

This booklet belongs to: _____



An activity booklet designed to teach children ways to prevent stormwater pollution.

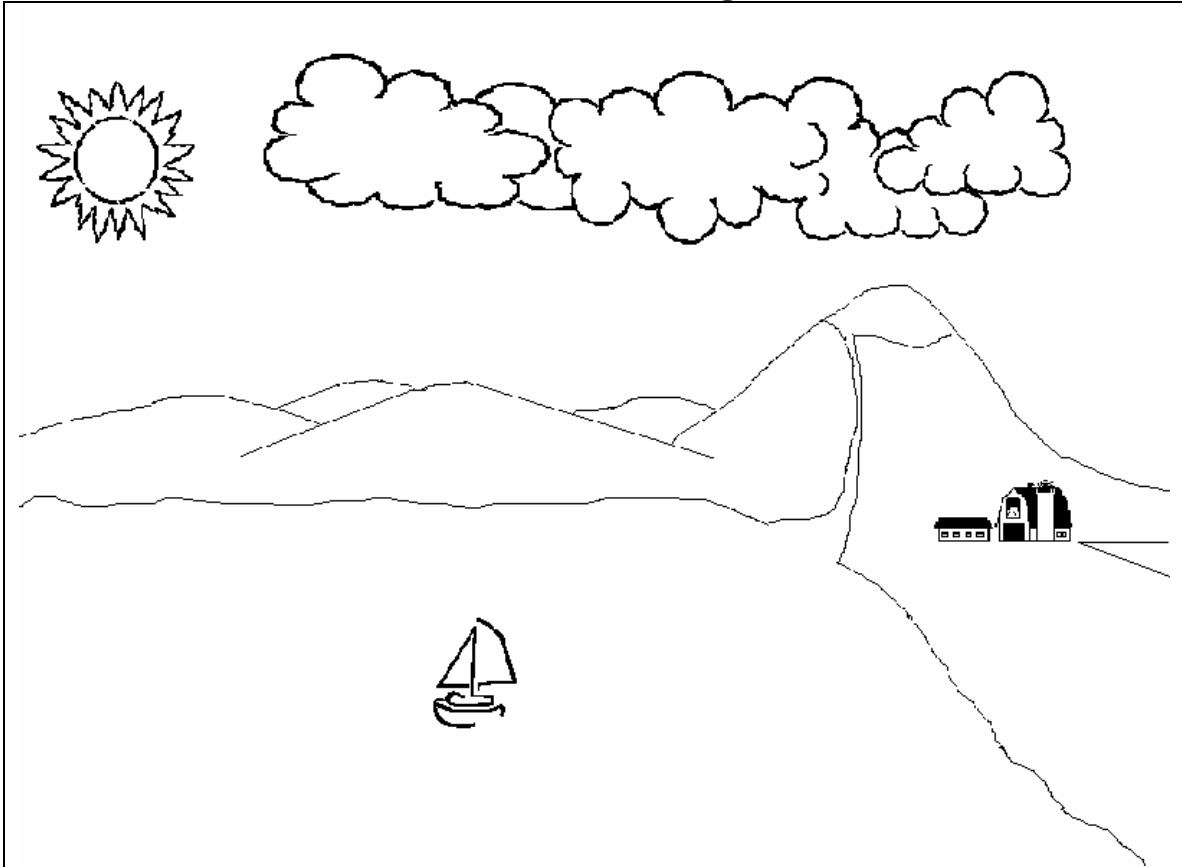


Brought to you by the City of Stockton Stormwater Program.

Did you know... that the water you drink is as old as the earth itself? Dinosaurs may have swum in the water from your kitchen sink. The earth's water supply is about the same as it was millions of years ago. That's because every molecule of water is recycled over and over through a process called the **water cycle**. More than 99% of the earth's water is salt water in the ocean or trapped in ice caps. That leaves only **1%** of the earth's water for us to use!

