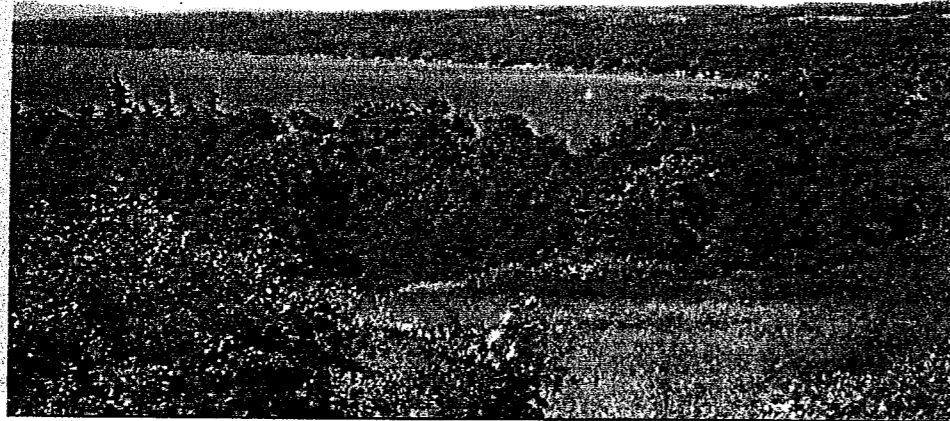


January 25, 2005  
Belhurst Castle  
Route 14 South  
Geneva, NY

January 26, 2005  
Esperanza Mansion  
3456 Route 54A  
Penn Yan, NY

# **TRAINING HANDBOOK**

CERTIFIED  
ONSITE WASTEWATER  
INSTALLER  
2005



## **CERTIFIED ONSITE WASTEWATER INSTALLER**

### **TRAINING PROGRAM**

#### **TRAINING PROGRAM**

KEUKA WATERSHED  
IMPROVEMENT  
COOPERATIVE  
1 Keuka Business Park  
Penn Yan, NY 14527

Phone: 315-536-0917  
Fax: 315-536-2389

&

SENECA LAKE PURE  
WATERS ASSOCIATION  
601 S. Main Street  
Geneva, NY 14456

Phone: 315-781-4398  
Fax: 315-781-4399  
Email: slwpa@eznet.net



# PULTENEY

William A. Weber  
Town Supervisor  
PO Box 214  
Pulteney, NY 14874

Phone: 607-868-4222  
Fax: 607-868-4010  
Cell: 607-738-1547

KEUKA LAKE

MEMO TO THE TOWN BOARD

CC: Town Clerk

18 JAN 2005

SUBJECT: QUESTIONS POSED AT THE LAST BOARD MEETING RE KWIC

1) The flyer sent out for training at Esperanza or Belhurst Castle.

KWIC apologizes for the tardiness of the announcement and with 8-10 places available at each location, the attendance looks to be good with no one being left out.

Whilst the training is not mandatory, the advantage to each waste water contractor is that he can hold himself out to his customers as being trained in the latest State approved waste water system construction techniques. There is no required certification envisioned by KWIC, but the manager feels it is something the State Dept of Health is planning on and will probably charge up to \$200 for training done by them at some time in the future. The course he is offering is free and will put local contractors at the head of the curve.

2) Release of liability on certain systems

In the case of a system approved by KWIC, either engineered or not, there are some cases where certain part 75A conditions cannot be met, such as distance from a watercourse. In the case cited at the meeting, an aerobic system in Urbana was in compliance in all respects, but the distance from the Lake. The State has recommended, and Schuyler County has implemented, a hold harmless statement for the Engineer or designer so that the homeowner recognizes that the system is not in full compliance with all aspects of the Code. It appears that the Dept. of Health will be requiring this type of statement for well designed systems that have setback and similar non-functional problems.

I attach herewith the document currently in use in Schuyler County.

3) Waivered systems

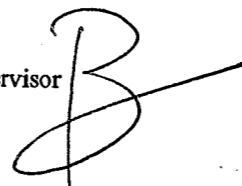
KWIC currently enjoys four system designs for new and remedial systems that do not require approval beyond KWIC. They are generically designed to enable an Engineer to apply them to an application deemed favorable by the KWIC manager based on his soil samples and deep hole tests. So that in difficult soil conditions, the homeowner can save time and money by having his Engineer apply the waived designs to the particular case at hand. I will distribute the drawings of these system designs to Inspector Lauren Welch for distribution to contractors and homeowners. Bear in mind, these waivers run only to KWIC and the Manager will decide the applicability based on the soil conditions at each proposed site.

