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## Fixing The Flow

SALINE SYSTEMS AND HIGH-EFFICIENCY PUMPS HELP POOLS MAKE AN ECO-FRIENDLY SPLASH

Each issue we ask a pair of experts questions about sustainability at home. This month, we're joined by Greg Darvin, owner of Pristine Pools and Pristine Eco Systems, East Hampton-based companies whose specialties range from pool design to installation of solar-electric and hot water systems, and Jeff Farlow, of Pentair Water Pool & Spa, a company that produces innovative pool and spaequipment sold by many local retailers.

How do I maintain my pool without using harmful chemicals? Can you suggest alternatives to traditional chlorine systems?

Greg Darvin: A saline, or salt, system, an ozone system and an ultraviolet-light system are three excellent, non-harmful alternatives to chlorine. The saline system is probably the most cost-effective and popular method. Unlike chlorine, disinfecting with salt leaves a soft, silky feel to the water that's healthy, too—it won't irritate your skin and eyes. This kind of system can easily be added to any existing swimming pool, or it can be factored into the construction of a new project.

My energy bills are skyrocketing! How can I reduce the energy costs for heating and filtering my pool?

GD: Installing solar panels is one effective way to significantly reduce the heating costs of a swimming pool, but many factors, such as desired water temperature and weather, affect the efficiency of this system. For these reasons, I recommend installing a photovoltaic solar array with an electric pool heat pump. This system will produce electricity while the pump will compress air temperature to heat the swimming pool. This offsets the cost of the swimming pool pump and the entire electric load of the house.







Smoothed Out | A Pristine Pools infinity-edge pool (тор) on the shoreline. Work Flow | A Pristine Pools project (сектек) in East Hampton. Pumped Up | A high-efficiency pump with oversized piping allows for more efficient filtration; sun shelves (воттом) provide a place to soak up the rays. See Resources.

I read that pool pump motors consume as much energy as all other household appliances combined. What new technologies can help reduce that?

**GD:** Other than installing solar panels to reduce your home's energy costs, replacing your standard pool pump with multi-speed pool pumps and piping will also drastically reduce the cost of operating and maintaining your pool.

Jeff Farlow: Pentair makes a pump called IntelliFlo, which features a permanent magnet motor-similar to the type used in hybrid vehicles-that has been proven to reduce electricity usage by about 30 percent, compared to the motors used in other pumps. But the real savings come from the pump's variable speeds, which filter water differently than a standard pump. You can program the controls for optimal energy efficiency for each pumping job. This means the pump can function at lower speeds for longer periods, which is the most effective-up to 90 percent in energy savingsand efficient way to filter a pool. The IntelliFlo is also significantly quieter, which may be a more important factor than the energy savings for some pool owners!

What rebates are available for Long Island homeowners who are interested in installing an energy-saving filter pump?

JF: The Long Island Power Authority has a rebate program that will reimburse pool owners \$200 toward the cost of a variable-speed pool pump until July 31, 2009. Pentair has trained more than 100 local pool companies in the technology to take advantage of this promotion.

We welcome reader questions. Email the editor of Green Living at green@candgpublications.com.