

PROTECT THE RIVER & YOU PROTECT YOURSELF

*T*he same factors that erode banks, worsen flooding and destroy property also hurt the river, habitat and wildlife.

Keeping the river healthy protects your home and property.

Which of these is part of the earth's hydrological system which supports all life on the planet?

- A) The Rio Grande River
- B) The "Mighty Mississippi"
- C) The Carmel River
- D) All of the above

Answer: "D," of course. The Carmel River is part of an intricate hydrological system that each year removes 80,000 cubic miles of water from the world's oceans and recycles it over the face of the earth.

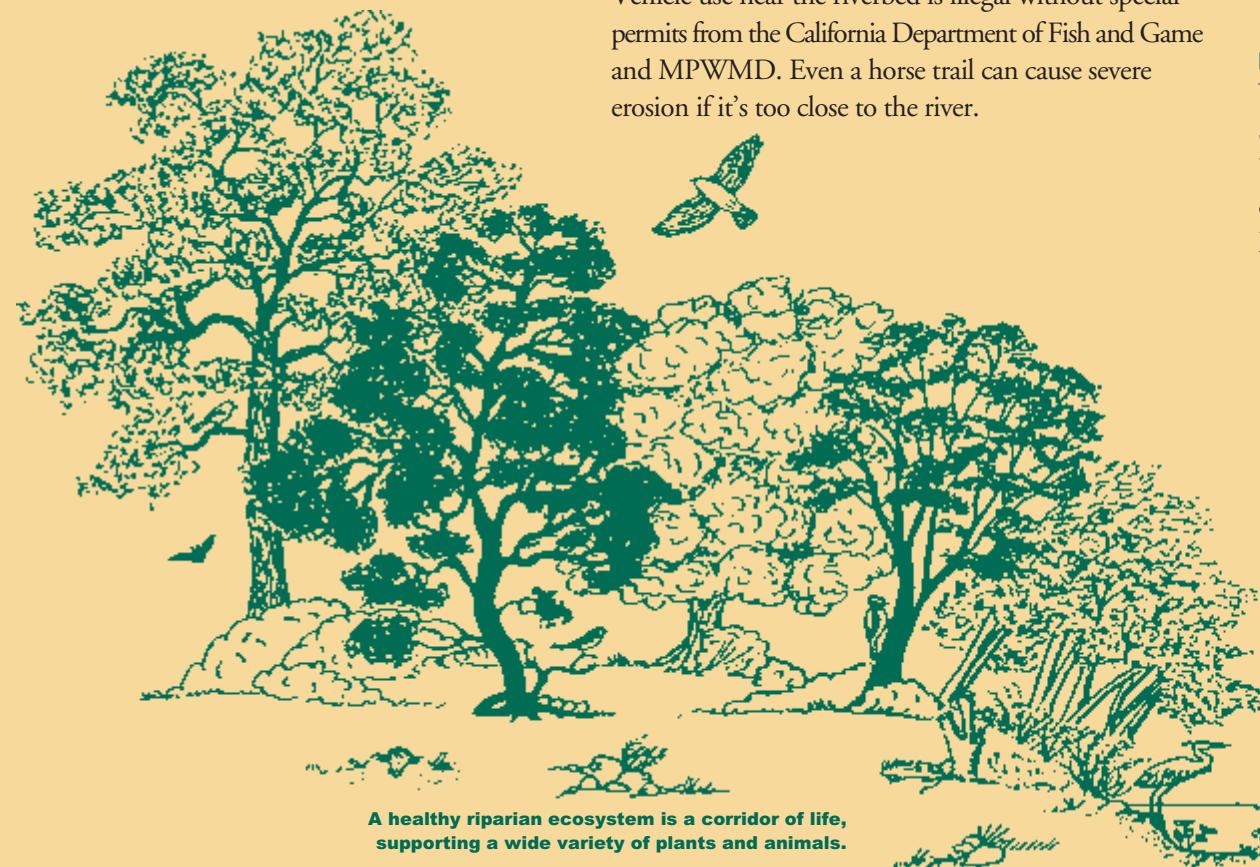
Rivers are the "arteries" of the planet; they sustain our most important food chains as they distribute nutrients, carry off waste and create habitat.

Yet it's easy to forget that the "overgrown creek" behind the shopping center is as vital to the health of our planet as a tropical rain forest or the ozone layer.

Of the 121 million acres of U.S. land within the 100-year floodplains of rivers, only 19 percent are in their natural or semi-natural conditions today.



Steelhead
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A healthy riparian ecosystem is a corridor of life, supporting a wide variety of plants and animals.

if you'd like to create a viewing "window" or need to alter vegetation for special reasons—they can help you minimize any negative impacts.

Irrigate native streamside vegetation when needed

In a typical year, groundwater pumping drops the water-table in the Carmel Valley aquifer from between 10 to 50 feet. That's why streamside plants may need irrigation to survive, especially in summer and fall. For example, heavy municipal pumping during drought years would kill much of the protective corridor of trees between the Carmel River Lagoon and Robinson Canyon Bridge, but it is kept alive by the MPWMD irrigation program.

Keep non-native plants out of the riparian corridor

Species not native to the riparian community such as ivy, broom, acacia, eucalyptus and pine trees, compete with native plants and do not prevent erosion. The riparian corridor is a natural area—not a garden—and should be left undisturbed. Call MPWMD for advice on removing non-natives or replanting native riparian vegetation.

Keep vehicles out of the riverbed

Vehicle use near the riverbed is illegal without special permits from the California Department of Fish and Game and MPWMD. Even a horse trail can cause severe erosion if it's too close to the river.