I know the above comments may not have answered all the questions posed on 12 Jan, but I thought it best to attempt to supply as much information as possible as we start the New Year with a new watershed inspector.

enclosure

CC; Robert Reed  
Lauren Welch  
Paul Bauter  
J. Leyden, Esq.

Bill Weber, Supervisor



SCHUYLER COUNTY WATERSHED

PROTECTION AGENCY

105 NINTH STREET,  
UNIT 18 WATKINS GLEN, NY 14891  
PHONE: (607) 535-8125  
FAX: (607) 535-8128

JAMES D. HOWELL- DIRECTOR  
CHRISTOPHER J. CONLEY-  
Watershed Assistant



RELEASE OF LIABILITY

The applicant agrees that the County of Schuyler and its employees shall not be liable to the owner or any other person for any act or omission of any employee of the County Watershed Protection Agency and agrees to hold the County of Schuyler free and harmless for any failure of the sewage system or for liability that may occur including, but not limited to, the contamination of any surface or ground water supplies used for drinking or any other purposes, as a result of the design, construction and operation of the sewage system applied for in this application. The applicant has the option of retaining a professional engineer of his choice to design the sewage system being considered in this application. The applicant, in executing this application, has elected to adopt the sewage system design and has decided not to consult or have the same designed or reviewed by his engineer. On December 1, 1990 the State Health Department changed the rules and regulations governing individual sewage disposal systems. In some cases, particularly with replacement sewage systems, it may be impossible to comply with these new rules and regulations. In these cases, the County Watershed Protection Agency will attempt to issue a construction permit which will reflect a sensible design within the lot restrictions and/or funds available.

IN WITNESS WHEREOF, the parties to this agreement have hereunto set their hands and seals the day and year first above written

\_\_\_\_\_  
WITNESS  
STATE OF NEW YORK  
COUNTY OF SCHUYLER

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, the subscribing witness to the foregoing Instrument, with whom I am personally acquainted, who being by me duly sworn, did depose and say that he resides at \_\_\_\_\_, and that he knows \_\_\_\_\_, to be the individuals described in, and who executed the foregoing Instrument, that he, said subscribing witness, was present and saw them execute the same; and that he, said witness, at the same time, subscribed his name as witness thereto.

\_\_\_\_\_  
Notary Public

INDIVIDUAL WAIVER

From Requirements of Schuyler County Watershed Protection Law  
For Individual Household Sewage Disposal Systems

GENERAL INFORMATION (Applicant Complete)

Name of Applicant: \_\_\_\_\_  
Last Name First M.I.

Address: \_\_\_\_\_  
No. Street City/Town State Zip

Site Location: \_\_\_\_\_  
No. Street City/Town County Zip

(Applicant - Do not write below this line)

1. REASON WHY SITE DOES NOT MEET PART 75 OF NYS SANITARY CODE: (check appropriate lines)

- Separation distance cannot be achieved.
- Excessive slope.
- High groundwater.
- Inadequate depth to bedrock or impermeable layer.
- Soil unsuitable.
- Other (explain) \_\_\_\_\_

2. PROPOSED DESIGN OR CONDITIONS OF WAIVER:

3. THE PROPOSED DESIGN MAY HAVE THE FOLLOWING LIMITATIONS: (check appropriate lines.)

- Increased risk of well or spring contamination.
- Increased risk of surface water contamination.
- Increased risk of inadequately treated sewage on the ground surface.
- Expected design life of the system will be diminished.
- Operation of sewage system is subject to mechanical problems.
- Other (explain) \_\_\_\_\_

Additional Information Attached \_\_\_\_\_

Construction pursuant to this waiver request should not pose any foreseeable health or environmental problems. In accordance with the Schuyler County Watershed Protection Law a waiver is hereby granted. This waiver may be revoked by the issuing official for a change in conditions for which this waiver was granted.

