

Water Conservation Survey



Freshwater availability is an increasing concern across the globe and it may be the most important natural resource issue of the century. Climate change and its effects on water are expected to intensify freshwater scarcity and conflict. Warming over the past several decades has fundamentally altered the hydrologic cycle, and these changes are percolating through our watersheds. Snowpacks are shrinking and stream temperatures will likely increase. Precipitation patterns may change, and floods, droughts, and severe weather disturbances may become more common.

In areas where water is scarce, conserving water can help to pool limited resources for agricultural needs as well as home use. Some areas of the United States only receive an average of 5 inches of rainfall per year, and droughts can result in reduced crop production, forest fire, and potable water shortage. Where water is not scarce, residents should be aware that treating water uses a lot of energy, and more water resources. Approximately 3 percent of all electricity in the U.S. is used to treat municipal water and wastewater. Additionally, freshwater resources are being overdrawn nationwide, and it only takes a few small shifts of habit to keep our lakes, rivers and reservoirs at health levels.



There are many good reasons to conduct a Water Management Survey and address consumption:

- ⇒ **Risk management:** Although almost 80 percent of Earth is covered with water, only 3 percent of the planet's water resources represent fresh water. Less than 1 percent of all water is available for human consumption; the rest is salty ocean water, or freshwater that is bound up in glaciers and polar ice caps.
- ⇒ **Sustainability benefits:** While water resources vary over time (as from drought, an abundant snowpack, etc.), sustainable use of water requires a reserve that can be maintained and managed so as to ensure the supply for future generations.
- ⇒ **Demand management:** Many utility companies offer financial incentives for consumers to upgrade their appliances to more

Studies show that natural landscaping can reduce annual storm-water runoff volume by as much as 65%.

Natural drainage and native landscaping areas can remove up to 80% of the suspended solids and heavy metals, and up to 70% of nutrients like phosphorous and nitrogen from stormwater runoff. Sustainable stormwater management is both cost effective and attractive. It addresses erosion, water pollution, combined sewer overflows and other stormwater runoff problems all at once.

Did you know?

- United States residents use three times as much water a day—1,300 gallons per person—as the average European.
- A single dripping faucet can waste up to 20 gallons of water a day.
- Stormwater management systems that mimic nature by integrating stormwater into building and site development can reduce the damaging effects of urbanization on rivers and streams.



856 Gate Way
Hillside, NJ 07205

Phone: 412-ECO-ZERO
Toll-Free: 855-ECO-ZERO
eMail: Info@myEcoZero.com

We serve as an unbiased resource for clean tech by helping businesses understand and profit from the clean tech revolution.

WE'RE ON THE WEB AT:
MYECOZERO.COM



water-efficient models. Conserving water saves you money. Not only will your water bill go down, but as you heat less water, your gas or energy bill will also decline. If your whole community conserves, you will also pay less fees for water-related services. Water conserving communities will not need to pay as much to develop new supplies and expand or upgrade water and wastewater infrastructure.

Our Water Management Survey includes the following tasks:

1. **Benchmarking:** Assess your current and historical (36-month) water use.
2. **Audit:** Review your water bills for the past year to match consumption on your monthly bill with your meter reading.
3. **Consumption modeling:** Identify heavy areas of water use.
 - A. Kitchens
 - B. Bathrooms
 - C. Laundry
 - D. Sprinkler systems
 - E. Leaks and other water use
4. **Management planning:** Identify the no- and low-cost options for managing your target areas.
5. **Strategic planning:** Develop a budget for actions which require some financial investment.
6. **Implement the Water Management Strategy.**
7. **Monitor the Water Management Strategy.**
8. **Submit quarterly reports on progress.**

Water conservation measures:

- A small food company designed one of the most innovative water recycling systems in the food processing industry. The system uses re-circulated hot water to pasteurize and re-circulated cold water to cool food products. Recycling their water reduces the need to heat and cool it, cutting their energy use too.
- A baking plant found and fixed water leaks that were wasting more than 709,000 gallons per year. Their leak repairs are saving the company \$3,280 per year.
- A golf and country club made significant changes to save water, reduce the use of herbicides and pesticides, and minimize wastewater. They added a computerized irrigation system linked to a weather station, implemented an integrated pest management program, and installed a wastewater treatment plant to recycle wash water. The club has cut costs for water, the energy to pump it, pesticides, and wastewater disposal.