

Please note: This is the first in a series of articles examining the ways that our human landscapes can be transformed to protect and enhance the watershed.

## Landscaping for the Watershed

By Owen Dell, County Landscape & Design

The Creek Week events of 2004 on the South Coast brought to public awareness the good work that is being done by local agencies, environmental groups and others. We join many others in applauding these efforts. We are especially gratified to see that more attention is being given to the opportunities in cleaning up the whole watershed, not just the creeks. Real progress is being made!

As a result of my work as a landscape architect, I have become conversant with a number of watershed-friendly systems, techniques and best management practices.

In an attempt to make a contribution, we are offering this larger look at watershed management techniques as a way of broadening the knowledge base and stimulating discussion among interested parties. We hope that some of these concepts are of interest to you.

It is becoming ever more obvious that the conventional pave-and-pipe approach to managing urban runoff doesn't work. Because the orthodoxy of modern industrial culture regards rainwater as a waste product rather than as a resource, engineering "solutions" to perceived and real stormwater management problems have resulted in widespread, pernicious and ever-worsening damage. Our creeks, rivers, lakes and oceans must receive increasing doses of pollutants which are utterly foreign to their abilities to process and bioremediate inflows. In addition, they must deal with these toxic materials at concentrations that are far greater than the carrying capacity of even the most effective natural systems. This has resulted in an alarming degradation of water quality, public health and safety, and the integrity of natural aquatic ecosystems.

The response to this has been widespread public outcry and a blossoming of public will to solve the problem. Locally, a hotel bed tax and other funding measures have been invested in an energetic and well-received program aimed at creek and beach cleanup. Water quality monitoring, public education, street sweeping programs, extensive creek cleanups and the development of the local South Coast Watershed Resource Center (located at Arroyo Burro County Beach) are some of the outcomes of this effort.

Now more and more, our attention is being directed towards reducing or eliminating the upstream sources of polluted runoff. Simply stated, there will be no end to the work needed to clean up creeks and beaches as long as we continue to treat the watershed as a highly efficient funnel to direct oil, human and animal waste and other unfortunate byproducts of modern life into our waterways. And that is exactly what our urban infrastructure does with marvelous and appalling efficiency.

The answer is to take a fresh look at the watershed and to recognize that every square foot of land upstream - whether under natural or manmade cover - is a functional (or

dysfunctional) part of that watershed. Communities and individual landowners must take responsibility for their contribution to the problem. Each home, commercial or public building, parking lot and road must be redesigned to reduce or eliminate runoff, to filter pollutants and to be a constructive rather than a damaging element in the larger system to which it contributes.

The solution to water pollution problems begins at the peak of every roof. There are inspiring, cost-effective, well-proven methods of optimizing the built watershed at every step of its cascade towards the ocean. There are many things we should be doing, and doing soon, if we are to truly remediate the damage that we and our forebears have done. And when we have finally built an efficient urban watershed system, it will be a tremendous asset for us and for future generations.

There is a natural order to the world, and we violate that order at our peril. It is my hope that there will be inspiration as well as information in the articles that follow, and that we can use some of these techniques to lead our communities back to the enduring way of living in harmony with the natural systems that give us life. If we can imagine a world where people can once again drink from the streams, swim without fear, look upon a wetland without feeling the pain of its degradation, then we can begin to make these things a reality. The path is not hidden; it is right in front of our eyes. We only need to see it, and then to do what is right.

If you're interested in more on this topic, please visit our web site at [www.owendell.com](http://www.owendell.com), and peruse the articles under "Landscaping for the Watershed". We'd be interested in hearing what is happening in your community and we'd be especially grateful for additions and corrections to this information.



**Figure 1: We can change the way we design and manage our landscapes to be constructive rather than a damaging element in the larger watershed to which it contributes.**