Do not dump tires, concrete, asphalt or any foreign material in or near the river

Altering the streambank in this manner does not provide lasting protection against erosion, but it can cause erosion on your neighbor's property by altering flow downstream. Besides being unsightly, rubble often contains toxic materials.

Never allow poisons to enter the river or floodplain

Herbicides, bug sprays, common yard chemicals, oil products, detergents, wash water, pool or spa water—all are poisons that kill plants and animals. Even "biodegradable" soaps can be harmful to wildlife, as well as fertilizers which cause algae blooms and deplete oxygen. If you live in the floodplain, using poisons in your yard is the same as dumping them in the river—that is where they will end up. Be sure containers are well-sealed and can't be carried off in the event of flood.

Do not construct cobble (rock) dams or diversions

These illegal obstructions in the river inhibit steelhead migration, reduce habitat value, raise water temperatures, alter flows and can cause erosion.

River water should remain in the river

Water diversions are strictly controlled by the State Water Resources Control Board. Unauthorized diverting or siphoning of water for personal use reduces water levels and can stress vegetation that

protects your banks and those of your neighbors. Less water means less aquatic habitat.

Work with your neighbors

Vegetation is most effective in preventing erosion when it occurs continuously along the banks. Whether you consider the river an amenity or a problem, neighbors must work together to minimize property loss. Participate in MPWMD river restoration projects in your area, or contact us to help plan a neighborhood restoration.

Become a "river watcher"

When streamside landowners act irresponsibly, it is their neighbors who end up paying the most. That's why all the destructive practices described here are either illegal or require a permit—to protect you, your neighbors and the river. Help keep the river healthy by educating your neighbors and alerting MPWMD to hazardous conditions, degraded areas, and damage to irrigation equipment or other property.

River Myth #3: fact & fiction

"Straightening the river would prevent floods and erosion."

Even if it were possible to engineer the "straightening" of the river, a straighter channel alignment would increase water velocity and erosion, while destroying habitat. To avoid increased velocity, the channel would have to be so wide it would engulf many nearby homes and properties.

Why save the river?

Saving threatened species
Steelhead fish and the California red-legged frog live within the watershed and have been listed as threatened under the Federal Endangered Species Act. Vegetation removal, streambank alteration and other activities around the Carmel River are regulated by federal law.

Natural looking streams increase property value
A recent analysis of property values of homes located on natural and channelized branches of the Portage River in Wood County, Ohio, indicates that "homes constructed on the natural stream [above the flood plain] are assessed to be worth 331% more than homes built on the channelized stream."

—K. Schurr, R. Schurr, and P. Barker. "How a Natural River Can Increase the Community's Tax Base," American Rivers 14, no. 2 (1986): 4.

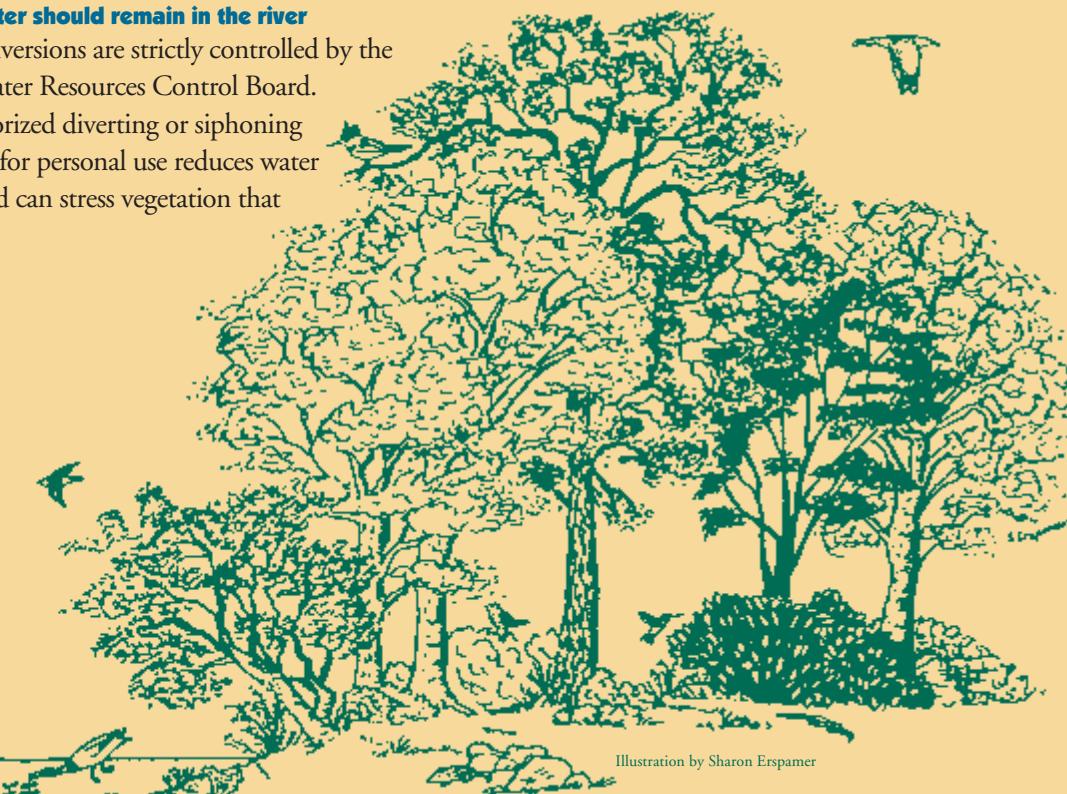


Illustration by Sharon Ersperer



Calif. red-legged frog
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