James D. Howell  
Watershed Inspection

Applicant \_\_\_\_\_

# PULTENEY

William A. Weber  
Town Supervisor  
PO Box 214  
Pulteney, NY 14874

Phone: 607-868-4222  
Fax: 607-868-4010  
Cell: 607-738-1547

KEUKA LAKE

MEMO TO TOWN BOARD

CC: Town Clerk  
Lauren Welch  
Bob Reed

9 Feb, 2005

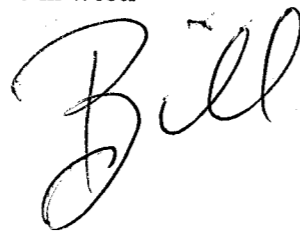
Subject: VARIOUS KWIC ITEMS

At the last Town Board Mtg, a variety of questions were asked and I have previously answered some of them. I attach herewith some additional documents/information:

- 1) The Attendance list for the Belhurst and Esperanza training sessions
- 2) A news clip on the training sessions
- 3) A new waste water permit application that is still under review by KWIC---your comments will be welcome
- 4) A proposed KWIC permit process flow chart
- 5) A Release of Liability form for use when a system is compliant in all respects except for separation distances and some other requirements that do not affect the operation, but represent hardships in the design/construction of a waste water disposal system
- 6) A letter from NYS DOH granting KWIC waivers for different types of systems that can be approved by the KWIC manager without further approvals from DOH. Any licensed professional can use these generic designs and save the homeowner quite a bit of money.
- 7) The KWIC 2005 budget and the latest inspection/activity report.
- 8) An article from Talk of the Town regarding KWIC
- 9) The cover from the book used in the training course

enclosures

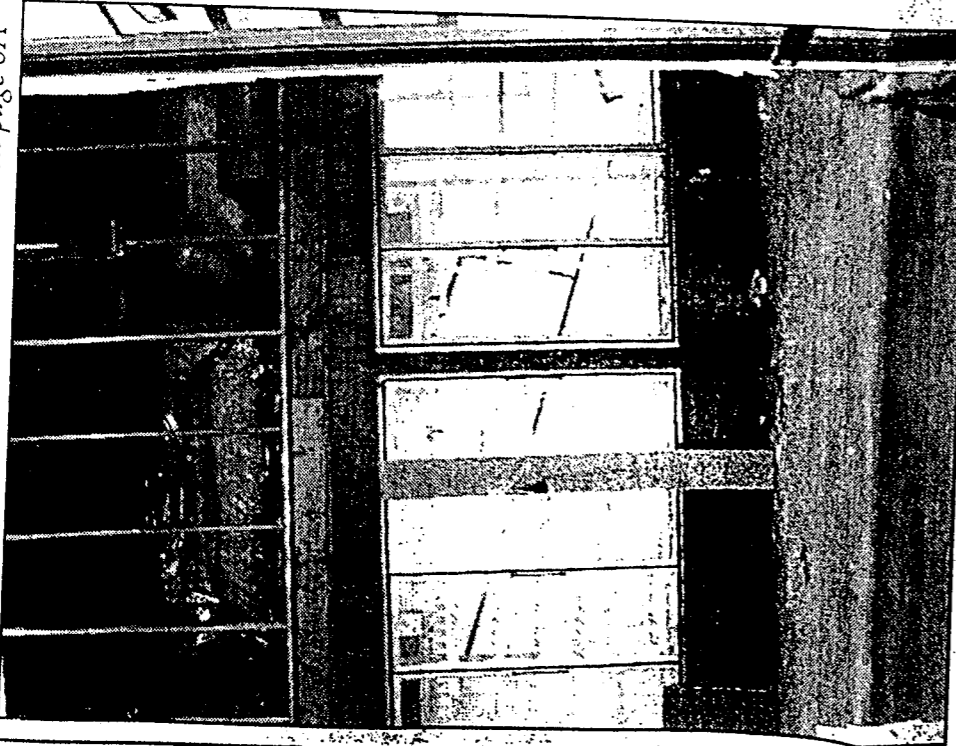
Bill Weber



Under the proposed amendments, the only areas where adult entertainment would be allowed are a site at

entertainment. He explained the law can be challenged as being too restrictive

continued on page 8A



Work is progressing at Morgan's Grocery. Drywallers should be finished by the end of this week. The next step will be painting the walls and doing the floors. Bruce Morgan and his staff are hopeful they will be able to re-open the last week of August. The coolers in the picture are the original ones and do not appear to have been damaged in the fire.

