

BARNEGAT BAY ESTUARY PROGRAM

“Water, water everywhere and not a drop to drink” is a line from Samuel Taylor Coleridge’s Ancient Mariner. Barnegat Bay water seems abundant, with streams and rivers leading into it. But it is not drinkable except for deep wells, and the quality remains of concern to all.

Being aware of water usage and managing our water usage is of utmost importance as the residents of Monmouth, Burlington and Ocean Counties of New Jersey look to the future.

Over 450,000 people live in the Barnegat Bay Watershed with the population up to a million during the months of July and August. Lawn and garden sprinklers are run, pools are filled, showers and wash increase. Water consumption becomes extremely high. Typical of shore communities where new housing developments seem to appear daily.

The Barnegat Bay Watershed is almost an address with 660 square miles of water, pinelands, towns, and open space. Every raindrop, fertilizer, pesticide, anything put into a storm sewer, and so forth from gas to chemicals, ultimately ends up in Barnegat Bay or in the ocean. The quality of the Barnegat Bay Watershed should be of utmost importance to all residents and visitors.

Much of the Barnegat Bay Watershed water comes from the Kirkwood Cohansey Aquifer. People seem to think that underground water will be forever plentiful. To top that off, residents have the highest water consumption in the state for some reason.

The more water used for personal use, the less there will be to flow into the bay. This changes the salinity, something to watch carefully in an estuary where salt water flows in from the ocean to meet the fresh cedar streams and rivers. An estuary is a nursery for everything from microscopic organisms and underwater foliage to large fish. The food chain is most evident where little fish eats something even smaller, and so on up the line.

Salt water intrusion into the usual brackish mix causes problems in drinking water. Wells put out too much salt water into the system. Seaside towns such as Seaside Heights and Point Pleasant Beach may soon have to make costly adjustments in their water distribution, either building desalinization plants or finding other water sources. Both could prove to be a strain on taxpayers and the towns themselves.

In addition too much salt water intrusion into the estuary can cause certain species in the estuary to die along with the grasses they eat.

Like the old children’s song where “the foot bone is connected to the leg bone ... and the leg bone is connected to the knee bone...” whatever is done in the Barnegat Bay Watershed area affects everyone even though they may live miles from a known problem. A cycle is completed where a few raindrops dropping into a stream or hitting the surface of a paved driveway ultimately end up as evaporation into the sky again.

Pesticide and fertilizer runoff are a main source of contamination. So is the general polluted mess that is put into the storm drains. Storms collect the gasoline and oil, cigarette butts, and lots of other bad. This polluted ground water runs through the soil or off the pavement into Barnegat Bay. Much is unable to be stopped or even controlled. Even something as normal as animal waste can upset our water system.

Storm drains are seen as such a problem that some communities and environmental groups have tried to educate the public about what they drop into them. Others have marked the storm drains with warnings about what should not be dropped into them. Seashore town storm drains back up at times of high tide and storms, leaving an unbelievable assortment of pollution floating around.

It is suggested that homeowners become aware of plants, trees and bushes that are able to withstand drought. Grasses could save water now being used for high maintenance annuals and perennials. Water-

saving showerheads, toilets and other appliances are now on the market. Towns must encourage homeowners not to cover too much of their property with non-porous pavement.

Rain water should be encouraged to be used as a secondary or two part water system. This old idea of catching rainwater in a barrel or cistern is coming back into use. Numerous Florida towns, concerned about over development and not enough drinkable water, are doing this with good results.

The U.S. Department of Environmental Protection's Trust for Public Land, Protecting the Source in 1997, issued the following statement:

“Drink a bottle of water, and it is gone.
Build a filtration plant, and it must be
operated, maintained, and eventually
replaced.

But protect an aquifer or reservoir, and
you will have safe drinking water forever.”