

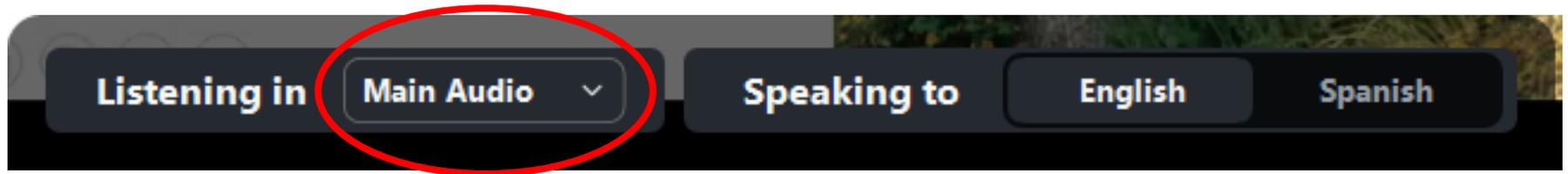


Sheet Mulching Tips and Tricks

to eliminate your lawn

November 3, 2022

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Si desea escuchar la presentación en español, seleccione y haga clic en el botón que dice: Listening in (Escuchando en).

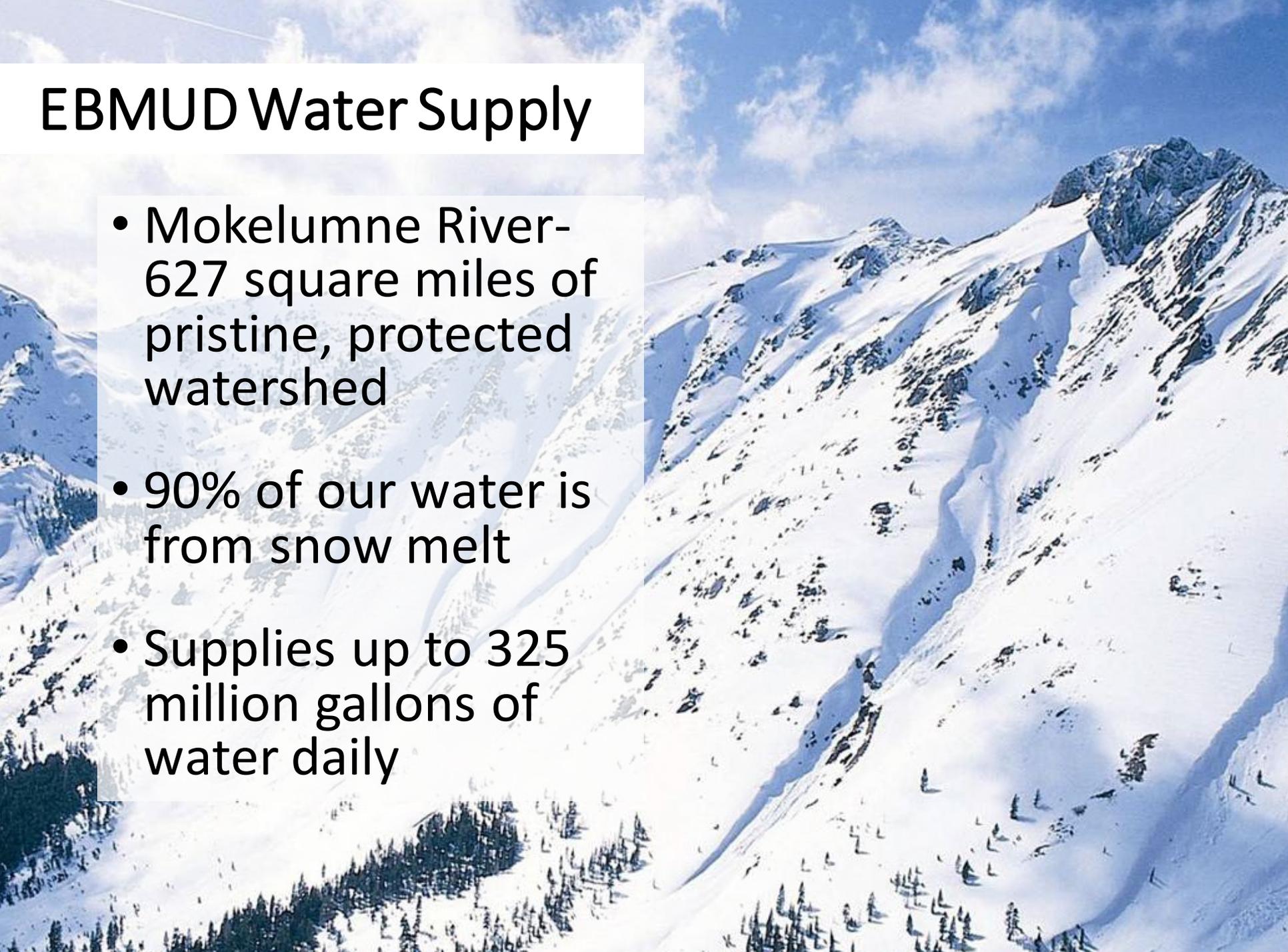
- Las 2 selecciones son
 - Inglés y Español.
 - Seleccione Español si desear escuchar esta clase en ese lenguaje.
- Si no elige un idioma, automáticamente se escuchara la presentación en inglés.
- Si desea hacer una pregunta, escríbala en la sección Q&A (preguntas y respuestas). El traductor le hará su pregunta en Inglés a los presentadores.

