S-P	1' x 3'	Bright yellow, rounded flower heads from spring to summer. Dark to medium green leaves. Needs part shade in the valley. Butterflies and beneficial insects love it. For Zone 11, plant in the shade.
Mimulus aurantiacus	sticky monkeyflower	WD: L,S	18-24	Semi D	S-P	2-3' x 2-3'	Narrow sticky leaves. Bright orange, yellow, or red tubular flowers spring to summer. Many cultivars.
Monardella odoratissima	mountain pennyroyal; western coyote mint	WD; L,S	18-24	E	P	1-2' x 1-2'	Hairy grey-green leaves. Purple flowers summer to fall. Very fragrant! Great to grow under taller shrubs or trees.
Monardella villosa	coyote mint	WD; L,S	21-24	E	P-SH	1-2' x 1-2'	Very fragrant, furry grey-green leaves. Lavender flowers summer to fall. Great for under taller shrubs/trees. Not for the valley.
Nolina bigelovii	desert beargrass; Bigelow's nolina	WD; L,S	11, 18-24	E	S	1-4' x 1-6'	Long slender leaves form clumps similar to yucca, but not sharp. Produces an 8' flower stalk with white flowers.
Penstemon eatonii	firecracker penstemon	WD; rocky L,S	11, 18-24	E	S	2-3' x 2-3'	Very showy, bright red tubular flowers from spring to summer. Native to the desert; does well in summer heat and drought once established.

Plants with Low to Very Low Water Needs (very low water needs in summer) continued

Scientific Name	Common Name	Soil Type	Sunset Climate Zone	Evergreen Deciduous / Semi-Deciduous	Sun Exposure	Plant Size (height x width)	Notes
Penstemon heterophyllus 'Margarita BOP'	Margarita BOP penstemon	WD;C,L,S	11, 18-24	E	S-P	1-2' x 2-3'	Heavy bloomer of deep purple-blue tubular flowers. Near the coast, plant it in the warmest locations.
Rhus ovata	sugarbush	L,S	11, 18-24	E	S-P	3-15' x 3-10'	Leathery leaves fold inward along mid-vein. White-pink flowers; small round, flat fruits taste like lemon. For screening and slopes.
Salvia apiana	white sage	C,L,S	18-24	E	S	2-4' x 3-6'	Large, stiff, white-grey, fragrant leaves. White flowers spring to summer displayed on long spikes (rather than whorls like other sages) on 6' flower stalks. Used in Native American ceremonies.
Salvia clevelandii	Cleveland sage	WD; L,S	18-24	E	S	4-6' x 3-5'	Very fragrant grey-green leaves. Bright lavender to purple-blue flowers spring to summer. 'Winifred Gilman' is the most popular cultivar. Many hybrids between Cleveland and Purple Sage such as 'Allen Chickering', 'Pozo Blue', 'Whirly Blue and 'Aromas'.
Salvia leucophylla	purple sage	C,L,S	18-24	E, S	S	3-7' x 4-7'	Very easy sage to grow. Light to rose-pink flowers in whorls on 10" spikes. New bright green spring leaves are replaced by smaller white-grey leaves in summer to conserve water.
Salvia leucophylla 'Amethyst Bluff'	Amethyst Bluff sage	WD; L,S	18-24	S	S-P	2' x 5-8'	A good erosion-control groundcover sage. Lavender flowers from spring to summer.
Salvia leucophylla 'Bees Bliss'	Bees Bliss sage	WD; L,S	18-24	S	S-P	1-2' x 2-5'	An excellent sage groundcover. Lavender-pink flowers from spring to summer.
Salvia mellifera	black sage	L,S	18-24	E	S	5' x 5'	White to lavender flowers spring to summer. Fragrant leaves.
Salvia spathacea	hummingbird sage	C,L,S	18-24	E	P-SH	1-1·' x spread-ing	Large fragrant leaves. Big magenta flower heads that hummingbirds love! Best in dry, light shade.
Sphaeralcea ambigua	desert mallow, apricot mallow	L,S	11, 18-24	Semi D	S	2-3' x 2-3'	Bright orange flowers in spring to fall. Grey-green, small leaves. Drought deciduous.

Scientific Name	Common Name	Soil Type	Sunset Climate Zone	Evergreen Deciduous / Semi-Deciduous	Sun Exposure	Plant Size (height x width)	Notes

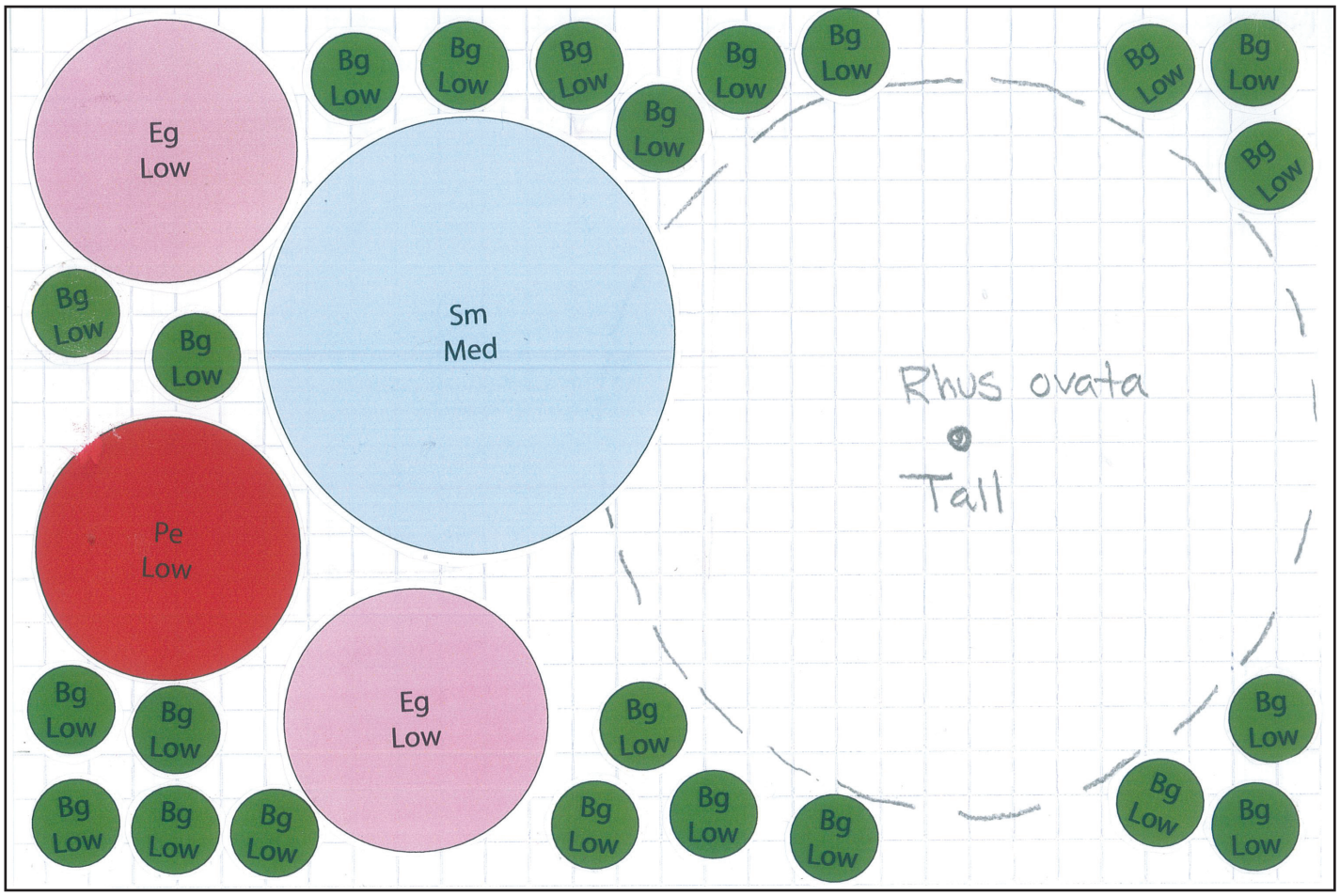
Plants with Moderate to Low Water Needs (low water needs in summer)

