PROTECT OUR
WATER & WILDLIFE
HELP KEEP OUR CREEKS, WETLANDS AND BAY CLEAN!

ZERO WASTE - YOU MAKE IT HAPPEN!
Answers to: WHAT’S WRONG WITH THIS PICTURE? (page 9)

Several trees, that lined the creek bank and provided shade, have been chopped down. Since fish need cool water to live and spawn, the creek no longer provides suitable habitat.

Someone is chopping tree limbs and letting them fall in the creek. They can be washed downstream and block the flow of water.

Someone is tossing a stick for his dog and letting the dog run through the creek. This stirs up the creek bottom and muddies the water, making it difficult for fish to breathe and to catch insects. If this is done during spawning season, the dirt from the bottom of the creek could settle over the eggs, smothering them. Avoid walking in creeks (and having your pet romp in them) during the months of October through June when salmonids migrate upstream, lay their eggs, or the baby fish hatch.

The woman is applying a dangerous pesticide close to the creek. The spray can be washed into the creek.

The man is cutting his lawn and the clippings are going into the creek.

Someone piled a bunch of leaves on the creekbank and they are falling into the creek. If many people did this, it could affect the oxygen level of the creek and kill fish and other aquatic life. (Leaves and other organic waste gives off nitrogen as they decompose. The more nitrogen in the water, the less oxygen there is for the fish and aquatic life.)

A large bundle of woody debris formed under the bridge—potentially blocking the flow of the creek and causing a flood. However, woody debris isn’t always a bad thing. For example, when a tree falls in a creek, it can provide habitat for creek critters and slow the flow of rushing water. For information on managing woody debris properly, have an adult call Marin County Stormwater Pollution Prevention Program at 499-6528.

Answers to:
SAVE SLAPPY & QUACKER!
(page 10)
HI THERE! I’m Quacker... ...And I’m Slappy!

By working through this activity book with us... ...you’ll learn how to protect local creeks where Quacker lives -- and the Bay where I live!

Help keep our creeks and Bay clean. When you toss trash on the ground, it can be washed into storm drains. All storm drains in Marin go to local creeks and the Bay!

You wouldn’t like it if someone emptied trash all over YOUR home -- and we don’t like it in our home either!

Put trash where it belongs...

...and tell adults to safely dispose of harmful products by calling 1-800-CLEANUP or taking them to a Collection Center listed on page 6.
WHAT IS THE DIFFERENCE BETWEEN "STORM" WATER AND "WASTE" WATER?

WASTE water comes from our homes and is cleaned* at the treatment plant before being discharged to the Bay or Ocean.

STORM water runs in the streets and gutters when it rains. It enters the nearest STORM DRAIN and goes right to a creek, Bay or Ocean -- without being cleaned at all!

ACTIVITY:
Color the path of the STORMWATER from the storm drain to the creek and the Bay BLUE.
Color the path of WASTEWATER from the house to the treatment plant YELLOW.

* Some chemicals (like paints, pesticides and motor oil) that are found in households, pass right through the treatment plant and into the Bay or Ocean.
All soap, even biodegradable, can hurt fish. Help protect the fish by making sure this car is washed properly. Find the way to the car wash or the grassy area.

When a car is washed on the street, the soapy water flows into a storm drain. Storm drains go directly to local creeks and the Bay!

Do you know of anyone that is having a CAR WASH to raise money? If so, have them call Marin County Pollution Prevention at 499-6528 to borrow a free "fish-friendly" car wash kit. It will keep soapy water from entering storm drains.

Soapy water is soaked up by grass, dirt, or gravel and does not flow into a storm drain.

Soapy water is recycled or sent to the waste water treatment plant.
EVERYBODY POOPS, *but not in the creek!* Make sure the poop from these animals finds its way to the trash instead of the creek!

ACTION: Pick up after your pet! Your pet's poop can contain bacteria and viruses which could spread to other wildlife. Horses and cows should not poop in or near creeks or other bodies of water. Their poop contributes to algae growth, which uses up oxygen in the water that fish need to survive.
You will need 4 coins and a friend. Give one coin to your friend and keep one for yourself (these will be your playing pieces). The remaining two coins get flipped on each player's turn.