Overview

- EBMUD water supply system and drought update
- How to eliminate your lawn by sheet mulching
- EBMUD rebates and resources
- Upcoming events
- Q and A

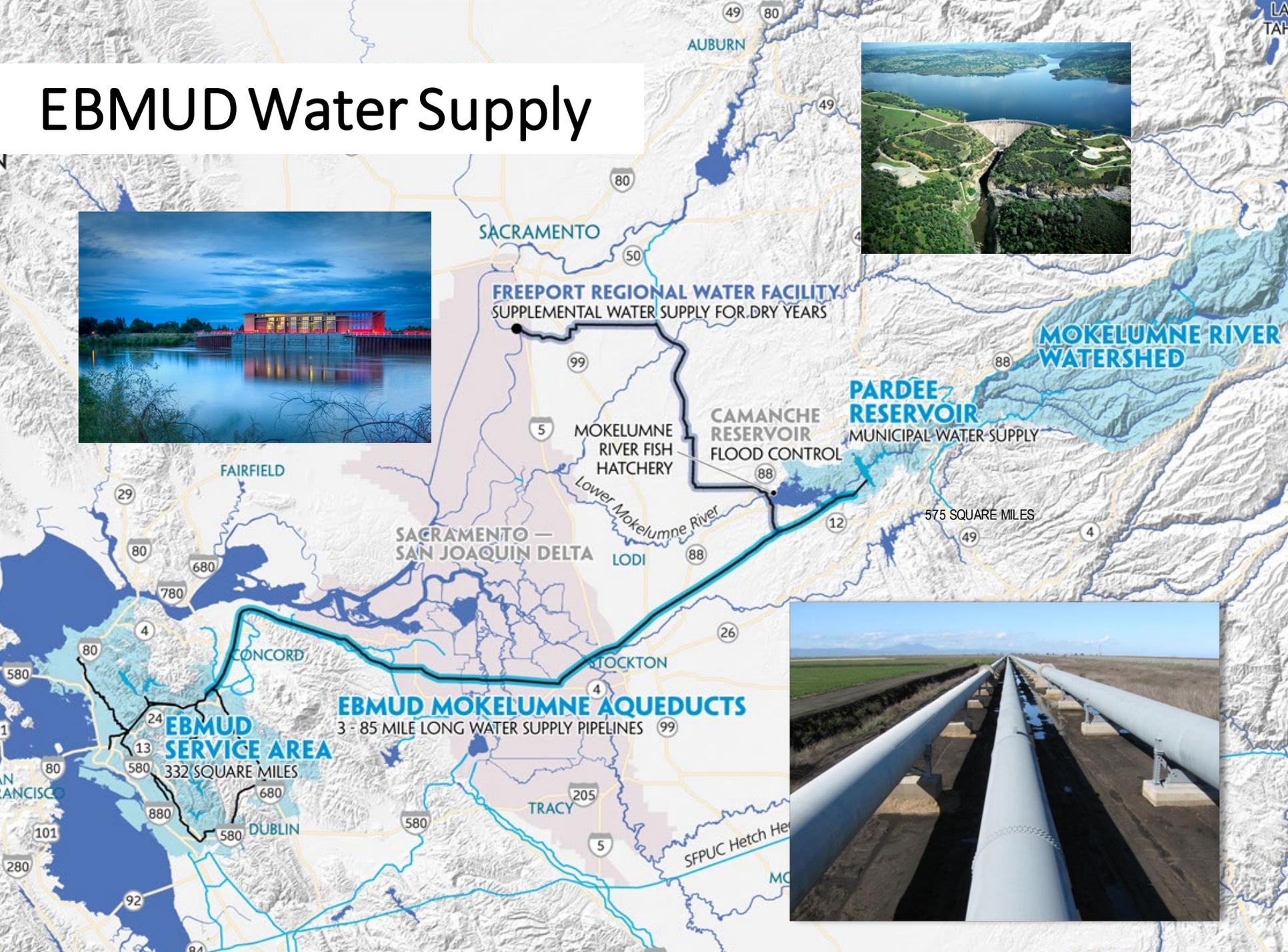


EBMUD Water Supply

An aerial photograph of a vast, snow-covered mountain range. The peaks are rugged and partially covered in snow, with some rocky outcrops visible. The slopes are steep and covered in a thick layer of snow. In the foreground, there are dense evergreen forests, likely pine or fir, scattered across the lower slopes. The sky is a clear, bright blue with a few wispy white clouds. The overall scene is a high-altitude, winter landscape.

- Mokelumne River-
627 square miles of
pristine, protected
watershed
- 90% of our water is
from snow melt
- Supplies up to 325
million gallons of
water daily