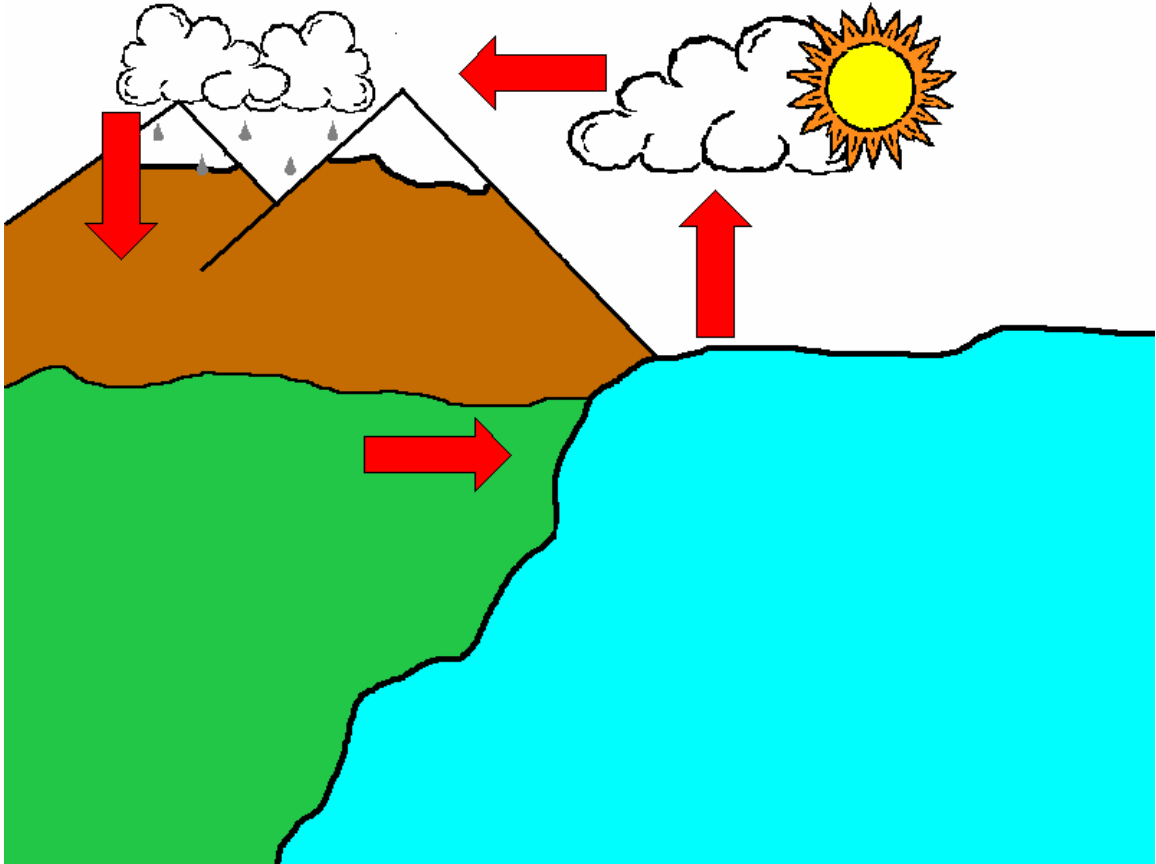


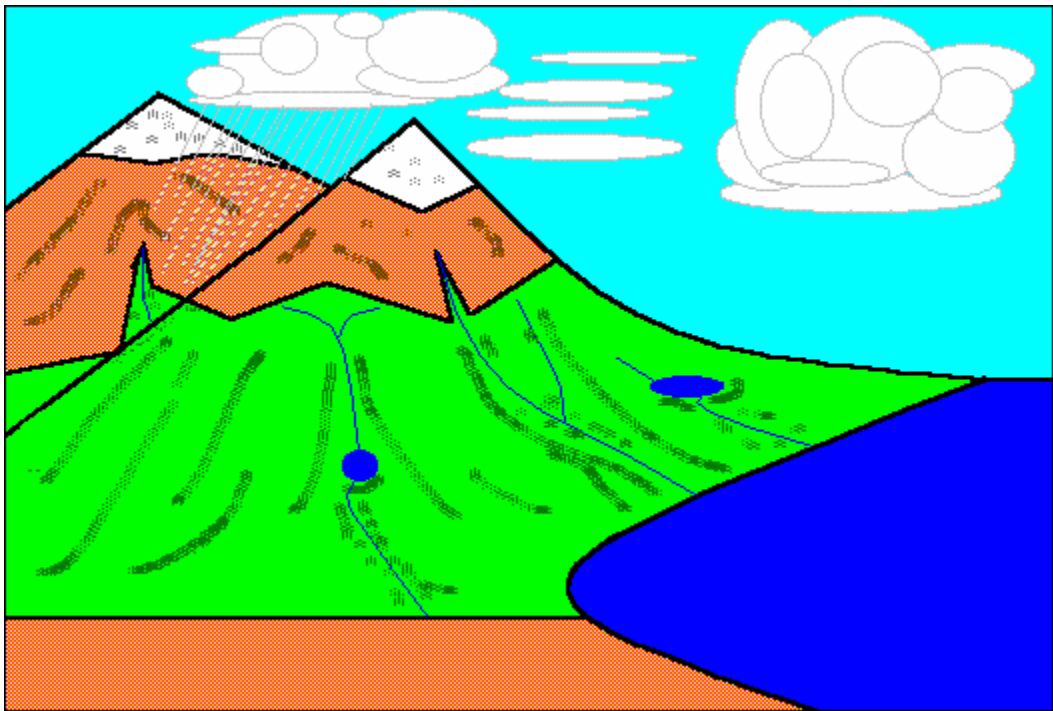