Arctostaphylos bakeri 'Louis Edmunds'	Louis Edmunds manzanita	WD;C,L,S	18-24	E	S-P	6-10' x 6-8'	Upright dark purple/mahogany branches. Grey-green leaves. Light pink flowers late winter to early spring.
Arctostaphylos 'Howard McMinn'	Howard McMinn manzanita	WD;C,L,S	18-24	E	S-P	5-8' x 6-15'	Light green leaves. White to pink flowers in late spring. Full sun, but part shade needed inland.
Artemisia pycnocephala 'David's Choice'	David's Choice sagebrush	WD; S,L	18-24	E	S	·-1' x 2'	Silver-grey, feathery foliage on a mounding shrub. 18" flower spikes rise above the foliage.
Asclepias fascicularis	narrow-leaved milkweed	L, C	18-24	D	S-P	4' x spreading	White and pink small flower clusters. Seeds attached to white fluff. Can spread readily, but it's the best food source for the monarch butterfly caterpillar, also the Striated Queen caterpillar. Winter dormant.
Asclepias speciosa	showy milkweed	L, C prefers clay	18-24	D	S-P	2-5' x 3-5'	Large, furry leaves. Large, pink, round flower heads in late spring and summer. Seeds are attached to white fluff. Second best food source for the monarch butterfly caterpillar. Winter dormant.
Baccharis pilularis (groundcovers)	dwarf coyote brush – Twin Peaks 2; Pigeon Point	C,L,S	18-24	E	S	1·-3' x 6-12'	Good evergreen groundcover. 'Twin Peaks 2' is 3' tall and 8-12' wide. 'Pigeon Point' is an even shorter version at 18-24" tall, 6-9' wide.
Calliandra eriophylla	fairy duster	WD; L,S	11, 18-24	Semi-D	S	1-3' x 4-6'	Pink fluffy flowers February to June. 2", flat seedpods are outlined in red. Tiny, hairy, blue-green leaves.
Carpenteria californica	bush anemone	L,S	18-24	E	P-SH	5-6' x 6-8'	Showy, 2-3" white flowers with yellow centers; look like camellias. Needs shade in the Valley.
Ceanothus 'Centennial'	Centennial ceanothus	WD; L,S	18-24	E	S-P	·-2' x 4-10'	Intense, cobalt blue flowers late winter to early spring. Deep green, ·", glossy leaves. Best near the coast, needs part shade inland.
Ceanothus 'Lemon ice'	Lemon Ice ceanothus	C,L,S	18-24	E	S-P	3-5' x 3-5'	Variegated leaves - green in the center and yellow around the edge. Light blue flowers in spring.
Ceanothus 'Ray Hartman'	Ray Hartman ceanothus	C,L,S	18-24	E	S-P	15-20' x 15-20'	Blue flower clusters on branch ends in spring. Periodic deep summer water keeps it blooming. Tolerates more water than other ceanothus. Part shade in the Valley.
Ceanothus 'Skylark'	Skylark ceanothus	WD;C,L,S	18-24	E	S-P	4' x 6'	Compact, dense shrub with dark green leaves. Blue flowers late in spring.

Plants with Moderate to Low Water Needs (low water needs in summer) continued

Scientific Name	Common Name	Soil Type	Sunset Climate Zone	Evergreen Deciduous / Semi-Deciduous	Sun Exposure	Plant Size (height x width)	Notes
Ceanothus thyrsiflorus griseus 'Yankee Point'	Yankee Point ceanothus	C,L,S	18-24	E	S-P	3' x 10-12'	One of the easiest Ceanothus to grow. Good in heat or clay. Can take regular watering. Glossy green leaves, light blue flowers in spring.
Cercis occidentalis	western redbud	L,S	11, 18-24	D	S-P	15-20' x 15-20'	Often multi-trunked. Heart-shaped leaves turn yellow and orange in fall. Bright magenta flowers late winter to early spring. Magenta seed pods. Part shade in the valley and Zone 11.
Chilopsis linearis	desert willow	L,S	11, 18-23	D	S	15-30' x 15-30'	Fragrant pink, lavender or white trumpet-shaped flowers. Usually multi-trunk. Does best inland.
Encelia californica	bush sunflower	C, L, S	18-24	E	S	3-5' x 3-5'	A mounding perennial shrub. Small yellow sunflowers with dark centers. Attracts butterflies and beneficial insects.
Erigeron glaucus 'Cape Sebastian'	Cape Sebastian	L, S	20-24	E	S-P	··1' x 2-3'	Low mounding perennial. Lavender-pink daisy flowers from spring to early fall. Best at the coast in full sun. Needs shade inland.
Heterolmeles arbutiflora	toyon	WD;C,L,S	18-24	E	S-P	12-25' x 12-20'	Great for wildlife habitat. Dark green leaves with serrated edge. White flowers in spring-summer, red berries in winter.
Heuchera maxima	sland alum root	C,L,S	18-24	E	P-SH	2' x 2-3'	Rosettes of soft, lobed leaves. Flower stalks with dainty white to pink flowers rise above the foliage. Best in dry shade.
Leymus condensa-tus 'Canyon Prince'	Canyon Prince wild rye	C,L,S	11, 18-24	E	S-P	3-4' x 3-4'	Blue-green strap-like leaves, forms a clump. Creamy, feathery flower spikes rise above foliage to 5'.
Linum lewisii	blue flax	L,S	18-24	E	S	2-3' x 1-2'	Sky blue flowers in spring and summer. Soft, needle-like leaves. Stunning in bloom. Easy to grow.
Muhlenber-gia rigens	deer grass	C,L,S	11, 18-24	E	S-P	2-3' x 3-6'	Grey-green, thin leaves form a clump like a fountain. Flower spikes rise above foliage to 5'. Little care is needed.
Ribes malvaceum 'Dancing Tassels'	Dancing Tassels chaparral current	WD: L,S	11, 18-24	D	P-SH	6-8' x 5-8'	Light pink flowers in long, 8-12" clusters winter to spring. Summer deciduous, but will hold its leaves if it receives some summer water.
Ribes viburnifolium	Catalina perfume	C,L,S	11, 18-24	E	P-SH	2-3' x 4-5'	Perfect plant for under trees or large shrubs. Needs full shade inland. Small red spring flowers. Round, fragrant leaves on arching stems.
Sisyrinchium bellum	blue-eyed grass	C,L,S	18-24	D	S-P	4-16" x 6"	Long thin, leaves. ·" bright blue-purple flowers in spring. Summer dormant.

Sample Design and Plant Templates



Sample Design

KEY

Height

Low = Up to 3' tall Med = 3' to 5' tall Tall = 5' and higher
For specific height information for each plant, see the the Low Water Use California Native Plant Chart

Width

Each circle, representing a plant, is scaled at: 1" = 2 feet

Letters

The letters represent the type of native plant, using the first letters of the botanical name.

Color

The color of the circles repesent the approximate color of the flower or plant.