EBMUD Water Supply

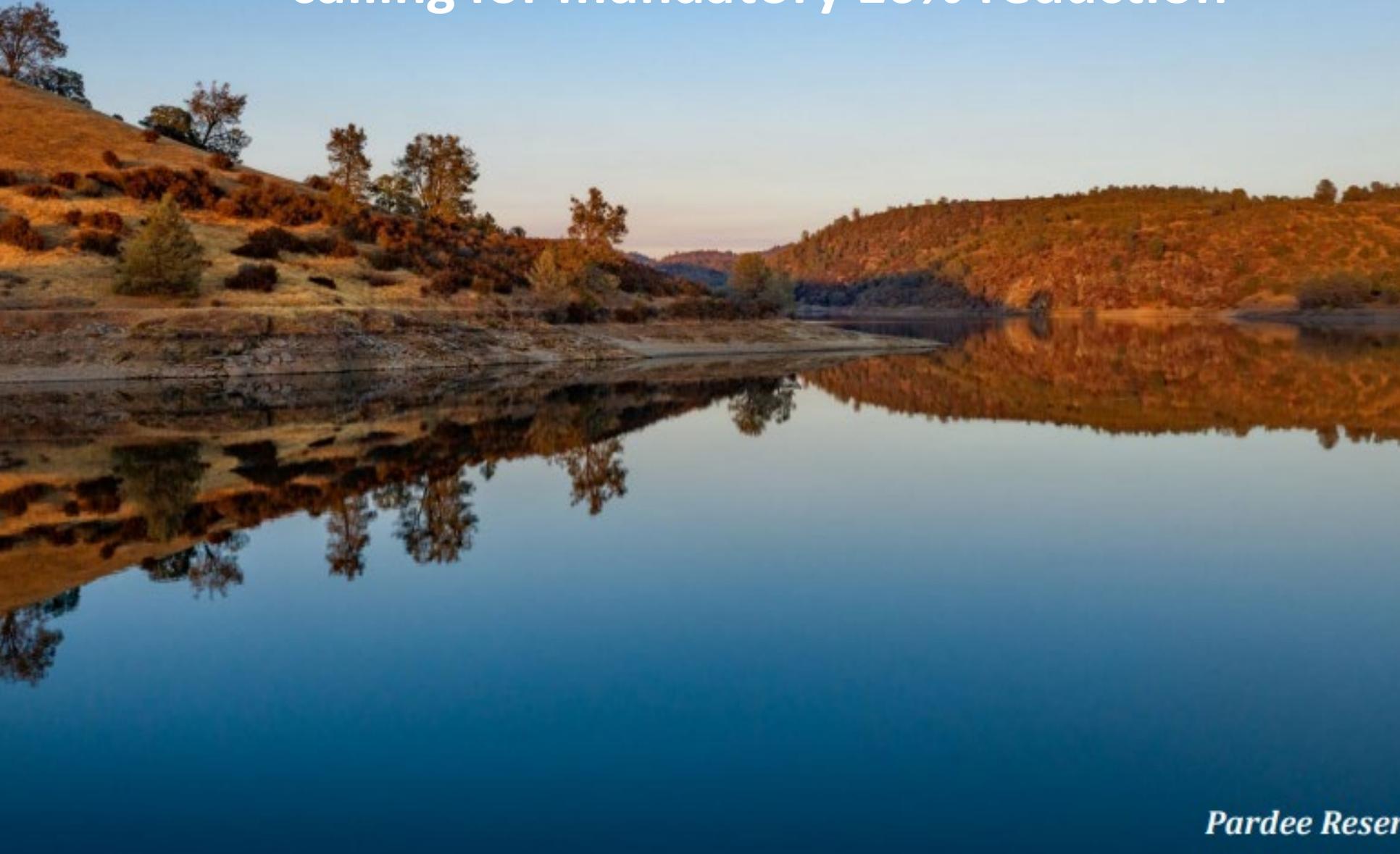




EBMUD Water and Wastewater Service Areas

- 1.4 million water customers
- 740,000 wastewater customers
- > 4,200 miles of pipe
- 400,000+ active water meters

**EBMUD is currently in a Stage 2 Drought-
calling for mandatory 10% reduction**



What Can You Do?

- Find and fix leaks
- Install efficient fixtures like showerheads and aerators
- 5-minute showers
- Focus on the landscape!



Our community
is in a drought.