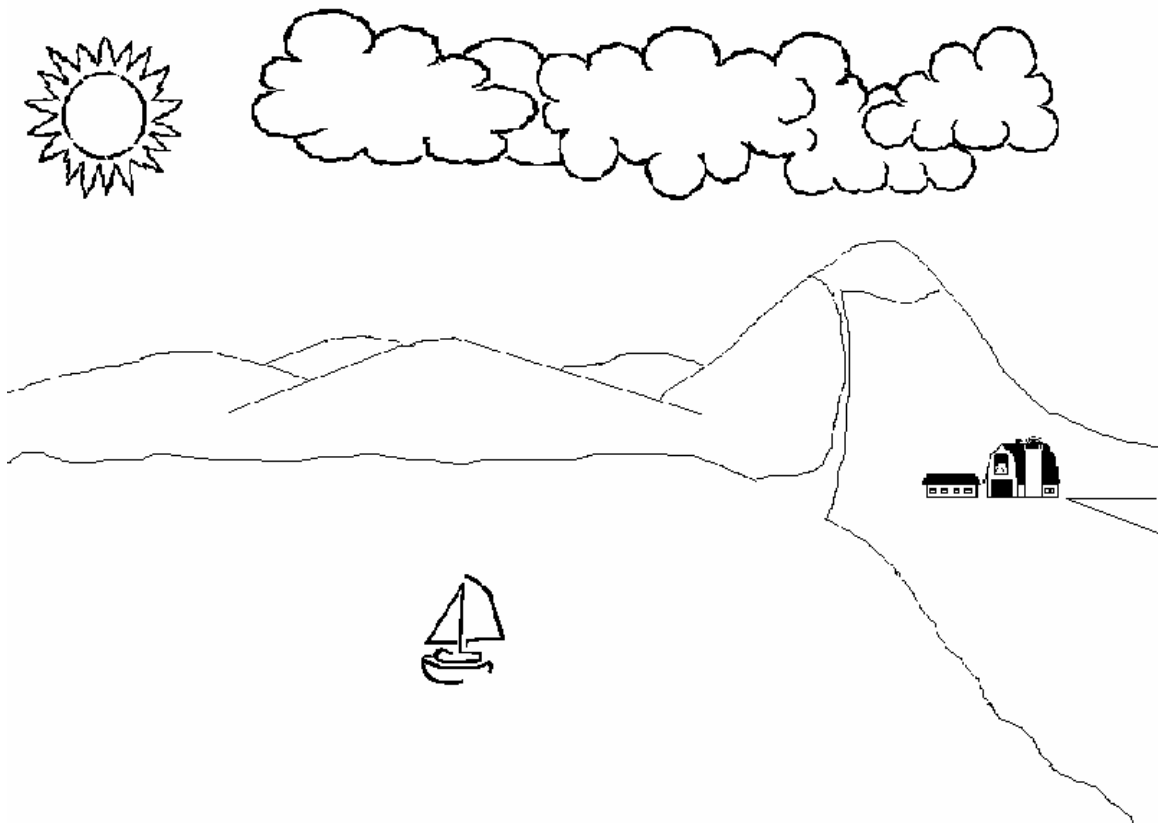
The Water Cycle



