# Water-wise Landscaping

Vol. I Issue 3

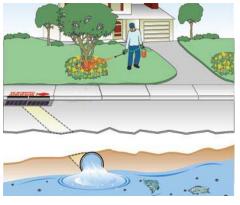
# The Watershed Experience

The first time someone asked me about my local watershed, I stared deep into the blue sky above, contemplated, took a deep breath, and then replied, "Well, I know we have one, but I am not sure what or where it is."

Well, little did I know we were literally standing on top of one. On the crest of a tall ridge, we peered down to view the beautiful North Fork of the American River winding through the canyon below us. It turns out we each live in a watershed and our individual actions can impact the health of these areas in positive and negative ways.

## What is a Watershed?

A watershed is generally defined as an area that drains to a common body of water or waterway, such as a stream, river, lake, estuary, wetland, aquifer, or the ocean. A watershed can be a large area like a section of a major river or a rather small area like a neighborhood creek. Regardless of the size or



location of any given watershed, each is important to understand and protect.

"Watersheds provide so many elements that are crucial to the health of the environment for all living things."

Watersheds provide so many elements that are crucial to the health of the environment for all living things. They serve as essential habitat for plants and animals. They provide drinking water and energy production. They are the places we go to experience natural beauty, enthusiastic recreation or solemn repose.

Since all living things depend on fresh, clean water, it is imperative that we become intimately connected with our local watersheds and identify ways to restore and sustain these precious ecologies.

#### What are the Problems?

In order to rejuvenate and nurture our watersheds, we first need to be able to identify the key issues involved with their deterioration.

#### Pollutants

The myriad of pollutants that enter our waterways cause a tremendous amount

of damage to our watersheds. The Watershed Watch Campaign states, "Pollution in our watersheds degraded

"Pollution in our watersheds degrades the environment, harms wildlife habitat, impacts the economy and jobs, causes higher taxes and fees, and ultimately affects the health of humans." Intended or not, we can no longer ignore the unfortunate human impacts upon our watersheds.

There are two sources of pollutants: "Point" and "Nonpoint" Point sources are direct contamination of water through such means as ditches, pipes, or deliberate dumping. Monitoring and regulation are in place for this type of pollution and as technology improves, point source pollution continues to be somewhat controlled.

Nonpoint source pollution, on the other hand, is indirect contamination through water runoff. Some examples would be oily water from roads, sediment from construction projects, or pesticides from over-fertilized lawns draining into our creeks and rivers. It is very difficult to control nonpoint source pollution, which accounts for the overwhelming majority of chemicals in our waterways. Also, the realization of the extent of nonpoint source pollution and its effects on watershed health is relatively recent. In fact, many people still do not realize that the water that flows down our storm drains goes directly into our watersheds, completely untreated.

# UNIVERSITY of CALIFORNIA - Agriculture & Natural Resources

#### COOPERATIVE EXTENSION • PLACER & NEVADA COUNTIES website: ceplacernevada.ucdavis.edu

PLACER: 11477 E Avenue • Auburn, CA 95603 NEVADA: 255 So. Auburn Street • Grass Valley, CA 95945 Tel: (530) 889-7350 H Tel: (530) 273-4563 H

 Fax: (530) 889-7397
 E-Mail: ceplacer@ucdavis.edu

 Fax: (530) 273-4769
 E-Mail: cenevada@ucdavis.edu



#### **Invasive Plants**

The flora of any given watershed area relates directly to the wildlife it supports and the ecology it participates in. When a native plant is displaced by a different species, habitat may be lost and the area may become unsuitable for wildlife forage. Additionally, as stated in a 2002 Nevada County Resources Report, "Some of these aggressive, invasive exotics present serious problems because they degrade natural areas, exclude native species, disrupt ecosystem processes, alter fire frequencies, reduce recreational values, and restrict economic returns on crops." A good example of a ferocious invasive plant infesting our watersheds is yellow star thistle.

#### Awareness and Education

A legitimate barrier to healthy watersheds is the lack of public awareness regarding the issues. The need for environmental education in our schools and developing communities is stronger than ever.

Also, on the state and federal levels, there are a multitude of large agencies attempting to manage and study the different facets of any given watershed. Their goals are very specific and their resources are not tailored to addressing the needs of all management areas (e.g. recreation, drinking water, and salmon spawning). Hence, as stated in a 2002 report to the Legislature from the State Water Resources Control Board,

"Increasingly, in response to overlapping authorities and the challenges of protecting and restoring impaired waters, watershed partnerships have formed. These partnerships are not usually designed or instigated by government agencies, but they evolve as a result of local leadership—landowners, county officials, water districts, resource conservation districts, educators, and the general public - to improve environmental conditions and to manage natural resources more effectively on a watershed scale."

If our watersheds are going to get the 3. attention they deserve, agencies at the local level must work together to educate and increase public awareness of environmental issues. In this way, we can connect with our watersheds and lend a hand in their management.

#### What can we do?

There are so many ways to help restore and sustain our precious watersheds, both as individuals and as part of a group. Here are some suggestions.

1. *Learn about your watershed.* Take a walk near your waterways and observe. Visit the sites listed below in References. Find local groups working to protect your watershed and volunteer. Learn how development decisions, land use, and recreation affect water resources.

2. *Garden wisely.* Use least toxic methods in your yard and garden, reducing reliance on pesticides and herbicides. Water wisely to prevent runoff and don't over fertilize. Provide habitat for wildlife in your backyard by planting native plants. Use appropriate plants and mulch to prevent soil erosion. Dispose of pesticides and fertilizers properly through your Household Hazardous Waste collection.

### Support Environmental Education and Action.

Through education, communities can learn how their actions directly affect watershed health and, in turn, all living things.

#### References

2002 Report to Legislature by State Water Resources Control Board <u>http://</u> resources.ca.gov/watershedtaskforce/ <u>AB2117LegReport\_041102.pdf</u>. EPA\_Adopt Your Watershed Program.www.epa.gov/owow/watershed. Resource Conservation Districts Placer County: <u>http://www.carcd.org/wisp/placer/</u>, Nevada County: <u>http://www.carcd.org/ wisp/nevada/</u>. Sacramento River Watershed Program

<u>www.sacriver.org</u>.



# KEVIN MARINI, UC Program Representative

WATER-WISE LANDSCAPING is a collaborative project of the University of California Cooperative Extension, UCCE Master Gardeners of Placer and Nevada Counties, Placer County Water Agency, and the US Bureau of Reclamation. For more information call 530-889-7388 or visit http://ceplacernevada.ucdavis.edu







The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancerrelated or genetic characteristic), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam-era veterans or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities or with respect to any of its employment policies, practices, or procedures.

University Policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200; (510) 987-0096

University of California, United States Department of Agriculture, Placer and Nevada Counties Cooperating