PLANT TEMPLATES

Sb
Low

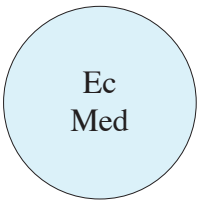
Sisyrinchium bellum

Bg
Low

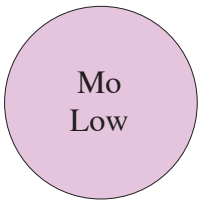
Bouteloua gracilis

Dh
Low

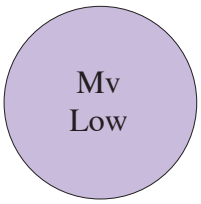
Dudleya hassei



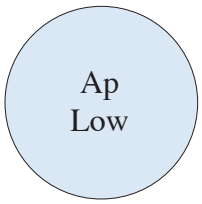
Eriogonum crocatum



Monardella odoratissima

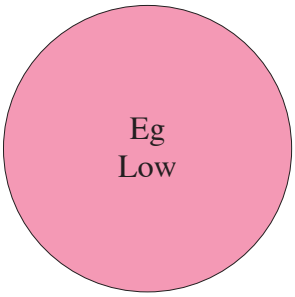


Monardella villosa

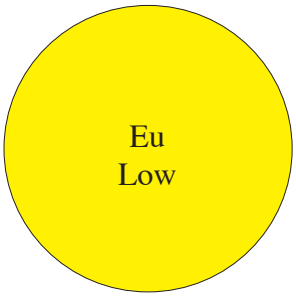


Artemisia pycnocephala

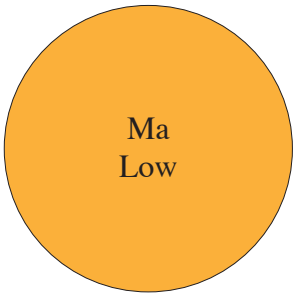
Linum lewisii



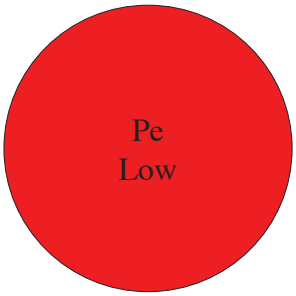
Eriogonum grande rubescens



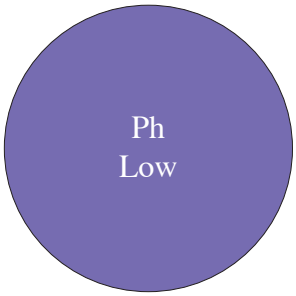
Eriogonum umbellatum



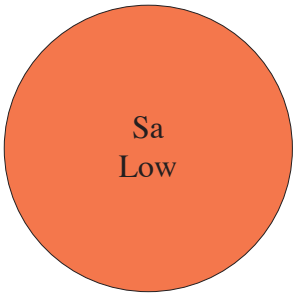
Mimulus aurantiacus



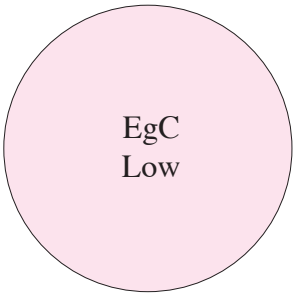
Penstemon eatonii



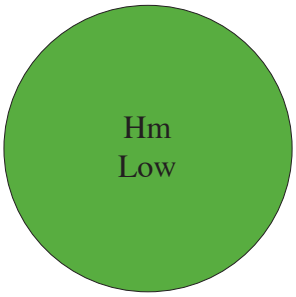
Penstemon heterophyllus



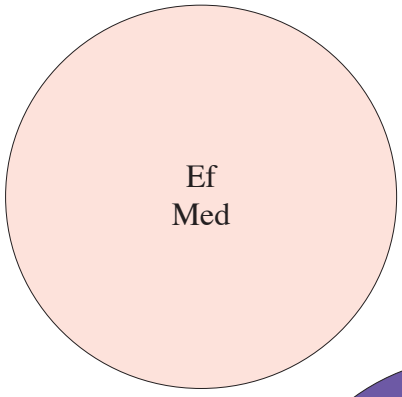
Sphaeralcea ambigua



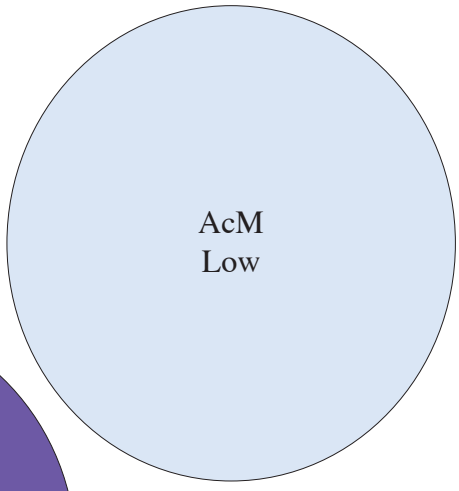
Erigeron glaucus
'Cape Sebastian'



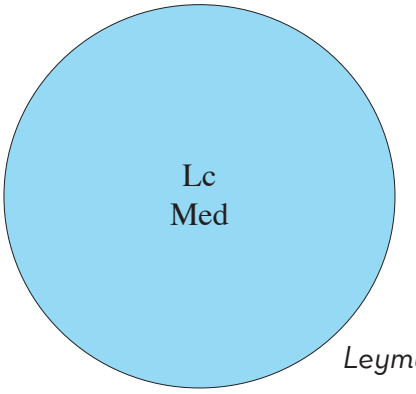
Heuchera maxima



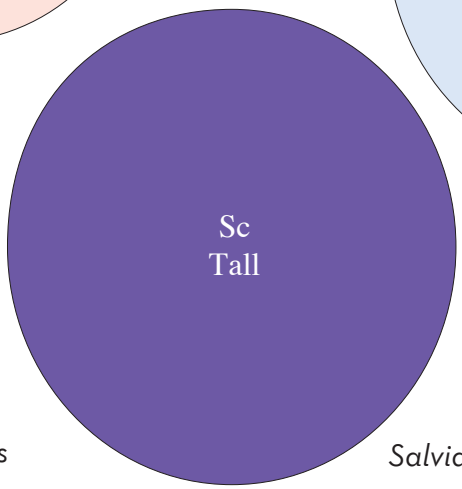
Eriogonum fasciculatum



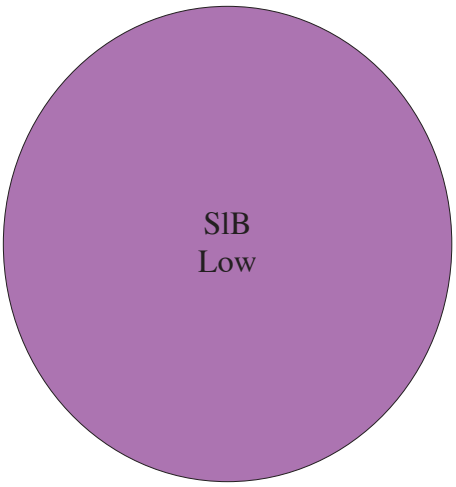
Artemisia californica
'Montara'



