LAKE MISHNOCK

The heart of your community, your way of life and your children's future



The Lake Mishnock area is a special place.







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The Lake Mishnock area is a special place. Lake Mishnock is a 48 acre natural pond. It affords wonderful recreational and scenic opportunities for the many people who call the area home.

In addition, the area is one of the state's most productive groundwater resources. Known as the Mishnock Aquifer, it serves as the drinking water source for area residents and deserves your protection.

Protect your drinking water.

Groundwater resources in the Lake Mishnock area supply drinking water



to residents in West Greenwich and Coventry. The public water company that supplies your water is Kent County Water Authority. About 20% of the Kent County water supply comes from wells located in the Mishnock Aquifer. The remaining 80% of Kent County's supply is from Providence Water, which gets its water from the Scituate Reservoir.

Kent County Water Authority wells are located between Mishnock Road and Nooseneck Hill Road, spanning the border of Coventy and West Greenwich. Not only are the existing wells important to

The protection and continued use of the Mishnock area groundwater resource is vital to the future drinking water resources for you, your family and neighbors. this area, the future water supply of the Kent County Water Authority is proposed to come from the Mishnock Aquifer area. The Water Authority's most recent land purchases in the area assures This rich groundwater resource is located under and around the surface water of Lake Mishnock itself, in the Pawtuxet watershed in the town of West Greenwich and part of Coventry.



well-head protection and the development of future water supplies. The groundwater quality in the area is excellent, requiring little to no water treatment.

What do we know about Lake Mishnock's water quality?

The West Greenwich Conservation Commission sponsors water quality monitoring on Lake Mishnock. Since 1995, volunteers have monitored the Lake as part of the University of Rhode Island's Watershed Watch Program. Volunteers conduct weekly monitoring from April to November. Three times a year, volunteers take water samples and bring them to the URI Watershed Watch Lab for analysis. From these volunteer efforts, we know that Lake Mishnock has high quality water.

The water clarity of Lake Mishnock has been improving over the years. Continued monitoring of Lake Mishnock will confirm whether water quality is improving and what impact development may have on the lake.

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that Lake Mishnock has high quality water.

What is a watershed?

While not everyone lives next to a lake or pond, we all live in a watershed—the land area that contributes water to a specific surface water body, such as Lake Mishnock. Human activities in the watershed—how we use the land in and around our homes—can affect the water quality of the resources within the watershed.

As a resident of the Lake Misknock area, you should know that there is a connection between the surface water and groundwater within a watershed. Surface water can move through the soil to the groundwater and groundwater can discharge to streams and ponds. This is important when considering the protection of water resources — the quality of one can affect the quality of the other.



Land use practices that can adversely affect water quality in the Lake Mishnock area include:

- Cesspools and improperly sited and maintained septic systems in close proximity to the lake.
- Sediment from soil erosion.
- Fertilizer and pesticide use from residential yard and garden care.
- Household trash and litter.
- Petroleum products used in and around the lake.
- Ø Road salts.
- Trace metals from road runoff.



- Chemicals from commonly used household and marine products.
- Animal waste including human, pet and waterfowl wastes.

What can you do to help protect Lake Mishnock and the Mishnock Aquifer?

to pest control when possible.

- Use as little fertilizers and pesticides as necessary to meet your needs.
- *Keep fertilizers and pesticides away from the lake.*
- Cean up spills.
- Ø Don't fertilize driveways, sidewalks or roads.
- Ø Avoid using de-icing salts.

Control animal waste.

- V Pick up after your dog to prevent waste from entering the lake.
- Ø Don't feed the waterfowl. Like all animals, they excrete phosphorus in their waste. Feeding waterfowl encourages them to gather on the lake.

Support community efforts aimed at

protecting the Lake Mishnock Aquifer area and local drinking water supplies.

Volunteer to monitor Lake Mishnock water quality with URI Watershed Watch. For volunteer information, call (401) 874-2905.

For more information on protecting Lake

Mishnock:

Kent County Water Authority (401) 821-9300 Public water, quality and testing

URI Cooperative Extension

(800) 448-1011 Septic systems, yard and garden

care, homeowner actions to protect water quality RI Dept. of Environmental Mgmt. (800) CLEANRI Proper disposal, storage, use and alternatives to household haz-



Conventional Septic System

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The standard conventional septic system consists of a septic tank followed by a drainfield, also called a leachfield or soil absorption field.Wastewater from tollet, bathtub and sink drains to a **septic tank (1)** where solids and grease are trapped and decomposition takes place. The liquid effluent flows to a **distribution box (2)** which directs flow to a **drainfield (3)** where it seeps into the underlying soil. The drainfield can be either a series of trenches (perforated pipe encased in washed stone) or galleys or flow diffusers (bottomless concrete chambers honeycomed with holes that store and allow the effluent to gradually seep into the ground).

Living on Lake Mishnock, you can help

protect it. Common activities like driving your car, fertilizing your lawn and garden or how you maintain your septic system can affect water quality. By paying careful attention to how you manage activities in and around your home, you



can protect your watershed and the water you and your family drink.

Maintain your septic system.

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- Inspect your system every year or two and pump as needed.
- Avoid using garbage disposals, which add excess solids and grease to your system.
- Avoid using septic system additives to "clean" your system.

Use nonphosphate detergents. Check the label. Most liquid laundry detergents do not contain phosphorus, but some powdered laundry detergents and dishwasher detergents still do.

 Don't pour chemicals
(pesticides, paint thinner, acids, disinfectants, etc.) down the
drain.

Yard and garden care.

Use non-toxic alternatives

WATER TABLE

If you boat or fish on Lake Mishnock, what can you do to help protect it?

If you enjoy Lake Mishnock's recreational opportunities, there are some important things you can do.

- Ø Don't transport water, animals or plants from one pond, lake or river to another.
- Ø Do not feed the waterfowl.

While boating on Lake Mishnock.

- Consider using a canoe, rowboat or electric motor as an alternative to gas powered motors.
- Keep all your trash on board your boat, don't throw it in the lake.
- For human waste, use a "pee can" or a large ziplock bag filled with kitty litter to avoid any spills.

Things to do after boating.

- Remove plants and animals from your boat before leaving the water access area.
- Learn what invasive organisms look like. If you suspect an infestation of an exotic plant or animal, report it to RIDEM.



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