## Village skate park

Photo by Connie Murphy

an open house in her honor Friday afternoon at the First Baptist Church. Joining her was Onnolee Mallory (!) who was celebrating her 99th birthday.

## KWIC's authority affirmed by state

By DOUGLAS ROBB

**THE CHRONICLE-EXPRESS**  
**PENNYAN** — The Keuka Watershed Improvement Cooperative (KWIC) is an inter-municipal agreement between eight municipalities: Barrington, Hammondsport, Jerusalem, Penn Yan, Pulteney, Urbana and Wayne. KWIC provides comprehensive planning for uniform regulation of wastewater (septic) management and assists with uniform enforcement of those regulations within the eight participating municipalities.

Recently, KWIC's authority was challenged by Steven and Robin Dillon, Denise Smith and Richard and Sandra Niles. The Niles became involved when they decided to tear down a 3-bedroom cottage and replace it with a 3-bedroom permanent home.

According to Paul Bauter, Watershed Manager for KWIC, KWIC's position is "When you tear down and replace a structure you must meet current standards. If a licensed professional engineer or architect hired by the homeowner can prove the exist-

ing septic system meets all standards it can be utilized. If the homeowner cannot prove it meets the standards it must be replaced."

The Niles challenged the NY State Building Code requirement. In a decision dated June 13, 2003, the Western Region Board of Review found in favor of Niles. The Niles then filed claims with each of the eight KWIC municipalities for \$25,000 in damages. The insurance companies for the municipalities settled the claim for \$10,000. According to Niles he received two checks totaling \$10,000.

On March 16, 2004, Cheryl A. Fisher, P.E., Assistant Director of Code Interpretation, Codes Division, NY State Department of State, in reply to a letter from Paul Bauter, stated that the [Review] board's decisions are meaningless because the board had no jurisdiction. KWIC operates under land use regulations (zoning laws) which refer to and include parts of the building codes. However, in cases where there

continued on page 8A

unteer Program and Literacy Volunteers.

But probably her greatest influence has been as a teacher at Penn Yan Academy. She taught English for many years, spanning at least two generations of students. She also helped with school plays and class dances.

Jack Clancy made two presentations at the open house. He admitted he was a little nervous about one of them—a card from the White House. "I've heard you're not fond of the current resident," he said. To which Mrs. Pond shook her head in agreement and, laughing, said she has lived through a lot of presidents.

The second was a citation from the New York Legislature, courtesy of Randy Kuhl and Jim Bacalles, recognizing the importance of the occasion.

Mrs. Pond, in her gracious way, chose to share her special day with long-time friend, Onnolee Mallory, who was celebrating her 99th birthday that day. The two sat side by side, greeting friends and sharing reminiscences.

The love, respect and affection of the community for Mrs. Pond was evident during the afternoon. It was an honor to wish her happy birthday.

## Breakfast proceeds benefit

continued on page 8A

continued from page 1A

is a conflict between local regulations and the building codes, the more stringent regulation applies. Therefore, Fisher found, "The code enforcement official was working correctly in his capacity as the local government official enforcing the KWIC regulations."

Since that time the NY State Department of Health (NYS DOH) in cooperation with the NY State Department of Education has weighed in on the issue. The NYS DOH recently circulated a factsheet defining how municipal Code Enforcement Officers (COE) should administer the approval of new residential wastewater treatment systems or major repairs to existing systems. The fact sheet recommends all such construction or repair work be certified by a registered professional engineer. This is exactly what KWIC required of the Niles.

Several questions remain. Milo Town Clerk Patricia Christensen and Village of Penn Yan Clerk Linda K. Bannach confirmed they have not yet paid any money to their insurance company. All eight municipalities are taking the position the insurance companies did not consult with them before settling the suit, and therefore they are not bound by it. Since the NY State Division of Codes has repudiated the decision of the Western Regional Board it is possible the insurance companies could decide to seek legal action to obtain the return of all payments made to the Niles. The important issue is

KWIC's authority "to provide comprehensive planning for uniform regulation of wastewater (septic) management and assist with uniform enforcement of those regulations" has been affirmed.

KWIC is active in other areas as well. It responds to problems and has the ability to develop model ordinances and recommendations for the municipalities to protect lake water quality. The KWIC may also determine if other methods, such as educational programs, are needed.

