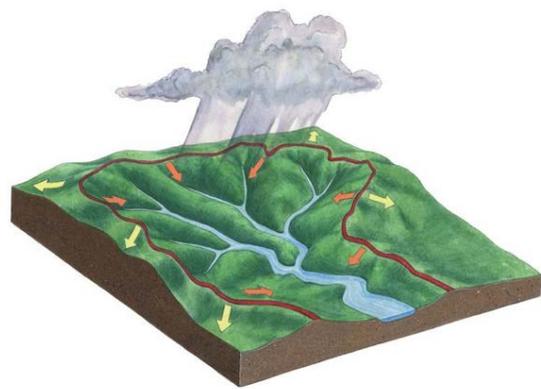


## WHAT IS IT?

Water quality is defined as the chemical, physical, biological, and radiological characteristics of water. A specific level of water quality is necessary to sustain the ecological processes that we rely on for drinking, fishing, agriculture, and recreational purposes. Water quality can be made worse by pollutants, which originate from many diffuse sources within a watershed.

These sources include failing septic systems, excessive lawn chemicals, stormwater and agricultural runoff. Water clarity, another important element for the recreational enjoyment of the lake, is reduced by soil erosion on steep slopes and river banks that lack adequate vegetation.



*The image above shows how water moves through a watershed.*

## WHY DOES IT MATTER?

Keuka Lake's water quality is rated as AA, meaning that the lake can provide drinking water to the area with minimal water treatment. This creates a water infrastructure that saves municipalities and residents money by keeping treatment costs low, and making lake drawn or well drawn water a safe option for residents.

Maintaining the lake's water quality also means protecting recreational opportunities like swimming, fishing and even boating. As the spring 2014 floods showed, excessive stormwater exacerbated by paved surfaces can limit the use of the lake.

## WATER QUALITY THREATS

- 1 **STORMWATER RUNOFF**
- 2 **INVASIVE SPECIES**
- 3 **NUTRIENTS FROM EROSION**
- 4 **FERTILIZERS AND PESTICIDES**

## POLICY OPTIONS

### Limit Invasive Species

*Policies that require boaters to check and clean their boats before and after being in the water can limit the spread of invasive species.*

*Compliance with such policies can be encouraged by staffing boat docks with monitors and supplying water and power hookups at docks.*

*Regulations that prevent homeowners from planting invasive species can also be effective.*

### Stream Setbacks

*Requiring setbacks for grazing areas, farming and buildings of at least 50 ft. from waterways can reduce the amount of unfiltered runoff entering waterways and the lake.*

*Vegetated buffers that filter surface water runoff can also be encouraged through incentives and education.*



### Pesticides and Fertilizers

*Municipalities can limit pollution from pesticides and fertilizers by regulating how they are used.*

*Properties using excessive pesticides may be required to plant buffers in order to filter pesticides out before water reaches the watershed system.*

*It can also be helpful to provide training sessions and materials about pesticide free gardening to residents of the watershed.*

## ADDITIONAL RESOURCES

### ***Water Quality***

*Learn more about threats to Keuka Lake's water quality by visiting these websites:*

Watershed Issue Guides from the Keuka Lake Association - [www.keukalakeassociation.org/key\\_topic.php?id=1](http://www.keukalakeassociation.org/key_topic.php?id=1)

Drinking Water Treatment from the Keuka Lake Association - [www.keukalakeassociation.org/post.php?id=10](http://www.keukalakeassociation.org/post.php?id=10)

### ***Invasive Species***

*Learn more about the invasive species that threaten the water quality of Keuka Lake by visiting these websites:*

Invasive Species Article - [www.keukalakeassociation.org/pdf/post/pdf106\\_pdf.pdf](http://www.keukalakeassociation.org/pdf/post/pdf106_pdf.pdf)

New York Invasive Species Clearinghouse - [nyis.info](http://nyis.info)

Identification Guide - [www.extendondaga.org/wp-content/uploads/2013/04/Reduced-Size-Cropped-Weeds-Watch-Out-2013.pdf](http://www.extendondaga.org/wp-content/uploads/2013/04/Reduced-Size-Cropped-Weeds-Watch-Out-2013.pdf)

### ***Stream Setbacks***

*Learn more about using stream setbacks and buffer plantings to preserve water quality by visiting these websites:*

Aquatic Buffers Info. - [water.epa.gov/polwaste/nps/buffers.cfm](http://water.epa.gov/polwaste/nps/buffers.cfm)

Model Ordinance - [water.epa.gov/polwaste/nps/mol1.cfm](http://water.epa.gov/polwaste/nps/mol1.cfm)

### ***Pesticides and Fertilizers***

*Learn more about how to minimize pesticide and fertilizer pollution while carrying for your lawn by visiting these websites:*

Lawn Care Guide from the Keuka Lake Association - [www.keukalakeassociation.org/post.php?id=42](http://www.keukalakeassociation.org/post.php?id=42)

### ***Watershed Information***

Watershed Plans: Protecting and Restoring Water Quality from NYS Department of State - [www.youtube.com/watch?v=gTqfVN3MfQ](http://www.youtube.com/watch?v=gTqfVN3MfQ)

Watershed information from the EPA - [water.epa.gov/type/watersheds/index.cfm](http://water.epa.gov/type/watersheds/index.cfm)

Canandaigua Lake Report - [www.fllt.org/linkfiles/cndgareport.pdf](http://www.fllt.org/linkfiles/cndgareport.pdf)

Seneca Lake Watershed Management Plan - [www.gflrpc.org/Publications/SenecaLakeWMP.htm](http://www.gflrpc.org/Publications/SenecaLakeWMP.htm)

*For more information, or to fill out our survey, visit [www.sustainablekeuka.net](http://www.sustainablekeuka.net)*

*This project was prepared for the New York Department of State with funds provided under Title 11 of the Environmental Protection Fund.*