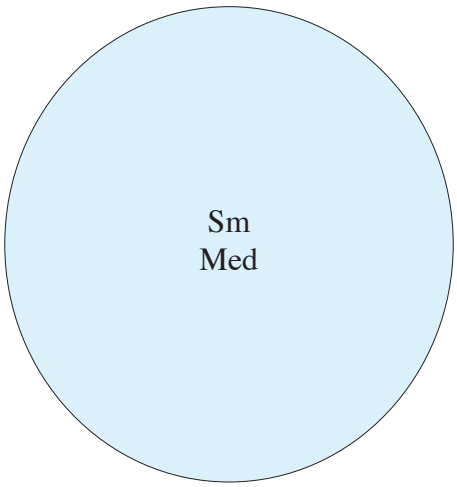
Leymus condensatus



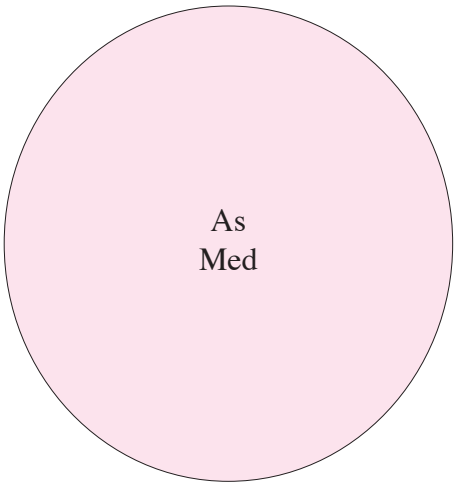
Salvia clevelandii



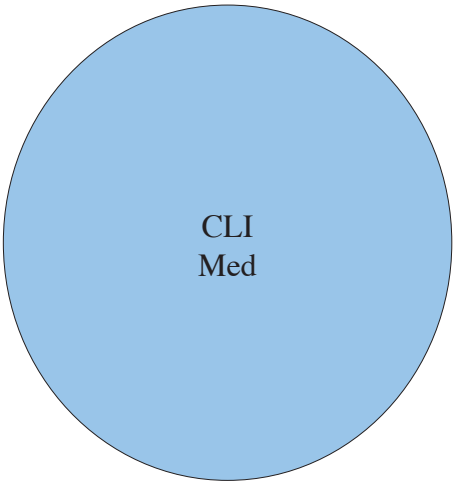
Salvia leucophylla 'Bees Bliss'



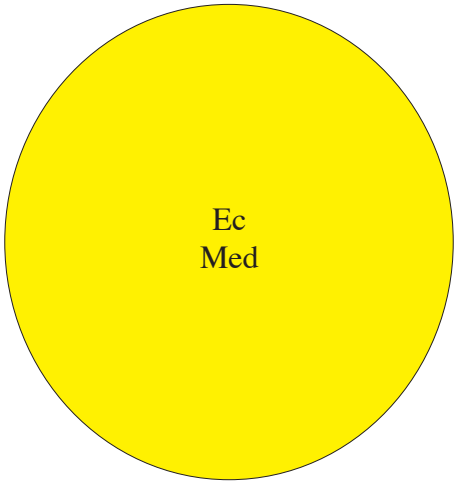
Salvia mellifera



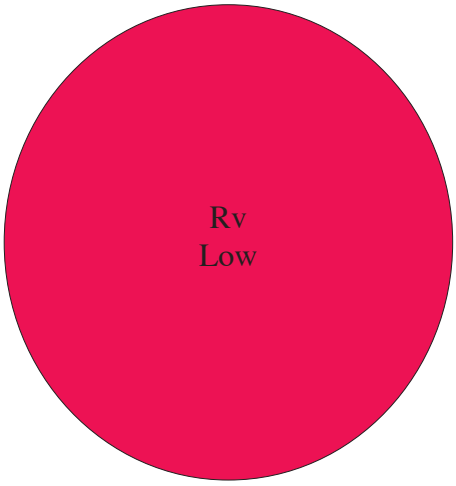
Asclepias speciosa



Ceanothus 'Lemon Ice'