The KWIC is staffed by a Watershed Program Manager, Paul Bauter. He is the supervisor for the local wa-

tershed inspectors who are hired by each of the participating municipalities. Each municipality participating in the KWIC is responsible for hiring a watershed inspector who will perform inspection of on-site sanitary systems and investigate complaints that arise in the watershed.

All municipalities bordering the lake have formulated and adopted a uniform septic system construction and management law. Important features of the law include: a requirement that all septic systems be constructed according to specifications outlined in a construction permit; that NYS sanitary code standards be followed for replacement and repair work as well as new construction activities; that inspection of septic systems be performed by the local watershed inspector as part of property transfers, complaints and building construction; and that routinely scheduled inspections are required of all holding tanks, aerobic treatment systems, and all sites within 200 feet of the lake or its tributaries.

These inspections are intended to assure that those systems with the greatest potential to impact the lake through failure or mismanagement are upgraded or improved as necessary, and managed in an effective manner.

Oversight and policy for the program is carried out by a board of directors consisting of one elected official from the municipalities of Barrington, Jerusalem, Hammondsport, Milo, Penn Yan, Pulteney, Urbana and Wayne.

taker. He will retire Aug. 27, after 14 years in the position. Deputy Mayor Willie Allison praised Trenchard for doing a wonderful job.

Dan Doyle, recreation director, gave a report on playground activity this summer. He said attendance has doubled, with approximately 25 to 30 children at each park.

Norm Koek raised the issue of increased vandalism at the skate park (see related story). If it does not stop, he warned the skate park will be closed down.

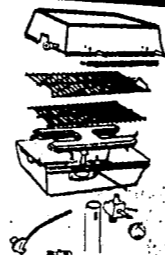
Penn Yan Fire Chief Kevin Pallar presented the 2004 report on fire department activities through July 26. There were a total of 140 fire calls, 26 medical/rescue calls and 147 miscellaneous activities, such as drills, training, fundraising, parades, work details and funerals. A total of 3,457 volunteer manhours was expended.

Trustees reviewed a usage report on the Jepsen Community Athletic Complex. Keuka College used the facility 65 percent of the time (886 hours), Village of Penn Yan used it 24 percent (337 hours) and the Penn Yan School District used it 11 percent (147.5 hours).

Although there were no scheduling problems this year, construction at the high school will force the district to use the athletic complex more

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**WASTEWATER TREATMENT SYSTEM APPLICATION  
CONSTRUCTION PERMIT & INSPECTION SHEET  
Keuka Watershed Improvement Cooperative  
1 Keuka Business Park, Penn Yan, NY 14527 (315)536-0917**

This application is being made for a permit to construct, repair, inspect or reconstruct a wastewater treatment system at the property described below. Please provide all applicable information indicated, if possible. Applicants are advised that construction, repair, inspection, or replacement of wastewater treatment systems are subject to regulation by the wastewater treatment laws of the municipalities of Barrington, Hammondsport, Jerusalem, Milo, Penn Yan, Pulteney, Urbana, and Wayne and their mutual agreement in the Keuka Watershed Improvement Cooperative as well as the New York State Public Health Law.

*(Please type or print)*

**Property and Owner Identification**

Tax parcel identification number \_\_\_\_\_ Town \_\_\_\_\_  
Property address \_\_\_\_\_  
Property owner \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone number \_\_\_\_\_  
\_\_\_\_\_ Existing structure \_\_\_\_\_ new or reconstructed

**Action Request Information**

Action requested by \_\_\_\_\_ Affiliation \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone number \_\_\_\_\_  
Action \_\_\_\_\_ Construction Permit \_\_\_\_\_ Inspection \_\_\_\_\_ Tank Replacement  
Request date of action (give two or three) \_\_\_\_\_  
Purpose of request: \_\_\_\_\_ property transfer \_\_\_\_\_ request \_\_\_\_\_ malfunction \_\_\_\_\_ repair  
\_\_\_\_\_ Construction \_\_\_\_\_ other (please describe) \_\_\_\_\_  
Fee \$ \_\_\_\_\_ to be paid by \_\_\_\_\_