1. **Evaporation:** The water is heated by the sun. This causes the water to turn into **vapor** and rise into the air.
2. **Condensation:** When water vapor cools, it turns into tiny drops of water. These combine to make **clouds**.
3. **Precipitation:** The water in the clouds falls to the earth as rain or snow.
4. **Runoff:** The water falling to the ground through precipitation runs back into the lakes, rivers and oceans.
5. **Infiltration:** Water that doesn't make it's way to a body of water seeps into the ground.

Then, the cycle starts all over again!



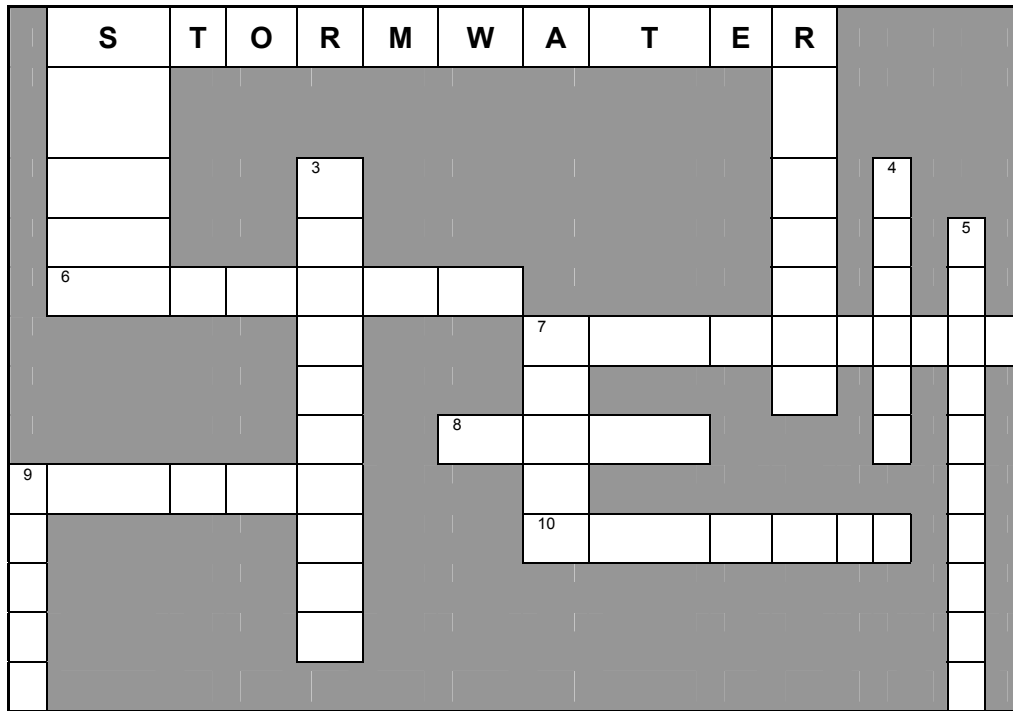


Directions: Complete this crossword puzzle by using the words below.

Hint: Not all of these words are in the puzzle!

Stormwater Trash Storm Drain Paint Gutter Street Waste Water Runoff

Pollution Toxins Recycle Sewer Conservation Chemicals Phosphates Rain Oil



Across

Down

1. _____ is the rain or runoff from sprinklers and hoses that flows into the storm drain.
6. _____ is another word for the water that flows from rain storms, sprinklers and hoses into the storm drains.
7. Stormwater is the #1 cause of urban water _____ in California today.
8. One quart of _____ can pollute 250,000 gallons of water.
9. The only thing that should enter a storm drain is _____.
10. _____ are pollutants or poisonous materials that are often found in our waterways.

1. The water that goes down the drains in our homes goes to the _____.
2. It is important for us to _____ things like motor oil, car batteries, paint and other materials rather than throwing them away.
3. A _____ is a catch basin designed to collect only rain and water.
4. A storm drain can be found in the _____.
5. When buying products like soap, read the label first and make sure there are no _____ in the ingredients.
7. Never rinse _____ brushes off in a storm drain. Clean them in your household sink.
9. To throw away something like used motor oil is to _____ it.