**Thank you for not
wasting water.**

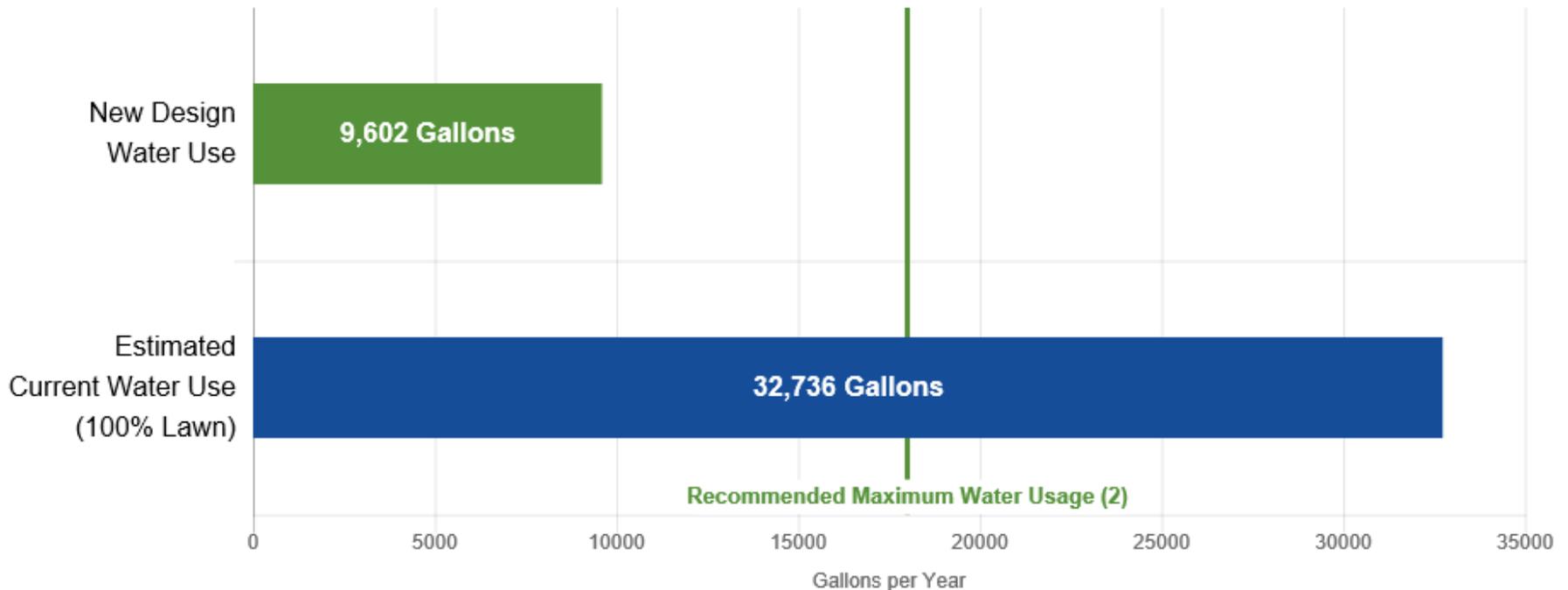


Water Use Before and After

Lawn: **32,736 gallons** annually

Water Efficient Design: 9,602 gallons annually

Estimated Annual Water Use for 1,000 Square Feet:





Sheet Mulching Tips and Tricks

How to eliminate your lawn

Lori Caldwell

CompostGal: Consulting, Landscaping & Education

Sheet Mulching Topics



What is Sheet
Mulching?



The **MANY**
benefits of sheet
mulching



Sheet Mulch
Prep Steps



Sheet Mulch
Recipe



Planting After
Sheet Mulching



Troubleshooting



Q&A



What is Sheet Mulching?

The perfect marriage of:
cardboard + compost + mulch

Sheet Mulching Benefits

Promotes healthy soil and plants

Feeds the soil food web

Excellent for unused areas

Mulch creates a uniform, attractive & natural landscape

Saves \$\$, water & time

Weed suppression

Minimizes erosion

Protects the environment

Holds moisture in the soil longer



Sheet Mulch Prep



Prep Must-Haves

- Apply for local lawn conversion rebate **FIRST!**
- Add hardscape elements
- Put in 5 gallon or larger plants first
- Pull out thick weeds $\frac{1}{4}$ in or larger
- Chop down waist high weeds
- ***DO NOT REMOVE YOUR LAWN***

Call 811

- Call before you start trenching or putting in large plants
- A free service that will send all the utility companies whose lines intersect your property
- They will mark the lines with paint and/or flags





TRENCHING ALONG HARDSCAPE EDGES

- Dig along edges of sidewalks, patios, utility boxes, etc.
- 3-6 inches deep at a 45 degree angle towards the hardscape
- 10-12 inches wide
- Helps keep mulch in the landscape and not spilling over
- Cardboard fits into trench to block running weeds



Create Mounds Using Trenched Materials

- A great way to reuse materials on-site
- Creates visual interest
- Increases drainage for native and drought tolerant plants
- Saves money

Irrigation Conversion

- Convert from pop-up sprinklers to drip irrigation
- Cap sprinkler heads that you don't need
- Install a pressure regulator either at the valve or at a former sprinkler head
- Many conversion kits contain a pressure regulator AND a filter.



A photograph of a garden bed filled with various green plants and mulch. In the background, there is a grey wall, a green trash bin, and a blue recycling bin. A large grey rock is visible in the foreground. The scene is brightly lit, suggesting a sunny day.

