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The Sprig Tales Newsletter is created through a college internship overseen by Education Coordinator, Sabreena Britt, sbritt@calwaterfowl.org/ 916-648-1406

For internship information, please visit: www.calwaterfowl.org/career-opportunities

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Wetlands are an important feature in California. Not only do they refill our underground water supplies, but they also contribute to most of California's wildlife diversity.

Fun Facts!



Wetlands are home to many species not found anywhere else in the world. This is a stream orchid.

Wetlands can absorb a lot of pollution runoff from cities and make it clean.



San Francisco Bay is actually made up of three bays that historically were large wetlands.

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Clean up Central

At one point in history, California was filled with huge stretches of marshes and estuaries. These places are known collectively as wetlands. They can be defined as areas that are



Typha latifolia or the Common Cattail that is found all over North and South America near water

saturated with enough water that it has an influence on the soil and wildlife. One example that you may be familiar with are vernal pools, which are only wet for a couple of months of the year.

These types of areas provide California with a lot of diversity, as well as providing natural services that benefit you and me! Some of the most important services include flood protection and pollution control.

Wetlands are like a giant sponge and can absorb a lot of water and the toxic things in that water. As the water flows through a wetland many plants will take in the pollution, removing it from the water. Other living things that help clean include microbes, which are tiny living things in the soil and water.

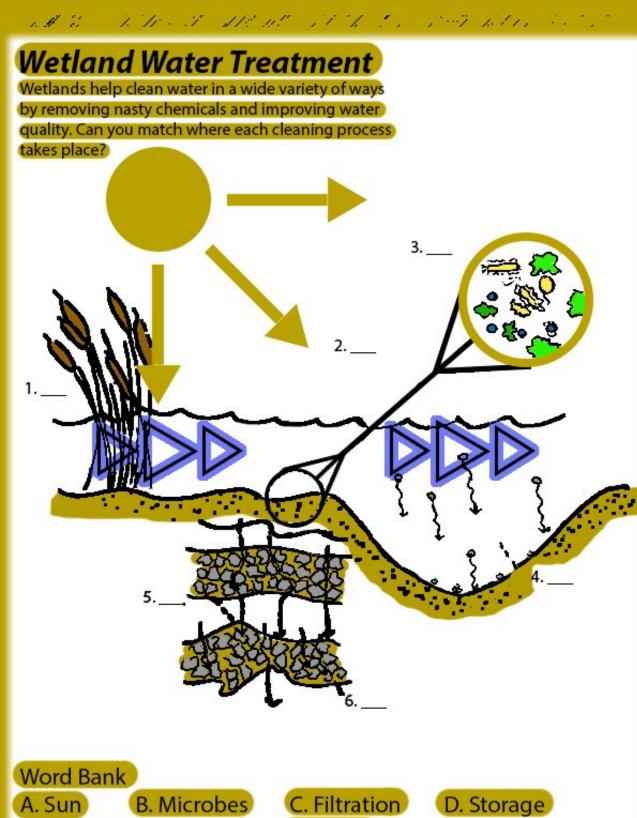
However there are also physical properties that wetlands have to clean. Slow moving water allows sediments or dirt to be trapped and like a giant filter, as water sinks down the larger pieces of toxins get stuck and are now stored in the dirt. Lastly some toxins breakdown when exposed to the sun for long periods, and since the water is moving slowly, the sun's rays have plenty of time to zap the toxins away!



One of California's protected wild life sanctuaries in Southern California.







F. Plants

E. Sediment Trap

Wetland Filter

Wetlands play an important role in cleaning and improving water quality. You can build one to simulate the cleaning powers of wetlands!

Materials:

An Empty 2 Liter Soda Bottle Cotton Balls Gauze Sand Gravel

About one-two cups of "Dirty" Water (mud or colored)

Directions

Have a parent help you with this project!

- First, have an adult cut off the bottom of the two liter soda bottle so that you have a large funnel.
- With the bottleneck facing down, place the gauze at the bottom near the neck. This will hold all the other materials and prevent it from falling out.
- 3. Fill the bottle with differing layers of materials you think would make a good filter. Example: Gauze, Cotton Balls, Sand, and finally Gravel on top. However use your creativity to see if you can make a better filter!
- 4. Once your filtration device is complete test it out by carefully pouring "dirty" water through. You can try using mud or colored water to see how good your filter is.
- The layers represent the many ways wetlands clean water. For example, the cotton balls are like the roots of the plants.
- 6. Keep trying to see if you can make a better filter, but don't drink the water!

This is how wetlands can clean our water. Conserving them not only provides a natural habitat for birds and other animals, but it also provides us with services like clean water!

hem ural her rides us water!

* I his diagram illustrates

stopped by things like cotoon balls and gravel.

how the dirt in dirty water is

*Clean water from a wetland in Taylor County, Iowa.