Two tails = 1 space
One head + One tail = 2 spaces.
Two heads = 3 spaces

If you land on a space with an oil drip, follow the oil slick down and wait for your next turn to try again.

GOOD LUCK!

ACTION: Make sure your family's car doesn't have any drips! Drips collect on streets, parking lots, and driveways and wash into the storm drain when the rains begin.
HAZARDOUS PRODUCT WORD SCRAMBLE

Many products used in your home and garden can be harmful to people and pets. Unscramble the following words that may be found on product labels. If any of these words appear on the label, you will know that the product should be used very carefully—only by adults.

RIWNANG  — — — — — —
TANOCIU  — — — — — —
RANGED  — — — — — —
BAMALEFML  — — — — — — — — —
SOIPON  — — — — — —
SOCREVRIO  — — — — — —
RAMLUHF  — — — — — —
ZODRAHUSA  — — — — — — — — —
COTIX  — — — — — —
RANITIRT  — — — — — — — — —

ACTION for ADULTS:
Harmful products, like those pictured below, should be taken to the Household Hazardous Waste Collection Center.
In Novato, call 892-7344.
In all other areas of the County, call 485-6806.

Answers: warning, caution, danger, flammable, poison, corrosive, harmful, hazardous, toxic, flint.
Dirt is a natural part of a creekbed; however, when dirt is disturbed, tiny dirt particles can muddy the water. This can clog the gills of fish, making it difficult for them to breathe.

**HERE'S WHAT YOU CAN DO:**

1. Be careful if you or your dog walk through a creek. Try not to stir up the dirt from the creekbed. This is especially important from October through June when fish are spawning and hatching from their eggs. The dirt can cover their eggs, causing them to suffocate.

2. Avoid walking in deep pools where fish take refuge during the summer.

3. When hiking or biking, stay on marked trails. This helps prevent erosion and protects our native plants from being trampled.
Water that comes from your \( O \) or from the garden \( O \), is piped to us from our local drinking water supplier. Our water supplier adds this water for us to drink by adding very small amounts of a disinfectant to the water—such as \( O \) or chlorine. In order for swimming pools to be safe for us to \( O \) in, we also add very small amounts of chlorine to the water. Chlorine kills \( O \) that could make us sick, but it is also very \( O \) to fish \( O \), or \( O \) water containing chlorine or chloramine should not go down a storm drain because all storm drains flow to local \( O \) and the \( O \) home to fish and other wildlife.

**ACTION:**

If water from a pool or spa needs to be drained, call the \( \) district or wastewater treatment plant near you for information on how to drain it correctly.

* There are two primary drinking water suppliers in Marin: Marin Municipal Water District and North Marin Water District. There are 20 sanitary districts/wastewater treatment plants.
WHAT'S WRONG WITH THIS PICTURE?

Never dump clippings and leaves from your yard into creek banks or into the creek. It may seem natural, but this material can pile up and kill native creek vegetation which protects the bank from erosion. Compost your yard clippings away from the creek. If your garbage company offers green waste recycling, ask your parents to participate.

To see how many mistakes you identified, refer to the inside front cover.
SAVE SLAPPY & QUACKER!

Look at the list below and circle all of the pollution before it washes down the storm drain.

Find the answers on the inside front cover.

MOTOR OIL
GREASE
ANTIFREEZE
DETERGENT
CHLORINE
CHEMICALS
GASOLINE
OIL PAINT
LATEX PAINT
PESTICIDES
YARD CLIPPINGS
SOAPY WATER
POOL WATER
STYROFOAM
PLASTIC BAGS
LEAVES
DIRT

CAN
TRASH
STRING
STRAWS
BOTTLES
FISHING LINE
APPLE CORES
CIGARETTE BUTTS
GUM WRAPPERS
SIX PACK RINGS
ORANGE PEELS

10
Motor oil is great for a car (it won’t run without it) but it’s not great in my home! Just one 16 ounce beverage will pollute an area of water the size of a football field!

Oil doesn’t wear out—it just gets dirty! And dirty oil can be recycled and turned back into new oil. It’s called re-refined oil. Ask adults to look for it next time they shop!