Sheet Mulch Recipe



(1st layer): Cardboard

- Weed blocker
- Permeable
- Will eventually break down and build the soil
- Overlap by 6-8 inches and water each layer to anchor into place
- For areas with Bermuda grass: apply cardboard and **do not wet!** It will last longer



Cardboard Types

- **Recycled cardboard**

- bike stores*
- grocery store
- appliance stores*
- big box stores
- furniture Stores*

- **Avoid Waxed boxes**

* Has **VERY** large boxes



Cardboard Types

- **Rolled cardboard**
 - needs to be purchased
(price range: \$50-\$100)
- Come in lengths of 250 ft or more
- 3-4 feet wide
- Type: B-flute
- Easy to apply



Layering cardboard over mounds

- Be sure to run boxes/rolls vertically across the mound
- The mound will settle once all the materials become heavy

2nd Layer: Compost

- Put a 2-inch layer on top of the cardboard
- Provides food for new plantings
- Feeds the Soil Food Web
- Retains moisture
- Irrigation tubing goes on top of this layer



3rd Layer: Coarse Mulch

- Minimum 3 inches on top of the compost layer
- Creates a sponge and slows evaporation
- Make sure you allow a 12inch space around trees
- Will need to be reapplied once it breaks down







Planting After Sheet Mulching

1-Gallon Plants

- Cut an X in the cardboard and carefully peel back cardboard
- Dig out some of the topsoil (*don't make the hole too deep*)
- Loosen the root ball if root-bound
- Place plant in hole and fold cardboard back down. A few handfuls of compost would be great over the cardboard at this point
- Cover the layers with mulch

4" plants - *easiest way*

- Move mulch/compost back to cardboard layer
- Remove plant from container
- Loosen root ball, if necessary
- Place plant right on top of cardboard.
- Add compost, if necessary



Planting After Sheet Mulching

TIPS

- Be sure to allow room around the plant
- Don't put mulch right next to the major stem of the plant.
- **For succulents:** give succulents 12 inches of room away from mulch. Fill area with soil.



Troubleshooting





Bermuda Grass

- Can be difficult to sheet mulch over
- Do not wet cardboard
- Make sure your trenches are clean along the edges
- Extra layers of cardboard
- Minimum 4 inches of mulch on top
- Use plants like Aster along property line to discourage Bermuda encroaching again



Fungi

- All part of the process...totally natural
- Types vary
- Don't bother pulling them unless you have concerns with kids or pets
- You may also see a cobwebby type of fungi right under the mulch layer





Oxalis a.k.a. Sourgrass

- **Bad News First...**
- Created by tiny bulbils/rhizomes embedded in the soil
- Can also re-grow from tiny fragments
- **Good News:** There is no good news...Treat Oxalis how you would an out-town-house-guest-you-don't-like-but- only-see-once-a-year



**After Sheet Mulching:
On-going Maintenance**



When do you add more mulch?

- Once the cardboard starts peeking out
- Weeds start popping up from below
- Patch with dry cardboard and new mulch



Watering plants

- Most drought tolerant and/or native plants will need 1-2 winters of good rain to get established
- Irrigation can be turned off after plants get established



Weeds?!

- Often there are flyover weeds from birds and wind
- Buried weeds by squirrels
- You will find these weeds very easy to remove



EBMUD Rebates & Resources

- Lawn Conversion and Irrigation Upgrade Rebate

\$2000 single family

\$15,000 commercial

- Mulch & Compost Coupons
- Resources

ebmud.com/watersmart-gardener

lawntogarden.org (videos, calculators, supplies)

