

# Raritan Basin Watershed Management Project

## Fact Sheet # 6

### WATER SUPPLY AVAILABILITY

The Water Supply Availability Report is one of a series of technical reports produced by the Raritan Basin Watershed Management Project. This report provides an overview of the water supply availability and the current and future demands for water in the Basin.

#### What Is "Water Supply Availability"?

The term "water supply availability" describes the amount of water that is currently available within a watershed. It takes into consideration the current and projected demands on existing water supplies, and assesses whether or not supplies can meet demands.

#### How Much Water Is Currently Available In The Raritan Basin?

Water is available from two types of sources:

- Underground water supplies, known as aquifers; and
- Surface water supplies, such as reservoirs, lakes, and rivers.

Aquifers are located throughout the Raritan Basin and the amount of water they supply depends on location and geology. Surface water supplies in the Basin are from Spruce Run and Round Valley Reservoirs, the Delaware and Raritan Canal, and the Lawrence Chain of Lakes. Water availability is measured in millions of gallons per day, or MGD. This number describes how much water is supplied to or used by the population of the Basin each day. Currently, the Basin has a water supply availability of 360 MGD; 225 MGD is supplied by surface waters, and 135 MGD is supplied by aquifers.

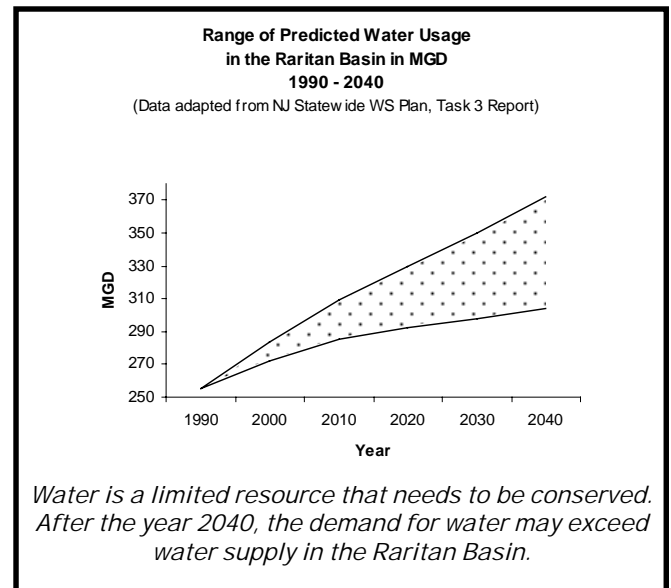
#### How Much Water Does The Population Of The Raritan Basin Use?

The Raritan Basin consists of approximately 1,100 square miles, and includes parts of 7 counties and 100 municipalities. As expected, the population located within the Raritan Basin demands a great

deal of water for households, industries and agriculture. Studies indicate that the 1990 water demand of the Basin was approximately 225 MGD.

#### What Are The Projections For Future Water Use?

Future development and population growth in the region will result in increased demands for water. Projections indicate that the Raritan Basin will need a water supply of approximately 350 MGD by the year 2040. As mentioned earlier, the total current water supply availability for the Basin is 360 MGD. To prepare for the projected increase in water demand, two projects have been identified as possibilities for increasing water supply availability in the Basin. One would be the construction of the Kingston Quarry Reservoir; the other would be the construction of the Confluence Pumping Station, where the North and South Branches of the Raritan River meet. It is anticipated that one of these projects will be completed around the year 2030 in order to meet increased water demands. As the graph below shows, water usage is predicted to range from approximately 300 MGD to 370 MGD by the year 2040.



## How Can You Help To Conserve Water?

Although it may seem that the supply of water is infinite, it is in fact a limited resource that needs to be conserved. You can help conserve water resources by following some of these steps:

- Plant a garden using native species. Native species come from this region and are better adapted to this climate. They usually require less water and care than non-native species.
- If you choose to water your lawn or garden, do so early in the morning or in the evening. Less water will be lost to evaporation and more water will reach your plants.
- Install low flow showerheads in your house, and put a plastic container filled with water in the tank of your toilet to reduce the amount of water used for each flush.
- Fix leaky faucets and do not leave the faucet running unnecessarily when shaving, washing your hands, and brushing your teeth.
- Collect rainwater in containers and use it to water your plants.
- Check your water meter or water bill to see how much water you are using.
- Support federal and state programs that fund water conservation practices on farmland.
- Encourage corporations to reuse treated wastewater for lawn irrigation, cooling processes and fire suppression.
- Encourage municipalities to develop ordinances that would help protect existing water supplies.

### For More Information.....

The Raritan Basin Watershed Management Project is a partnership of government, non-profit and private organizations working together to improve the water resources of the Raritan River. To learn more about the Raritan Basin Watershed Management Project or for additional information on conserving water in the Raritan Basin, contact the New Jersey Water Supply Authority, Watershed Protection Programs Unit, at (732) 356-9344 or visit our website at [www.raritanbasin.org](http://www.raritanbasin.org). Also, you may contact the New Jersey Department of Environmental Protection's (NJDEP) Raritan Region staff at (609) 633-7020 or visit the NJDEP Division of Watershed Management website at [www.state.nj.us/dep/watershedmgt/](http://www.state.nj.us/dep/watershedmgt/).