

# Welcome to the Adams Elementary School Bioswale

Storm water flows through the newly constructed bioswale in 2009.

## What's a bioswale?

A bioswale is a constructed wetland or creek that slows down and naturally treats storm water (rain) and urban runoff to help improve water quality.

When it rains, or when urban runoff water flows down the street (like when your sprinklers are left on too long), pollutants like oil from cars, pet waste, and trash are washed into storm drains, which flow right into our creeks and the ocean.



This storm drain on Las Positas Road drains into the bioswale.

The bioswale at Adams Elementary School helps remove pollutants from the water before it flows downstream into Las Positas Creek!

## What was here before?

Before the bioswale was built, a long asphalt drainage ditch ran along the edge of the school.

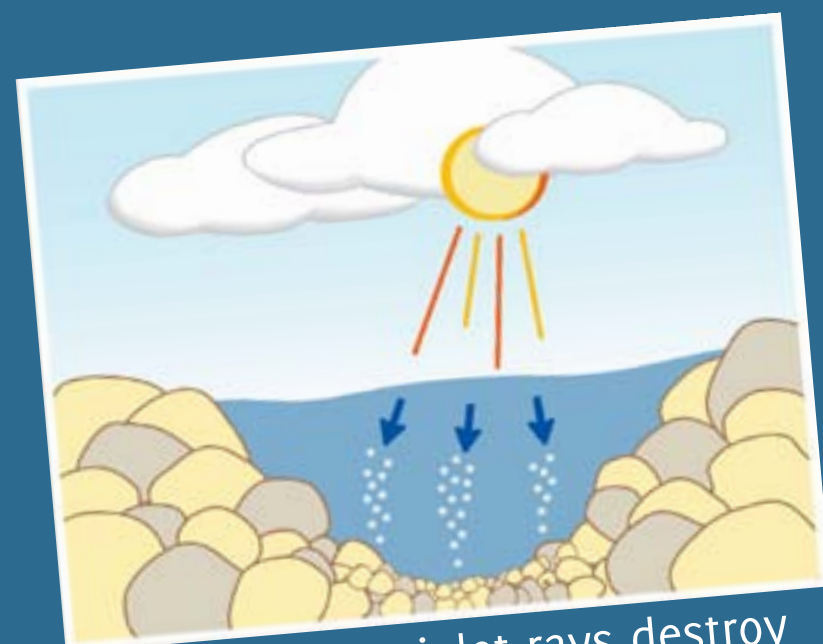


BEFORE: An asphalt drainage ditch along the edge of the campus.

The drainage ditch took storm water and runoff from Las Positas Road, and quickly sent it flowing onto the golf course, causing erosion, and taking pollutants along for a ride through the watershed.

## How does the bioswale work?

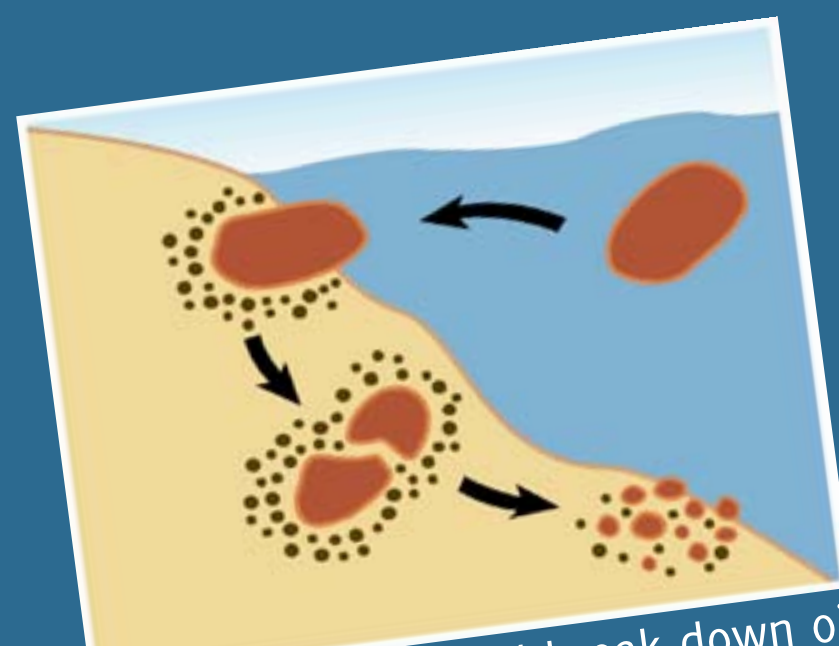
The bioswale works like a natural creek, slowing water down to allow pollutants to be treated by sunlight, plants, and soil.