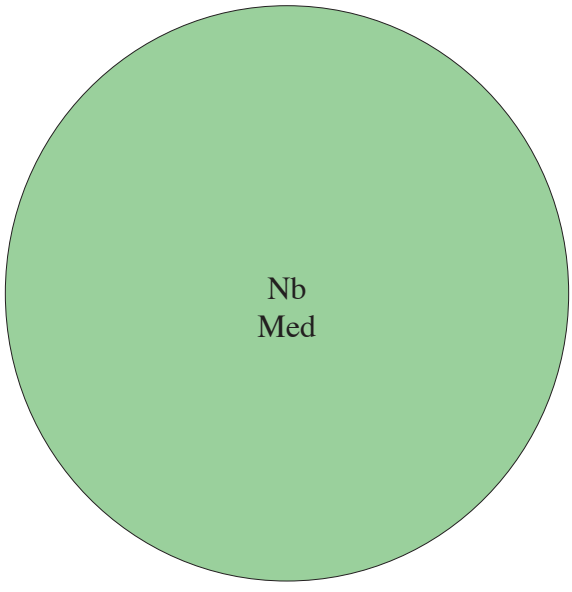


Encelia californica

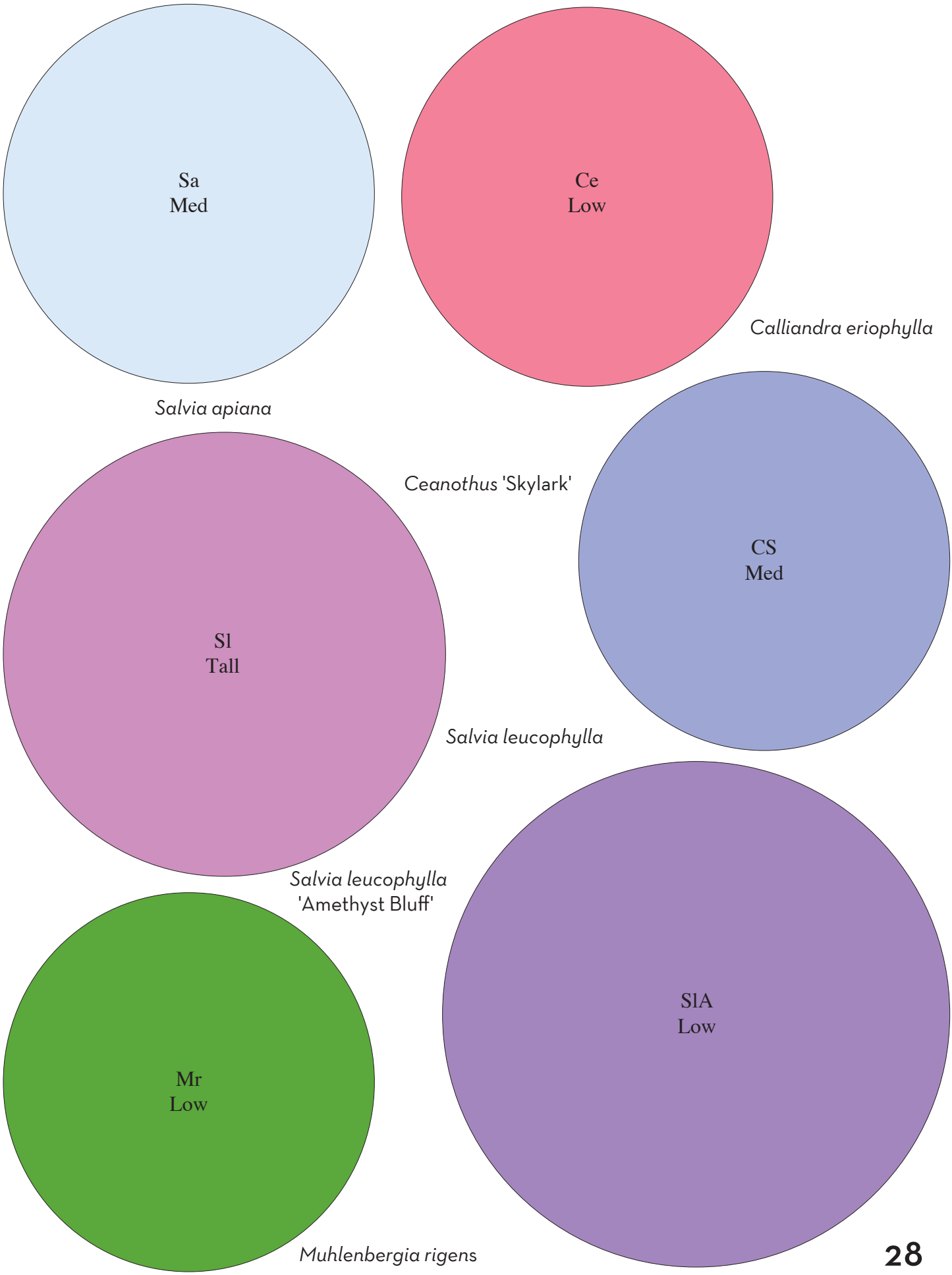


Ribes viburnifolium

Eriogonum giganteum



Nolina bigelovii


Sa
Med
Ce
Low
Calliandra eriophylla
Salvia apiana
Ceanothus 'Skylark'
CS
Med
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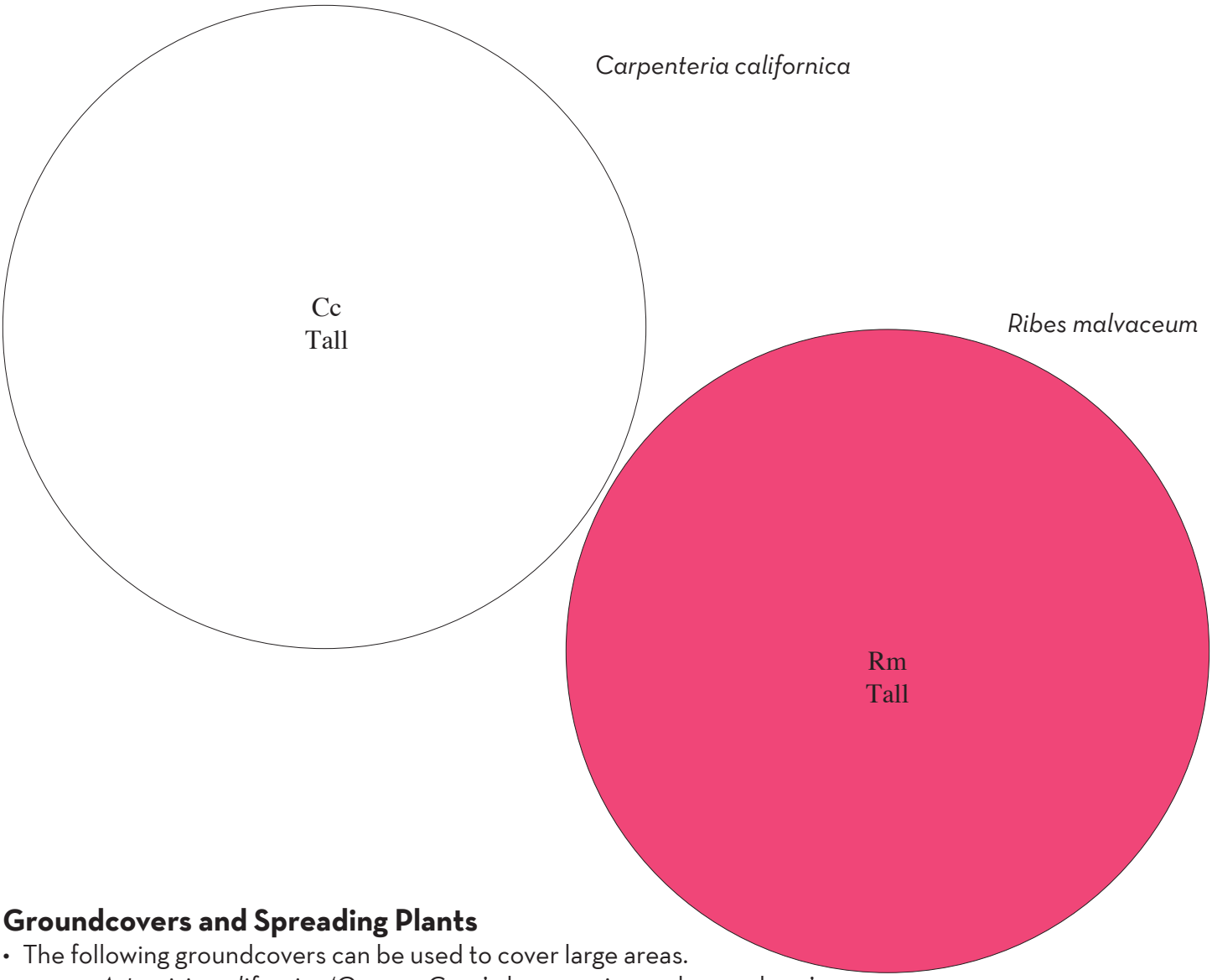
Tall
Salvia leucophylla
Salvia leucophylla
'Amethyst Bluff'
SlA
Low
Mr
Low
Muhlenbergia rigens



Groundcovers and Spreading Plants

- The following groundcovers can be used to cover large areas.
  - *Artemisia californica* 'Canyon Grey' - low growing and spreads 10'
  - *Asclepias fascicularis* - medium growing and spreads as it grows
  - *Baccharis pilularis* - low growing groundcover spreads 6-12'
  - *Salvia spathacea* - low growing and spreads as it grows
- Write in the name of the plant on your plan to indicate use.

Shrubs and Trees

- Place a dot on your map to indicate where you would like to plant the following large shrubs or trees.
- Use a dotted line to indicate the width at maturity going out 1/2" for every 1 foot of width.
- Other low plants, that can tolerate shade, can be planted underneath.
  - *Arctostaphylos* 'Howard McMinn' - shrub that grows 5-8' wide
  - *Arctostaphylos bakeri* - shrub that grows 6-10' wide
  - *Ceanothus* 'Centennial' - shrub that grows 4-10' wide
  - *Ceanothus* 'Yankee Point' - shrub that grows 10-12' wide –
  - *Ceanothus* 'Ray Hartman' - shrub that grows 15-20' wide
  - *Cercis occidentalis* - tree that grows 15-20' wide
  - *Cercocarpus betuloides* - shrub that grows 8-15' wide
  - *Chilopsis linearis* - tree that grows 15-30' wide
  - *Heteromeles arbutifolia* - shrub that grows 12-20' wide
  - *Rhus ovata* - shrub that grows 3-10' wide

FINALIZE YOUR PLAN
Getting Permission

Once you have chosen the plants for your site and created a design, it is time to finalize your plan. Whether you are interested in planting a garden at your local school, or at a community site, you will need to obtain permission from the entity responsible for those plants before you begin work. In some cases, you will be required to submit your plans and receive a permit.

Finalize Your Plan

- Using a copy of your site map, indicate where the garden will be located.
- Create a key for your plan that indicates the type of plants to be planted.

Property Owner / School Principal Permission

A *Project Information Sheet* is provided in the Resource section on page 42. Make a copy, fill in your specific information, and use it as a tool for providing the property owner or school principal with information about TreePeople and the proposed project.