**DOWN**
1. When it ____ pollution can wash into a stormdrain.
2. Always ____ used motor oil, NEVER throw it away!
3. ____ oil can be cleaned and used again and again.
4. Call 1-800 ____ to find out where used oil can be taken for recycling.
5. Check to make sure your car does not have any oil ____.
6. Wildlife can be hurt or ____ by oil.
7. Marin County has over 15 oil collection ____.
8. 40% of the pollution in America’s waterways is from used ____ oil.

**ACROSS**
1. Motor Oil is used by ____ and other vehicles.
2. Recycled Motor Oil is called ____ oil.
3. Oil damage is not easy to cleanup, it can last for many ____.
5. Crude oil is a limited resource, the more we____, the less will be available.
6. Color of used oil.
7. One quart of oil can ____ more water than 30 people will drink in a lifetime!
8. When oil is dumped in the dirt, it can seep down into our ____ water.
9. Water that flows into a ____ goes directly to our creeks and the bay.

**Answers:** Down: Rain, Rain, Reuse, Recycle, Dirty, Cleanup, Leaks, Kiln.
Across: Cars, Refinery, Years, County, Waste, Black, Pollute, Ground, Stormdrain
OWLS are nature’s pest control! Baby barn owls eat their weight in food every night—feasting on rodents like moles, rats, gophers, mice, and voles. Sometimes people try to get rid of such rodents by poisoning them. This also puts the owls in danger because if the owl eats a rodent that ate some poison, it will poison the owl as well!

These six pictures of mama and baby Spotted Owls look similar, but only two are exactly alike. Can you find the two that match?

Raccoons, coyotes, foxes, skunks and opossums are also in danger because they, too, eat rodents. If they eat one that has been poisoned, they’ll get poisoned too!

Learn more about owls, their role as nature’s pest control, and how to make homes for them. Visit The Hungry Owl Project at www.hungryowl.org or call them at 454-4587. And for safer ways to manage rodents and other pests without toxic chemicals, have mom or dad visit this website: www.ourwaterourworld.org
MAKE A PROMISE, MAKE A DIFFERENCE

Draw a picture of an animal found in or around a creek in Marin. Make a promise to do something that will help protect this animal from pollution. Write your promise below.

I promise to protect the ________________________(type of animal you drew) by __________________________

______________________________
OTHER ACTIONS
YOU CAN TAKE TO PROTECT OUR CREEKS AND THE BAY

- All storm drains lead to local creeks and ultimately the Bay and ocean—home to a variety of wildlife.
  ACTION: Help keep their homes clean by putting litter in the trash where it can’t enter storm drains.

- Balloons and plastic bags can be swept hundreds of miles out to sea by currents. Deflated balloons and bags are mistaken for food by some animals (e.g., sea turtles and dolphins) who end up starving because the plastic interferes with their digestive systems.
  ACTION: Don’t release balloons into the environment and do toss your plastic lunch bags in the trash (or save and re-use them).

- Wildlife can become injured by 6-pack rings, fishing lines, plastic and styrofoam.
  ACTION: When picnicking, don’t forget to take ALL of your trash and recyclables with you.

- Dirty water can contaminate a creek and be harmful to fish and other aquatic life.
  ACTION: When camping, if you MUST take water from a creek for washing dishes, pour the dirty water on vegetated ground—far away from the creek.

- Erosion can create too much loose dirt in creeks. The dirt clouds the water and makes it difficult for fish to breathe. (This can also happen when you or your pet run through the creek—stirring up dirt from the creekbed.) Erosion can also cause the creek banks to slip away, removing important creek vegetation.
  ACTION: When hiking or biking, stay on marked trails. This will help prevent erosion.

- Pesticides can be harmful to our health and the environment.
  ACTION: Learn about plants that attract “good” bugs (called beneficials) to a garden. These beneficial bugs feed on garden pests, reducing the need to use pesticides or bug killers. Call Marin County Stormwater Pollution Prevention Program at 499-6528 to get your free copy of A Kids Guide to Backyard Bugs. Also visit www.mcstoppp.org

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