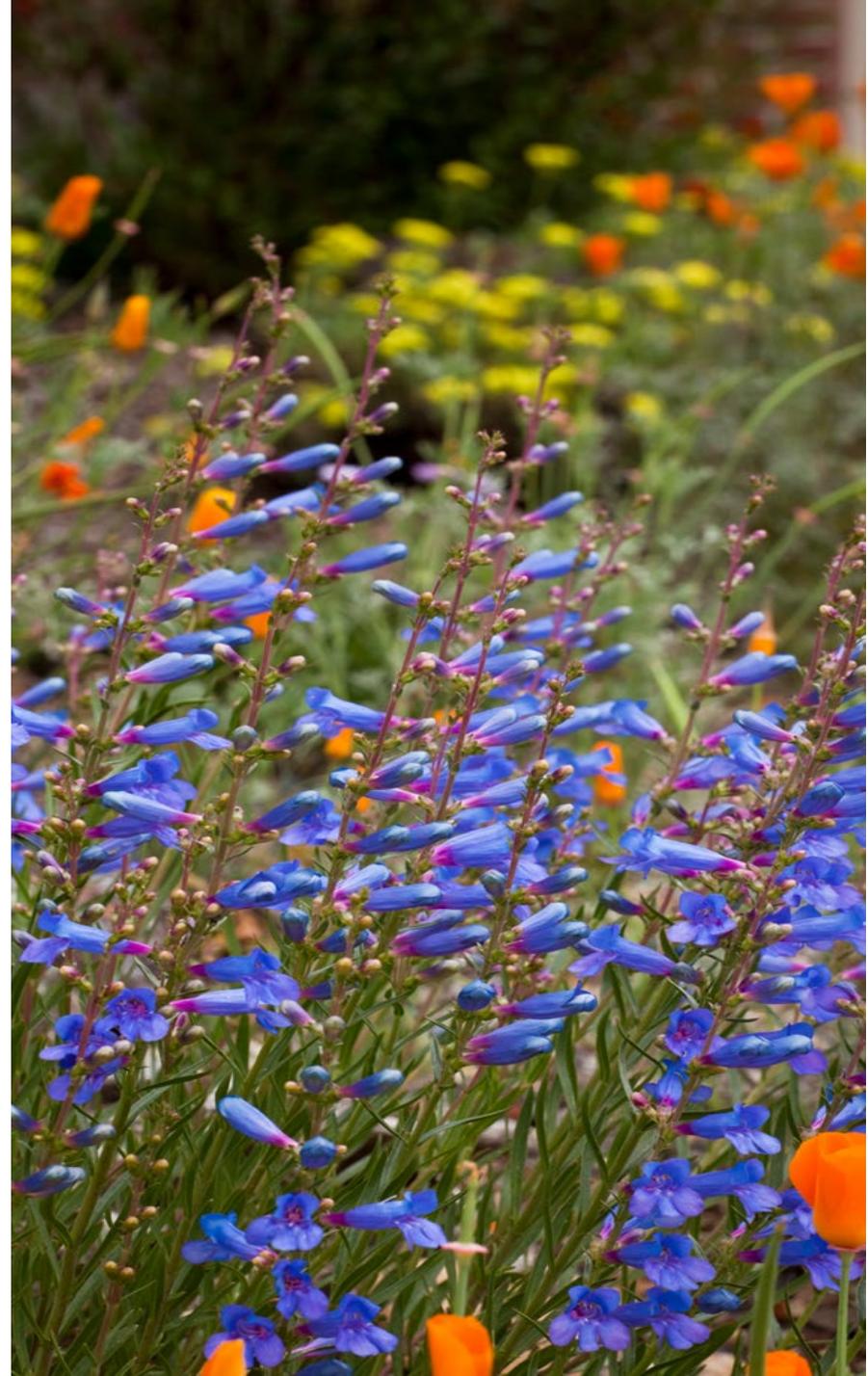
Upcoming Events

Landscape Rebate Virtual Office Hour- Lunch

Bi-weekly Tuesdays, 12 - 1 p.m.
Nov. 8, 22

Landscape Rebate Virtual Office Hour- Evening

Bi-weekly Tuesdays, 5 - 6 p.m.
Nov. 15, 29



Summary

- EBMUD water supply relies on snow melt
- We are in a drought- do what you can to conserve
- Water-wise gardens help to save water
- Sheet mulching
 - Benefit – health soil and plants, weed suppression, retain soil moisture
 - First – apply for rebate, call 811, add hardscape elements, 5-gallon plants
 - Next - trench, create mounds, convert irrigation to drip
 - Last –cardboard, compost, mulch, smaller plants
 - Ongoing light maintenance
- EBMUD offers landscape rebates, mulch coupons, plant selection and design resources





Q and A

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