Permits & Final Approval

In some situations you will need to obtain a permit for your garden project. Work with a TreePeople Mentor, if necessary, to get a packet of instructions, forms, and samplers for obtaining a permit/final approval from the following:

Los Angeles Unified School District

Other than approval from the school's principal, approval must be obtained from the school's Complex Project Manager (CPM). This includes a site visit, site plan and project scope of work.

TREEPEOPLE MENTOR

A TreePeople Mentor is available to assist your group through this process and to help avoid any roadblocks.

PERMIT TIMING

Take into consideration that, in some situations, the permit process make take 6 weeks or more. A TreePeople Mentor can help gauge timing.

PREPARE FOR YOUR EVENT
Timeline and Supplies

EVENT PLANNING

Things to consider:

– **Volunteers**: Depending on the size of the garden to be planted, you may need extra help.

– **Publicity**: Who should know about your event?

– **Refreshments**: It is important to drink water during the planting. It is also nice to celebrate afterwards with food.

– **Water**: Where is your source of water? The plants will need water after they are planted and for continued care.

– **Opening Ceremony**: An important way to start the event, recognize and thank people, and share why you are planting natives.

– **Documentation**: before, during and after the event and share what you have done on our Facebook site, and more.

Once you have permission, then it is time to prepare for your event. This involves creating a plan for event day and ensuring you have all the supplies you need.

Create a Timeline

Create a timeline for the event and assign tasks as necessary. The following are some event guidelines:

Before the garden planting

- Unload tools and supplies
- Set out water and refreshments
- Set up sign-in table and name tags
- Distribute plants and supplies according to your plan

During the garden planting

- Conduct an opening ceremony
- Conduct a planting demonstration
- Install the plants
- Mulch and water the garden

After the garden planting

- Gather up and load the tools
- Clean the area
- Eat and celebrate!

Gather Your Supplies

Plants

Some local nurseries carry a variety of native plants. For a list of nurseries that specialize in native plants, check the Resources on page 39.

– Not all varieties may be available that are listed on the TreePeople Recommended Low Water Use California Native Plants list. Talk with your TreePeople Mentor for other similar options, if necessary.

Tools

- If your group needs to borrow tools, check the Resource section on page 46 for how to check out tools from TreePeople.
- Check the list on the right for the tools needed for a garden planting.

Mulch

Using mulch on the soil of the garden is an important step. Different options are available for getting mulch for free.

- Check the Resources section on page 46 for where to get mulch.

Water

Locate the closest water source for watering the garden.

- Check with a Facilities Manager for the site
- Check if a water key is needed.

TreePeople Sign-in sheets and Outreach Materials

- TreePeople sign-in sheets are required to ensure that everyone involved in the event is covered under TreePeople insurance.
- TreePeople outreach materials include brochures, stickers and fliers of upcoming events.

MATERIALS

- Plants
- Gloves
- Trowel/Garden spade
- Cultivars
- Rake
- Mulch
- Water buckets
- Hose
- Water key

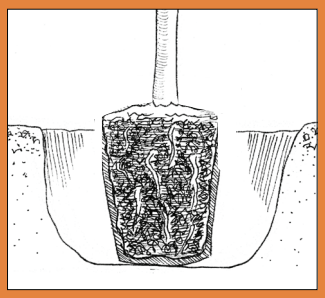
Remove Any Grass

Before the garden planting, any grass will need to be removed as part of site preparation. There are a couple of options to ensure that you save as much of the top soil as possible:

- **Use a shovel or sod cutter**
  - Use a shovel or a sod cutter to remove the turf.
  - Try not to remove too much of the top soil.

- **Cover it**
  - Called, "sheet mulching", cover your lawn with about 1 layer of cardboard or 6 layers of newspaper. Be sure to overlap by at least 6" to prevent grass from growing through.
  - Add 4 - 6 inches of mulch on top.
  - Water it.
  - Wait 2 months and dig through to plant.

CREATE YOUR GARDEN
Garden Planting Steps



How to Install Plants

Based on your design, use the following as a guide to install plants. Remember to space them for growth!

1. Dig a hole twice as wide as the root ball and slightly shallower than the root ball.
   - The root ball is comprised of all the roots contained in a pot.
2. Hit the bottom and sides of the container until the root ball is loosened.
3. Slide the pot off the root ball.
   - Be careful not to pull the plant out by the main stem.
4. Lightly massage the roots to loosen the root ball.
5. Place your plant in the soil.
   - Have the top of the root ball level with the ground.
6. Fill the hole with soil.
   - Tamp the soil firmly as you backfill to eliminate any air pockets.
7. Create a small basin around the plants to help hold in water until they become established.

8. Slowly, deep water your plants with the following:
   - 1 gallon potted plants: 2 gallons of water (1/2 bucket)
   - 5 gallon potted plants: 5 gallons of water (1 bucket)
   - 15 gallon potted trees: 15 gallons of water (3 buckets)
9. Apply mulch.
   - Cover the entire planting area with mulch to a depth of 3 - 4 inches.
   - Push the mulch 2 inches away from the base of tree/plant trunks.

MAINTAIN YOUR GARDEN
Plant Care

Ongoing Care for Native Plants

New plants will need care until they are established. Follow the general guidelines below and the more in-depth guidelines for the specific plants in your garden, provided in the Native Plant Care Guide on page 35.

General Guidelines

1. Water the plants.
   - Provide supplemental water for about 2 dry seasons or until plants are established.
   - Water during the early morning or late afternoon.
   - Do not water if the soil is wet.
2. Weed the garden.
   - Weed the garden as needed for the next 2 -3 years.
     - Once plants are established, little or no weeding is needed, if the area is kept mulched.
3. Maintain mulch.
   - Maintain mulch at about a 3 inch depth.
     - Apply a layer twice a year, in the spring and fall, as needed.

Plant Care by Species

1. Create your own plant care guide
   - Using the Native Plant Care Guide on page 35 highlight the specific plants used in your garden.
   - Create a timeline for care.
2. Things to remember:
   - Follow the water frequency given. However, when we have below average rainfall in winter, it's important to water the plants to make up the difference. Deep soak the plants once (or twice in extremely dry winters) a month until the end of April.
   - The plants listed as summer dormant do not need water in the summer. They need to rest and will come back with the winter rains.
   - Do not fertilize the garden. Most California native plants prefer well-drained soil that is nutrient poor. If they are fertilized, or grown in organic-rich soil, they may die.
   - Check the chart for specific pruning guidelines. Most plants will do well with just pinching back stalks after flowering.

Native Plant Care Guide

Plants with Low to Very Low Water Needs (very low water needs in summer)