Word Search



Find the following words in this puzzle.

Words may be horizontal (--), vertical (|) or diagonal (\).

Alternatives
Clean Up
Conservation

Pesticides
Phosphates
Prevention



Read The Label
Runoff
Sewer
Storm
Drain
Water Pollution
Wildlife

How Does Water Get to Our Homes?

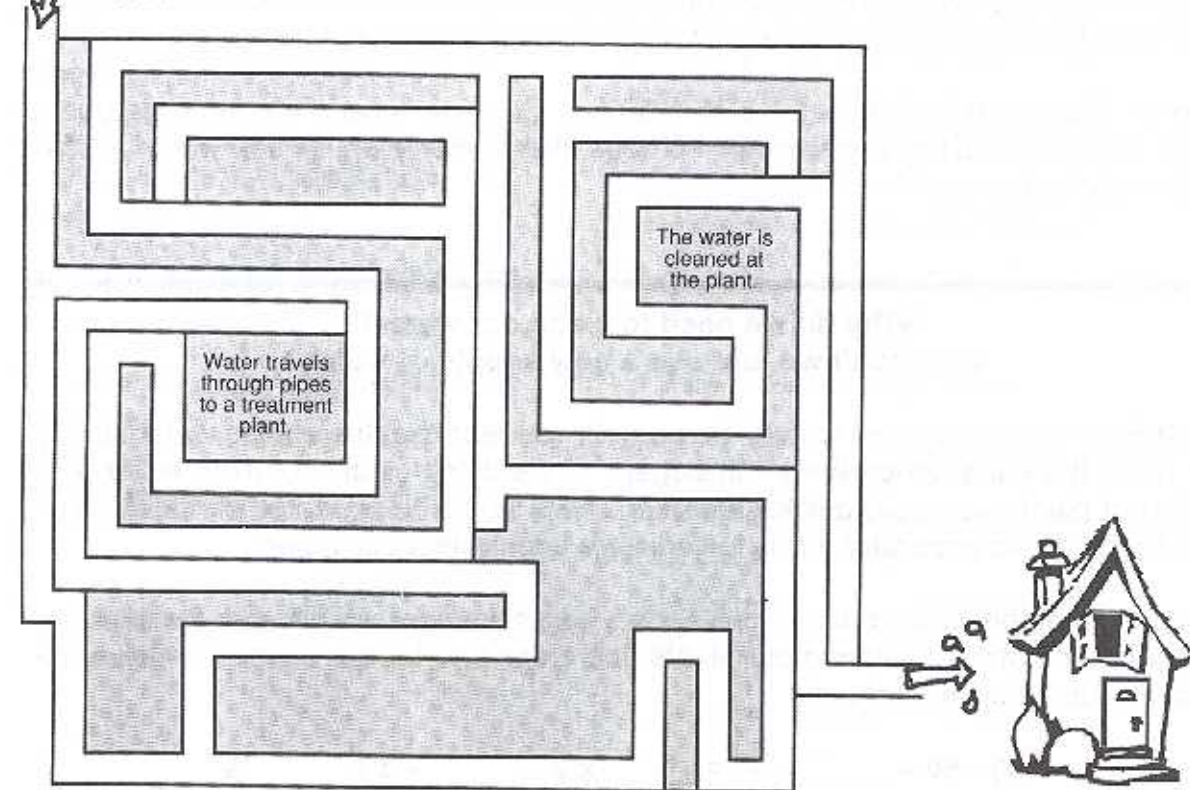
First, water travels to us in large canals and pipes called **aqueducts**. The aqueducts take the water to large man-made lakes called **reservoirs**.

Reservoirs store water until we are ready to use it.



We can also get water from **wells**, which are holes drilled deep in the earth. Wells allow us to get water from under the ground. Water from the wells and reservoirs is cleaned at a treatment plant. Then, pipes take the clean water from the plant and deliver it to homes, schools, businesses and parks.

Follow the droplet through the maze to see how it gets to the house.
Start



Scrambled Phrases

Solve the mystery phrase by unscrambling the words in each sentence. The numbers at the end of each sentence represent the letters in parentheses (). Match those numbers with the numbers below the mystery phrase, and then fill in the blank with that letter. Use the words below to help you solve the phrases!

