



On Watershed Education

While it may be true that old dogs cannot learn new tricks, there are some hopeful signs that our society will adopt new behaviors to protect the local environment. Witness the universally high rates at which we recycle bottles and newspapers, compost, and dispose of household hazardous wastes in the proper places, compared to a few decades ago. Littering and motor oil dumping are now much less socially acceptable behaviors than they once were. These dramatic social shifts occurred because a compelling case was made that changes were good for the environment (and reasonably convenient and inexpensive to make), and communities heavily invested in environmental education.

As the previous article establishes, the public does not always practice a very good watershed ethic, and continues to engage in many behaviors that are directly linked to water quality problems. Watershed education is the primary tool for changing these behaviors. The basic premise of watershed education is that we must learn two things: that we live in a watershed, and how to properly live within it.

A handful of communities have attempted to craft education programs in recent years to influence our watershed behaviors. These initial efforts have gone by a confusing assortment of names, such as public outreach, source control, watershed awareness, pollution prevention, citizen involvement, and stewardship, but

they all have a common theme: educating residents on how to live within their watershed.

Many more communities will need to develop watershed education programs in the coming years to comply with pending EPA municipal stormwater National Pollutant Discharge Elimination System (NPDES) regulations. Indeed, half of the six minimum management measures prescribed under these regulations directly deal with watershed education: pollution prevention, public outreach and public involvement. Yet, many communities have no idea what kind of message to send, or in which medium to send it out.

This article reviews the prospects for changing our behaviors to better protect watersheds. We begin by outlining some of the daunting challenges that face educators seeking to influence deeply rooted public attitudes. Next, we profile research on the outreach techniques that appear most effective in influencing watershed behavior. Special emphasis is placed on media campaigns and intensive training programs. Lastly, recommendations are made to enhance the effectiveness of watershed education programs.

Challenges in Watershed Education

Watershed managers face several daunting challenges when they attempt to influence watershed behaviors:

Table 1: Provisional Estimates of Potential Residential Polluters in the United States

Watershed Behavior	Prevalence in Overall Population	Estimates of Potential Residential Polluters
Over-Fertilizers	35%	38 million
Bad Dog Walkers	15 %	16 million
Chronic Car washers	25%	27 million
Septic Slackers	15%	16 million
Bad Mechanics	1 to 5%	3 million
Pesticide Sprayers	40%	43 million
Driveway Hosers	15%	16 million

Note: Estimates are based on 1999 U.S. population of 270 million, 2.5 persons per household, and average behavior prevalence rates based on surveys in Understanding Watershed Behavior.