*\* Payment is due on site visit or before*

**Household Information**

\_\_\_\_\_ Owner/occupied \_\_\_\_\_ rental \_\_\_\_\_ vacant land Lot size < 1 acre or > 1 acre  
\_\_\_\_\_ Full time \_\_\_\_\_ seasonal ..... If seasonal, # weeks per year: \_\_\_\_\_  
Last know date occupancy: \_\_\_\_\_ Number of occupants: \_\_\_\_\_  
Age of home: \_\_\_\_\_ yrs. Total square footage: \_\_\_\_\_ # of bathrooms: \_\_\_\_\_  
# Of bedrooms: \_\_\_\_\_ Water-saving fixtures? \_\_\_ yes \_\_\_ no  
Home business or hobby? (e.g. daycare, salon etc.) \_\_\_ yes \_\_\_ no  
Type \_\_\_\_\_  
Number of employees \_\_\_\_\_ Seating capacity \_\_\_\_\_  
Regularly use medications? (e.g. chemotherapy, dialysis): \_\_\_ yes \_\_\_ no  
Are there any wells on the property? \_\_\_ yes \_\_\_ no How many? \_\_\_\_\_  
Household fresh water source: \_\_\_ public \_\_\_ well(s); \_\_\_ spring(s); \_\_\_ other  
List all public or private buried utilities or structures on property: (gas, electric, phone, etc)  
\_\_\_\_\_  
Is there a well on additional property within 200 feet \_\_\_ yes \_\_\_ no  
Is the foundation a full basement \_\_\_\_\_ partial basement \_\_\_\_\_ crawl space \_\_\_\_\_ slab \_\_\_\_\_

over



**Onsite Wastewater Treatment System (s)**

How many systems are on the property? \_\_\_\_\_ Year system(s) installed \_\_\_\_\_

Tank \_\_\_\_\_ Absorption system \_\_\_\_\_

Are all components wholly within the property boundaries? \_\_\_ yes \_\_\_ no

Are system plans available? \_\_\_ yes \_\_\_ no Does system(s) serve multiple properties \_\_\_ yes \_\_\_ no

If yes, describe \_\_\_\_\_

**Maintenance**

Service agreement? \_\_\_ Yes \_\_\_ no If yes, vendor name \_\_\_\_\_

Date of last inspection \_\_\_\_\_; N/A \_\_\_\_\_ Date tank last pumped \_\_\_\_\_ N/A \_\_\_\_\_

Frequency of pumping \_\_\_\_\_; N/A \_\_\_\_\_

List known repairs/replacements, with dates:

Date \_\_\_\_\_ Type of Repair/Replacement \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Operation**

- System problems? \_\_\_ yes \_\_\_ no Sewage odors? \_\_\_ yes \_\_\_ no
- Direct surface discharge? \_\_\_ yes \_\_\_ no Back-up toilets or fixtures? \_\_\_ yes \_\_\_ no
- Slow drains? \_\_\_ yes \_\_\_ no Seasonal ponding or breakout \_\_\_ yes \_\_\_ no

**Statement of Acceptance of Conditions**

- I agree to:
- ✓ Ensure that the septic tank(s), distribution box(es), and/or seepage pit(s), if any, will be uncovered prior to the requested inspection time
  - ✓ Have a septage hauler on site (to pump the tank after\* the inspector arrives) inspector shall see tank pumped
  - ✓ Have an authorized representative present at the site to provide access to home for inspection or interior pipes.
  - ✓ Allow the inspector to verify information provided above, and to conduct an inspection of the indicated onsite wastewater treatment system(s), including all system components, and interior and exterior plumbing.
  - ✓ Applicants may accept a plan developed through consultation with the Keuka Watershed Improvement Cooperative or choose to present a design prepared by a licensed professional engineer. In some circumstances, the applicant will be required to submit an engineer's design. The applicant agrees that the Keuka Watershed Improvement Cooperative, its officers, employees and agents shall not be liable for any act or omission, and shall hold KWIC, its officers, employees or agents free and harmless for any failure of the wastewater treatment system including, but not limited to, contamination of surface or ground water supplies, as a result of the plan, construction and operation of the wastewater treatment system permitted by the Keuka Watershed Improvement Cooperative. On some sites where a building or dwelling is already present, it may be impossible to meet current sanitary code standards intended to safe guard public health and water quality. Where this is the case, the wastewater treatment system plan must reflect best available technology for wastewater treatment and prevention of public health hazards.

To the best of my knowledge, the information provided above is accurate. I agree to be responsible for fee payment.