Scientific Name	Common Name	Water Frequency	Pruning and Care
Artemisia californica 'Canyon Grey'	Canyon Grey California sagebrush	No supplemental water once established, except for dry winters.	Prune out arching stems before new spring growth.
Artemisia californica 'Montara'	Montara California sagebrush	No supplemental water once established, except for dry winters.	Prune back as needed before new spring growth.
Bouteloua gracilis	Blue grama grass; Mosquito grass	Once or twice a month during warm weather if needed.	Used as turf- mow to 2 or 3 inches once a month during the warm months, or leave it unmowed for a natural look. Needs less water if left tall. Cut back clumps in late winter before new growth begins.
Cercocarpus betuloides	birch-leaf mountain mahogany; western mountain mahogany	Once a month during warm weather if needed.	To plant smaller natives under this tall shrub, prune out the lower branches all the way back to the trunk. Can also coppice it (cut it to 6" stubs or to the ground) in fall.
Dudleya hassei (D. virens hassei)	Catalina Island dudleya	Needs good drainage. Very little water needed. Can be summer dormant.	Remove flower stalks after blooming. It's better not to remove any dead leaves.
Eriogonum crocatum	Saffron buckwheat; Conejo buckwheat	Once a month during warm weather if needed.	Cut back flower stalks after bloom.
Eriogonum fasciculatum	California buckwheat	Once a month during warm weather if needed.	Lightly prune in late fall to late winter. Do not cut into stems without leaves.
Eriogonum giganteum	Saint Catherine's lace	Once or twice a month during warm weather if needed.	Lightly prune in late fall to late winter or as needed.
Eriogonum grande rubescens	island buckwheat; red buckwheat	Once or twice a month during warm weather if needed.	Cut back flower stalks after bloom.
Eriogonum umbellatum	sulfur buckwheat	Once or twice a month during warm weather if needed.	Cut back flower stalks after bloom.
Mimulus aurantiacus	sticky monkeyflower	Once a month during warm weather if needed.	Pinch back young stems a few inches throughout the spring growth to make it denser and prevent branch breakage. Prune out flower stalks after blooming. Prune in late fall if needed.
Monardella odoratissima	mountain pennyroyal; western coyote mint	Once or twice a month during warm weather if needed.	Cut back flower stalks after bloom.
Monardella villosa	coyote mint	Once or twice a month during warm weather if needed.	Cut back flower stalks after bloom.
Nolina bigelovii	desert beargrass; Bigelow's nolina	Needs good drainage. Very little water needed after establishment	Cut back flower stalk after bloom and once completely dried.
Penstemon eatonii	firecracker penstemon	No supplemental water once established, except for dry winters.	Cut back flower stalks after bloom or leave to release their seeds, then remove them.
Penstemon heterophyllus 'Margarita BOP'	Margarita BOP penstemon	Once a month during warm weather if needed.	Cut back old flower stalks or leave them to release their seeds, then remove them.
Rhus ovata	sugarbush	None to once a month during warm weather if needed.	Prune as needed in late fall to winter. Pinch back branches on younger plants to encourage a dense plant. Sap may be irritating to the skin.

Native Plant Care Guide

Scientific Name	Common Name	Water Frequency	Pruning and Care
Plants with Low to Very Low Water Needs (very low water needs in summer) continued			
Salvia apiana	white sage	No supplemental water once established.	Remove old flower stalks. Pinch back branches on younger plants to encourage a denser plant.
Salvia clevelandii	Cleveland sage	No supplemental water once established.	Cleveland sage and its hybrids (Allen Chickering, Aromas, Pozo Blue, Whirly Blue) are vigorous and need a heavy pruning in winter to prevent the branches from breaking. Prune back the plant by 1/2 to 1/3 in winter, leaving 2 sets of leaves or buds.
Salvia leucophylla	purple sage	Once or twice a month in the warm months if needed.	Pinch back when young to encourage a dense plant. Can also prune back by 1/2 to 1/3 in winter, but not into wood without buds or leaves.
Salvia leucophylla 'Amethyst Bluff'	Amethyst Bluff sage	Once or twice a month in the warm months if needed.	Lightly cut back stems in the center of the plant when young during winter.
Salvia leucophyll-la 'Bees Bliss'	Bees Bliss sage	Once or twice a month in the warm months if needed.	Lightly cut back stems in the center of the plant when young during winter.
Salvia mellifera	black sage	No supplemental water once established.	Pinch back when young to encourage a dense plant. Can also prune back by 1/2 to 1/3 in winter, but not into wood without buds or leaves.
Salvia spathacea	hummingbird sage	Once or twice a month in the warm months if needed. Do not get leaves wet when watering.	Can have a problem with powdery mildew. Keep good air circulation and don't use a sprinkler which gets the leaves wet. Cut out old flower stalks.
Sphaeralcea ambigua	desert mallow, apricot mallow	Once a month during warm weather if needed.	Cut back in the fall after bloom.
Plants with Moderate to Low Water Needs (low water needs in summer)			
Arctostaphy-los bakeri 'Louis Edmunds'	Louis Edmunds manzanita	Once a month during warm weather if needed.	Ok to remove lower branches as the plant matures to display branches and allow space for understory plants. Prune in summer and sterilize pruning tools with alcohol or a 10% bleach solution between pruning cuts.
Arctostaphylos 'Howard McMinn'	Howard McMinn manzanita	Once a month during warm weather if needed.	Remove lower branches as it matures to expose branches and to allow space for understory plants. Can take regular summer water and regular pruning, but still best to prune In summer and sterilize pruning tools with alcohol or a 10% bleach solution between pruning cuts.
Artemisia pycnocephala 'David's Choice'	David's Choice sagebrush	Once a month during warm weather if needed.	Cut back flower stalks after bloom.
Asclepias fascicularis	narrow-leaved milkweed	None to twice a month during warm weather.	Winter dormant. Cut back old growth before new growth begins March to April.
Asclepias speciosa	showy milkweed	None to twice a month during warm weather.	Winter dormant. Cut back old growth before new growth begins, March to April.

Native Plant Care Guide

Scientific Name	Common Name	Water Frequency	Pruning and Care
Baccharis pilularis (groundcover)	dwarf coyote brush – Twin Peaks 2; Pigeon Point	Once a month (Twin Peaks 2) to twice a month (Pigeon Point) if needed.	Cut back a lot or to the ground every few years.
Calliandra eriophylla	fairy duster	None to once a month in warm weather.	Not much pruning needed.
Carpenteria californica	bush anemone	Twice to four times a month in warm weather.	Not much pruning needed.
Ceanothus 'Centennial'	Centennial ceanothus	Once or twice a month in the warm months if needed.	Prune as needed after bloom.
Ceanothus 'Lemon ice'	Lemon Ice ceanothus	Once or twice a month in the warm months if needed.	Prune as needed after bloom. Prune out stems with solid green leaves.
Ceanothus 'Ray Hartman'	Ray Hartman ceanothus	Once or twice a month in the warm months if needed. Can take more water than other ceanothus.	Remove old flower clusters after bloom. Can remove lower branches to create space for plants.
Ceanothus 'Skylark'	Skylark ceanothus	Once or twice a month in the warm months if needed.	Prune flowers heads after bloom.
Ceanothus thyrsiflorus griseus 'Yankee Point'	Yankee Point ceanothus	Once or twice a month in the warm months if needed. Can take more water than other ceanothus.	Prune as needed after bloom.
Cercis occidentalis	western redbud	Once or twice a month in the warm months if needed.	Prune in winter as needed making removal cuts back to the trunk or branch collar.
Chilopsis linearis	desert willow	Two to four times a month in the warm months if needed.	Prune in winter as needed.
Encelia californica	bush sunflower	No water to once a month in the warm months.	Prune to 4" stubs in late winter.
Erigeron glaucus 'Cape Sebastian'	Cape Sebastian	Two to four times a month in the warm months if needed.	Prune back a few inches after flowering.
Heteromeles arbutifolia	toyon	No water to once a month in the warm months.	Prune branches as needed.
Heuchera maxima	Island alum root	Twice a month during warm months.	Remove flower stalks after bloom. Prune out old tattered leaves and cut back shabby plants in late fall.
Leymus condensatus 'Canyon Prince'	Canyon Prince wild rye	Once or twice a month in the warm months if needed.	Prune to the ground late summer to early winter every year or two.
Linum lewisii	blue flax	Once or twice a month in the warm months if needed.	Prune to the ground in winter.
Muhlenbergia rigens	deer grass	No water to once a month in the warm months.	Rake out old flower heads or cut to the ground every few years from May to June.
Ribes malvaceum 'Dancing Tassels'	Dancing Tassels chaparral current	Summer deciduous, but will keep flowering if deep watered once a month.	Best pruned after flowering. Prune as needed.
Ribes viburnifolium	Catalina perfume	Once or twice a month in the warm months if needed.	Cut back vigorous upright stems. Pinch stems of young plants to encourage a bushy shrub.
Sisyrinchium bellum	blue-eyed grass	Needs winter and spring water once or twice a month. Do not water in summer.	Summer dormant. After leaves are totally brown, you can prune them off.