Water Cycle	Liquid	Pollution	Conserve
Chemicals	Phosphates	Reservoir	Storm Drain
Pesticides	Prevention	Waste Water	Environment

- Water has three forms, solid, (1) i q u (i) d and gas. (1, 2)
d q i i l u
- A lake used to store water is a () (). (3, 4)
s r v o e i r e r
- () water by turning off the faucet when brushing your teeth
e r s e c v o n
and taking quick showers. (5)
- () () is sent to a treatment plant to be cleaned. (6, 7)
e s w t a r a w e t
- () () and fertilizers can be dangerous if they're washed
s c e t p i d s i e
down a storm drain. (8, 9)
- The () allows us to use the earth's water over and
e r a t w y e c l c
over again. (10)
- Products you buy shouldn't contain () () . (11, 12)
s a h s t p o h p e

MYSTERY PHRASE

"Always remember,

11 5 1 10 4 6 2 5 9 11 7 5 8 12 3 9 4 6 2 5!"

WHY IS WATER IMPORTANT?



We need it to live.

Did you know our bodies are made up of mostly water? It's important for us to drink water every day. Water carries nutrients to all the cells throughout our bodies. If we don't drink enough, we may become *dehydrated*.

We need it to grow crops.



If it weren't for water, we would not be able to enjoy any of our favorite fruits and vegetables. Plants need water just like we do. Without it, they can't grow.

Our pets and animals need water.

If plants and humans need water to live, then all animals, including our pets, must need it, too! It's important to give our pets plenty of water to drink. Nothing could survive without water! Every living thing needs water to live.

We need it for bathing and cleaning.

We use water for bathing, cleaning our vehicles, and washing our dishes and clothes. How else would we get clean if it weren't for water? Remember to practice *water conservation* when taking showers and baths or when using it to wash vehicles, clothes and dishes. See page 11 for some water conservation tips!



Activity:

Take a moment to think of other ways to use water every day. How many can you come up with?

Information for Activity Books

Tips for Pollution Prevention

- **Pet Waste:** Never leave pet waste on the sidewalk or ground where it might wash into gutters and down storm drains. Dispose of it properly, always using "doggie bags" when walking your pet. Horse and livestock owners should never dump manure into or near-by creeks.
- **Properly Dispose Used Motor Oil and Household Chemicals:** Never pour chemicals on the ground or down the storm drain. Dispose of unwanted paint, solvents, pesticides, antifreeze, motor oil and other household chemicals at the Permanent Household Hazardous Waste Facility located near the Stockton Airport at 7850 So. R.A. Bridgeford St. Call 1-800-449-4840 for more information.
- **Reduce Chemical Runoff From Lawns and Gardens:** Pesticides and fertilizers can be carried into the creeks and storm drains when you over water or when it rains. Consider using organic or lawn and garden products that are not as toxic. Always read the directions on the labels and use the smallest amounts needed. Avoid applying right before expected rainfall. Landscape with native plants that don't require chemical fertilizers and excess water.
- **Maintain Septic Systems:** If you use a septic system, make sure it is functioning properly. Overflowing septic systems release raw sewage that can flow to creeks and ground water, causing serious contamination.
- **Properly Manage Yard Debris and Litter:** Grass clippings, leaves and litter can damage a natural creek habitat by suffocating native plants and aquatic life. In the gutter and storm drains, yard debris and litter promote bacterial growth that will be carried to the ocean when it rains. Use your green waste bin to dispose of yard debris.
- **Get Involved** in the environmental process by understanding the condition of your local watersheds and learn what it takes to improve the environmental health of our creeks and ocean.
- **Urge Local Decision Makers** to continue to make protecting water in our rivers, creek and sloughs a high priority. Ask your City Council member or County Supervisor to support whatever measures are necessary to protect our creeks and ocean environment.
- **Attend Public Forums:** Many governmental and community groups host forums to inform the public and discuss the issues regarding the health of our local waterways. Find out how you can get involved and have your voice heard. Watch for listings in our local newspapers.
- **Volunteer:** Local organizations need volunteers for creek and wetland restoration, beach and creek cleanups, or watershed monitoring.