**Signature of property owner or authorized agent:**

Please print name: \_\_\_\_\_

Affiliation: \_\_\_\_\_ owner \_\_\_\_\_ agent,

Signature: \_\_\_\_\_ Date \_\_\_\_\_

**Onsite Wastewater Treatment System (s)**

How many systems are on the property? \_\_\_\_\_ Year system(s) installed \_\_\_\_\_  
Tank \_\_\_\_\_ Absorption system \_\_\_\_\_

Are all components wholly within the property boundaries?  yes  no

Are system plans available?  yes  no Does system(s) serve multiple properties  yes  no

If yes, describe \_\_\_\_\_

**Maintenance**  
Service agreement?  Yes  no If yes, vendor name \_\_\_\_\_

Date of last inspection \_\_\_\_\_; N/A \_\_\_\_\_ Date tank last pumped \_\_\_\_\_ N/A \_\_\_\_\_

Frequency of pumping \_\_\_\_\_; N/A \_\_\_\_\_  
List known repairs/replacements, with dates:

| Date  | Type of Repair/Replacement |
|-------|----------------------------|
| _____ | _____                      |
| _____ | _____                      |
| _____ | _____                      |

**Operation**

- > System problems?  yes  no
- > Direct surface discharge?  yes  no
- > Slow drains?  yes  no
- Sewage odors?  yes  no
- Back-up toilets or fixtures?  yes  no
- Seasonal ponding or breakout  yes  no

**Statement of Acceptance of Conditions**

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Signature of property owner or authorized agent: \_\_\_\_\_  
Please print name: \_\_\_\_\_  
Affiliation: \_\_\_\_\_ owner \_\_\_\_\_ agent, \_\_\_\_\_

Signature: \_\_\_\_\_ Date \_\_\_\_\_



Keuka Watershed Improvement Cooperative  
 1 Keuka Business Park  
 Suite 205  
 Penn Yan, NY 14527  
 Phone: 315-536-0917  
 Fax: 315-536-2389

Paul R. Bauter  
 Watershed Manager

**RELEASE OF LIABILITY**

The applicant agrees that the Keuka Watershed Improvement Cooperative, the KWIC employees, and its contracted agents, shall not be liable to the owner or any other person for any act or omission of any employee or agent of the Keuka Watershed Improvement Cooperative and agrees to hold the Keuka Watershed Improvement Cooperative and its agents free and harmless for any failure of the onsite wastewater treatment system or for liability that may occur including, but not limited to, the contamination of any surface or ground water supplies used for drinking or any other purposes, as a result of the design, construction and operation of the onsite wastewater treatment system applied for in this application. The applicant has the option of retaining a professional engineer of his choice to design the onsite wastewater treatment system being considered in this application. The applicant, in executing this application, has elected to adopt the onsite wastewater treatment system design and has decided not to consult or have the same designed or reviewed by his engineer. On December 1, 1990 the State Health Department changed the rules and regulations governing individual onsite wastewater treatment disposal systems. In some cases, particularly with replacement systems, it may be impossible to comply with these new rules and regulations. In these cases the Keuka Watershed Improvement Cooperative will attempt to issue a construction permit which will reflect a sensible design within the lot restrictions and/or funds available.

IN WITNESS WHEREOF, the parties to this agreement have hereunto set their hands and seals the day and year first above written

\_\_\_\_\_  
 WITNESS

\_\_\_\_\_  
 L.S.

\_\_\_\_\_  
 L.S.

STATE OF NEW YORK

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_, the subscribing witness to the foregoing Instrument, with whom I am personally acquainted, who being by me dully sworn, did depose and say that he resides at \_\_\_\_\_ and that he knows \_\_\_\_\_, to be the individuals described in, and who executed the foregoing Instrument, that he, said subscribing witness, was present and say them execute the same; and that he, said witness, at the same time, subscribed has name as witness thereto.