SHARE WHAT YOU DID
Let Us Know About Your Project!

Projects like this serve as an inspiration to others, and count toward TreePeople's goal of transforming our city into a safe and sustainable environment! There are a variety of ways to share what you did.

Social Media

Share photos and videos on the Project Toolkit Facebook Group. If your group has not been invited to join, contact youthleadership@treepeople.org. See page 3 for other ways to share.

Final Report

Send an email to youthleadership@treepeople.org and tell us:

1. What is the name of your school/Eco club?
2. What are the names of the students who participated?
3. What project did you complete?
4. Where and what plants did you use?
5. Are you interested in another Project Toolkit?

We would love photos and/or videos of the project too!

RESOURCES

Glossary

absorption: The taking in of something, such as a liquid.

asphalt: A product used in paving, specifically for streets and play grounds.

berm: A raised mound of dirt designed to slow, spread and sink water much like a dam. They can be covered with shrubs, ground covers, turf or mulch.

climate-appropriate: Plants and grasses that are native to Southern California, or are adapted to our semi-arid climate.

compaction: The process by which soil particles are squeezed or compressed, reducing air and water spaces.

debris: Scattered remains, such as those from trees, that include leaves, branches, bark and twigs.

dependent: Relying on or requiring the aid of another for support.

dormant: In a condition of biological rest or inactivity characterized by cessation of growth or development.

habitat: The area or environment where an organism or ecological community normally lives or occurs.

hardscape: Refers to hard elements on the land such as those composed of concrete, brick and stone. It includes driveways, patios and sidewalks.

impervious: Presenting a barrier to the passage of stormwater.

import: To bring in from an outside source.

infiltration: The absorption of surface water by the soil.

irrigation: To supply with water by means of pipes, sprinklers, etc.

landscape: Garden or planted area.

Mediterranean climate: climate characterized by hot, dry summers and mild, wet winters. Usually located between 30 - 40 degrees north and south latitude of the equater, next to a large body of water on the west edge of continents.

mulch: A ground covering, especially of organic materials, that holds water, slows evaporation, enriches the soil and encourages plant growth.

native: Originating in, or inhabiting, a specific place for many years.

non-native: Not coming from a given locality; synonymous with "exotic."

permeate: To flow through.

percolation: The movement of water downward through the soil.

runoff: Stormwater flowing across the surface of the earth.

semi-arid: A region characterized by very little annual rainfall, usually from 10 to 20 inches.

sustainability: The use of natural resources in a way that avoids depleting them or otherwise damaging the environment.

watershed: The land area that drains water to a particular stream, river, lake or ocean.

Tools

If you plan to borrow tools from TreePeople:

- Please try to schedule 2-3 months in advance.
- TreePeople tools are lent out depending on availability.
- Work with a TreePeople Mentor to reserve and pick-up tools.

For an LAUSD school site: (213) 241-1000

Mulch

DO NOT PAY for mulch! Many free options exist:

- LAUSD
  – Contact Mahmud Shieikh-Ali at Mahmud.shiekh-ali@lausd.net
- Los Angeles City Recreation and Parks
  – Work with a TreePeople mentor to arrange for mulch.
- Other
  – For a large amount, contact a local tree trimmer.
    - Let them know you will be using it around trees and don't want chips from a palm or diseased tree.
    - They can deliver it to your site.
  – For a small amount, work with a TreePeople mentor to arrange for mulch from TreePeople/Coldwater Canyon Park.

HOW MUCH MULCH?

Measure the length and width of the garden area. The measurements should be in feet.

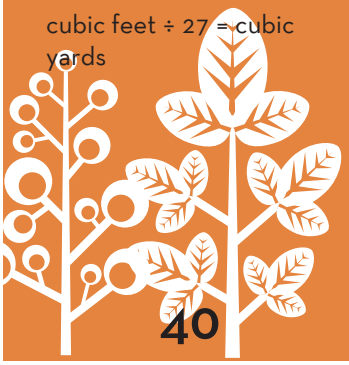
Mulch is delivered or purchased by the cubic yard. To figure out how many cubic yards you need follow the formula below:

- Multiply the width by the length to get the area.

  width x length = area
- Multiply the area by .25 feet (depth of mulch)

  area x .25 = cubic feet
- To get the cubic yards, divide by 27.

  cubic feet ÷ 27 = cubic yards



Native Plant Nurseries

Theodore Payne Foundation 10459 Tuxford St. Sun Valley, CA 91352	(818) 768-1802 www.theodorepayne.org
Tree of Life Nursery 33201 Ortega Hwy. San Juan Capistrano, CA 92675	(949) 728-0685 http://treeoflifenursery.com
Las Pilitas 8331 Nelson Way Escondido, CA 92026	(760) 749-5930 http://laspilitas.com
Matilija 8225 Waters Rd. Moorpark, CA 93021	(805) 523-8604 www.matilijanursery.com
El Nativo Growers 200 S. Peckham Rd. Azusa, CA 91702	(626) 969-8449 http://elnativogrowers.com
Rancho Santa Ana Botanic Garden 1500 N. College Ave. Claremont, CA 91711	(909) 625-8767 www.rsabg.org/grow-native-nursery
Grow Native Nursery - Westwood 100 Davis Ave. Los Angeles, CA 90049	(424) 234-0481 www.rsabg.org/grow-native-nursery

Project Information Sheet

Who We Are

TreePeople is an environmental nonprofit that unites the power of tree, people and technology to grow a sustainable future for Los Angeles. Our mission is to inspire, engage and support people to take personal responsibility for the urban environment, making it safe, healthy, fun and sustainable and to share the process as a model for the world.

TreePeople believes in the power of young people to make change in their communities. In fact, TreePeople was founded by a teenager in 1973. Since then, over 2 million trees have been planted in wilderness areas, neighborhoods and school campuses in Southern California by volunteers. We've continued to place young people at the center of our work by developing one of the largest environmental education programs in the United States. Our programs for youth create opportunities for leadership, community service and fun.

TreePeople's Youth Leadership Program

TreePeople's Youth Leadership Program is designed to assist teens, youth groups and youth group leaders by providing a program that teaches youth about critical environmental issues in their community and how taking action can help to address these issues.

TreePeople Mentor

Groups are assigned a TreePeople Mentor who will provide expertise and work with the group to support the completion of the project. Project guidelines, tools and some supplies are also provided. For sites on LAUSD property, TreePeople has a formal partnership to assist with greening projects and is well-versed in the procedures for obtaining permission at the District level.

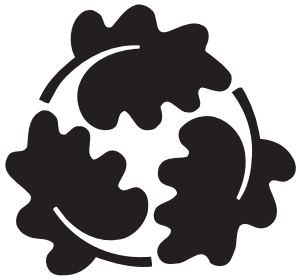
Name of TreePeople Mentor: _____

Email: _____ Phone: _____

☐ **Native Plant Garden Project**
The group has assessed the site and identified a location for a small native plant garden. A site map and suggested native plant species are included.

Name of Group: _____

Group Contact: _____



TreePeople

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