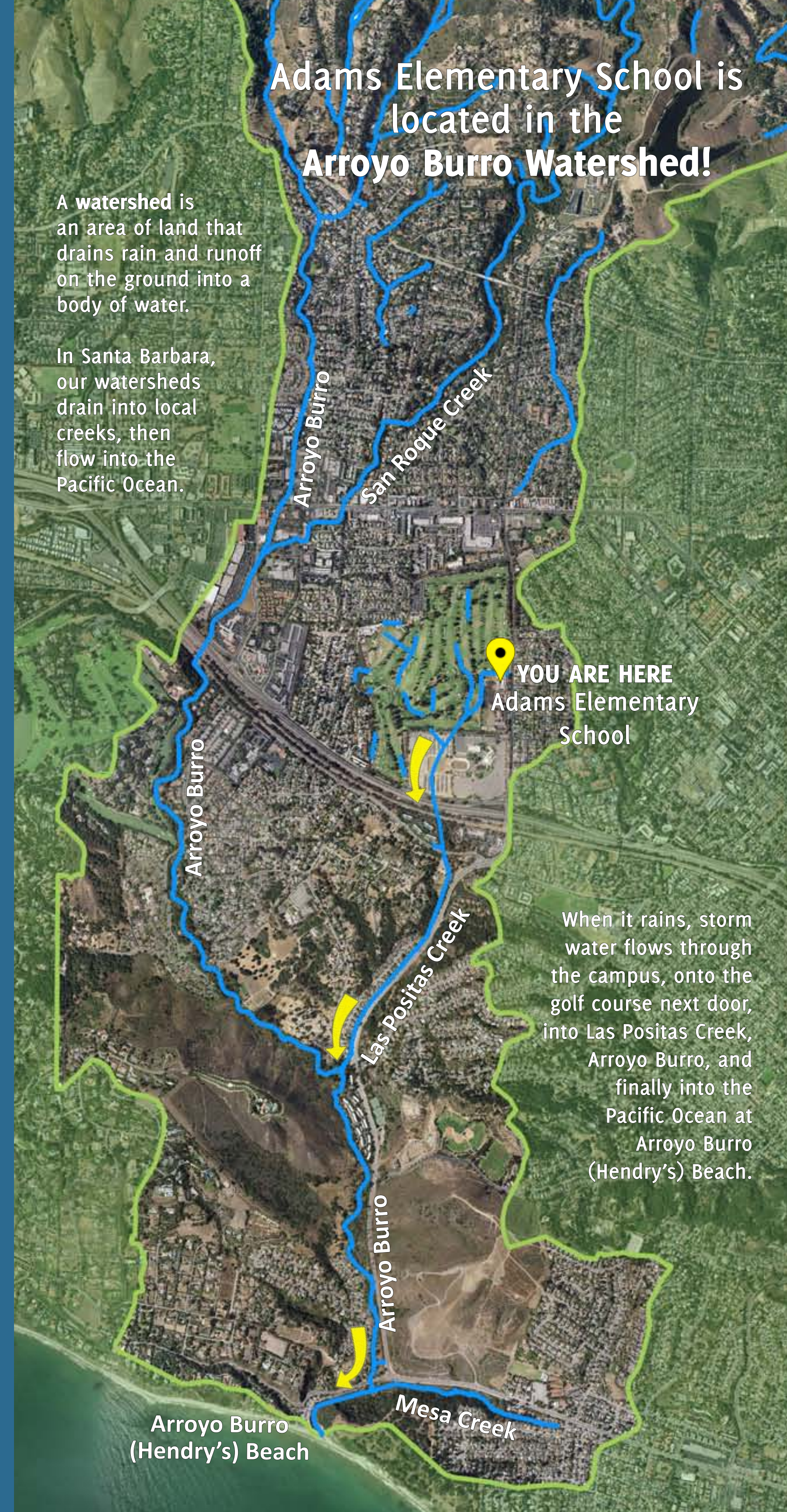
The sun's ultraviolet rays destroy bacteria in the water.



Native plants soak up nutrients, fertilizers, and other pollutants.



Microbes in the soil break down oil and metal pollutants.



## Adams Elementary School is located in the Arroyo Burro Watershed!

A **watershed** is an area of land that drains rain and runoff on the ground into a body of water.

In Santa Barbara, our watersheds drain into local creeks, then flow into the Pacific Ocean.

**YOU ARE HERE**  
Adams Elementary School

When it rains, storm water flows through the campus, onto the golf course next door, into Las Positas Creek, Arroyo Burro, and finally into the Pacific Ocean at Arroyo Burro (Hendry's) Beach.

## Who calls the bioswale home?

Plenty of critters love to live in and around our local creeks.

The bioswale provides great habitat, and native plants are an important source of food for birds, bugs, and other animals.



Pacific tree frog.

As you explore the bioswale, look for butterflies, ladybugs, animal prints in the mud, and other evidence of wildlife!

## Why are native plants important?

Native plants provide food for pollinators like hummingbirds, bees, and butterflies, who will help the school's edible garden thrive!



Monarch caterpillar on milkweed at the bioswale.

Native plants are plants that have always lived in Santa Barbara. They are used to our weather and soil, so they need less water and chemicals to survive.

Non-native or invasive plants are plants that have been brought here from other parts of the country and even the world.

## How can you help protect our creeks and ocean?

It's easy to help keep the bioswale, your school, AND our local creeks and ocean clean!

- ✓ Learn about the bioswale at your school.
- ✓ If you see trash on the ground, pick it up and put it in a trash can.
- ✓ Volunteer at a creek or beach clean-up, or help plant native plants!
- ✓ Always pick up after your pets!
- ✓ Share what you have learned with your friends and family!

### Vocabulary Review

- **bioswale** - a constructed creek or wetland designed to help improve water quality
- **habitat** - a place where animals, birds, bugs, fish, or plants live
- **watershed** - an area of land that drains storm water (rain) and urban runoff to a body of water like a creek, river, lake, or the ocean
- **urban runoff** - water from human activities (not rain), that flows over streets and picks up pollutants
- **storm drain** - an opening in the curb or gutter in the street that drains storm water (rain) and runoff into our creeks and ocean



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