

irrigation systems

Homeowners looking for convenience and cost savings often think an irrigation system will provide both. However, according to the Irrigation Association, even the most efficient automatic sprinkler systems waste a minimum of 30 percent of the water they deliver. Without proper maintenance (experts recommend at least annual inspection) systems become even less efficient over time. And any type of irrigation system can be wasteful if the water doesn't get where it's needed (the plant's *root zone*), when it's needed.

The Washington State Department of Health requires that all irrigation systems include *backflow prevention*-devices to keep irrigation system water from entering the municipal water supply-and systems should be inspected annually by the water provider. If you have questions about backflow prevention on a Seattle property, call Seattle Public Utilities at (206) 684-3456. If you decide to purchase an automatic in-ground system, use a *certified irrigation designer and contractor* to design, install, and maintain it for maximum efficiency. Contact the Irrigation Association at www.irrigation.org or the Washington Association of Landscape Professionals at www.walp.org for certification information.

It's possible to design a landscape to minimize the need for regular supplemental watering once it is established. Weigh your priorities (economic, environmental, and personal) and consider landscape designs and plant choices that eliminate the need for an automatic, in-ground irrigation system. Look to the *Natural Lawn & Garden* series for tips on water-wise plant selection, design, and maintenance. The series is available at www.seattle.gov/util (click on *Yard*) or by calling the Natural Lawn & Garden Hotline at (206) 633-0224.

If you have an existing permanent irrigation system within Seattle, water efficiency incentives may be available from Seattle Public Utilities. For help with increasing the efficiency of an existing system, go to www.seattle.gov/util (click on *Yard* and then *Natural Lawn & Garden Care*) for irrigation and sprinkler tips. For information related to new irrigation systems visit the Irrigation Association at www.irrigation.org and go to *Search* and *Consumer Info*.

Permanent In-Ground Irrigation Systems

Pipe Materials. In-ground irrigation systems commonly rely on pipe made from *polyvinyl chloride* or PVC. Recent research raises questions about vinyl's impact on human health and environmental safety. *Polyethylene* is an increasingly available PVC alternative used in the irrigation and plumbing industry.

Irrigation Controllers. Also called *clocks* or *timers*, these devices control the time an irrigation system operates and the amount of water it uses. The most efficient controllers automatically adjust to changing plant water needs. See *Product Specifications* at www.savingwater.org/outside_sprinklers.htm to learn about important water saving controller features.

Soaker Hoses

These hoses look like a black garden hose, but are made of a porous material and are capped at the end, allowing the water to slowly leak into the soil along the entire length of the hose. When used correctly, soaker hoses are an efficient way to water, and reduce the incidence of plant disease too. See www.savingwater.org/docs/soakerhose.pdf for tips on efficient use. Many soaker hoses are made from recycled plastic.

Garden Hoses

Most garden hoses are made from various forms of plastic, including PVC (see discussion above about PVC). Reinforced rubber hoses are generally considered the most durable option. (Although they tend to be heavier and more awkward than their PVC cousins.) Many hoses also contain recycled content plastic, an environmental plus. No matter what material your hose is made of, avoid drinking from a garden hose. Hoses can siphon contaminants from standing water or breed bacteria within a warm hose, along with leaching chemicals from the hose itself.