\_\_\_\_\_  
 Notary Public

**INDIVIDUAL WAIVER**

From Requirements of Keuka Watershed Improvement Cooperative  
For Individual Household Sewage Disposal Systems

**GENERAL INFORMATION (Applicant Complete)**

Name of Applicant \_\_\_\_\_  
Last First MI

Address \_\_\_\_\_  
No. Street City/Town State Zip

Site Location \_\_\_\_\_  
No. Street City/Town State Zip

(Applicant - Do not write below this line)

1. Reason site does not meet part 75 of NYS Sanitary Code: (check appropriate lines)

- Separation distance cannot be achieved
- Excessive slope
- High groundwater
- Inadequate depth to bedrock or impermeable layer
- Soil unsuitable
- Other (explain) \_\_\_\_\_

2. Proposed design or conditions of waiver:

\_\_\_\_\_  
\_\_\_\_\_

3. The proposed design may have the following limitations (check appropriate lines)

- Increased risk of well or spring contamination
- Increased risk of surface water contamination
- Increased risk of inadequately treated sewage on the ground surface
- Expected design life of the system will be diminished
- Operation of onsite wastewater treatment is subject to mechanical problems
- Other (explain) \_\_\_\_\_

Additional Information Attached \_\_\_\_\_

Construction pursuant to this waiver request should not pose any foreseeable health or environmental problems. In accordance with the Keuka Watershed Improvement Cooperative, a waiver is hereby granted. This waiver may be revoked by the issuing official for a change in conditions for which this waiver was granted.

Paul R. Bauter  
Watershed Manager

Applicant \_\_\_\_\_

## Objective:

- Review water quality testing program and results for 2005

## Water Testing Program

- The Crew: Dr. Alexander Wahlig; Pete Robbins; Jim Balyszak; Jennifer Allen, Summer Intern; Peter Landre
- Monthly lake sampling, nine months per year
- NYS Certified Labs and analysis: SUNY Brockport, Cornell University, Midstate Labs

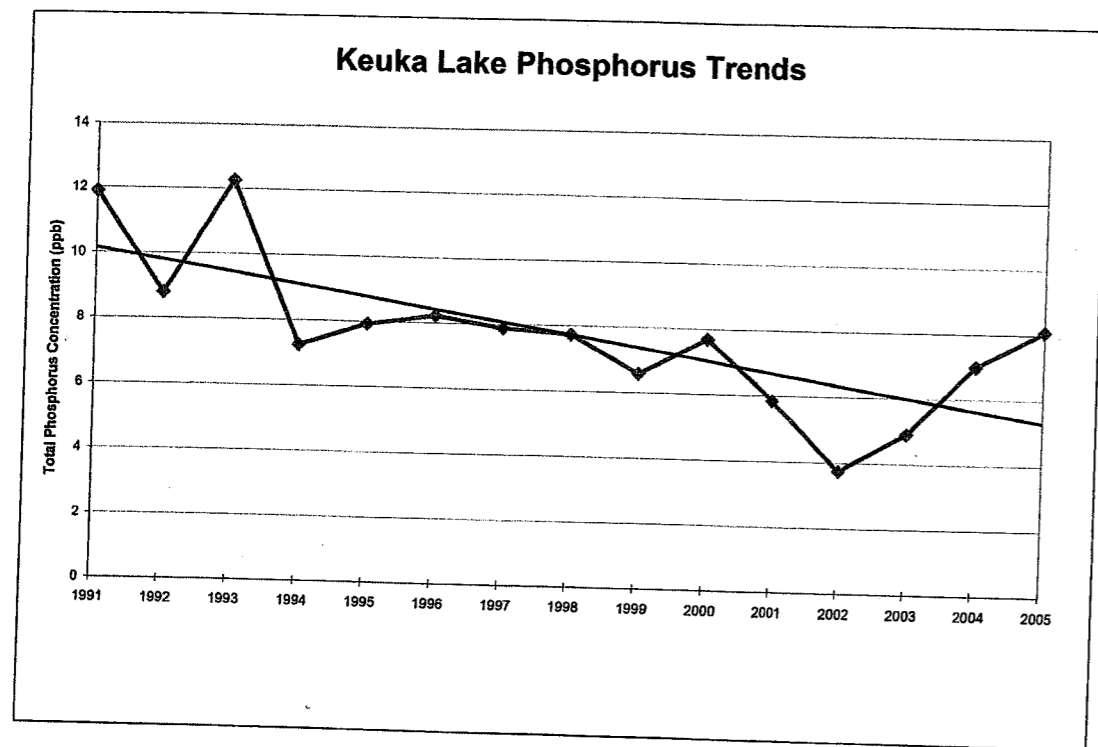


## 2005 State of Keuka Lake

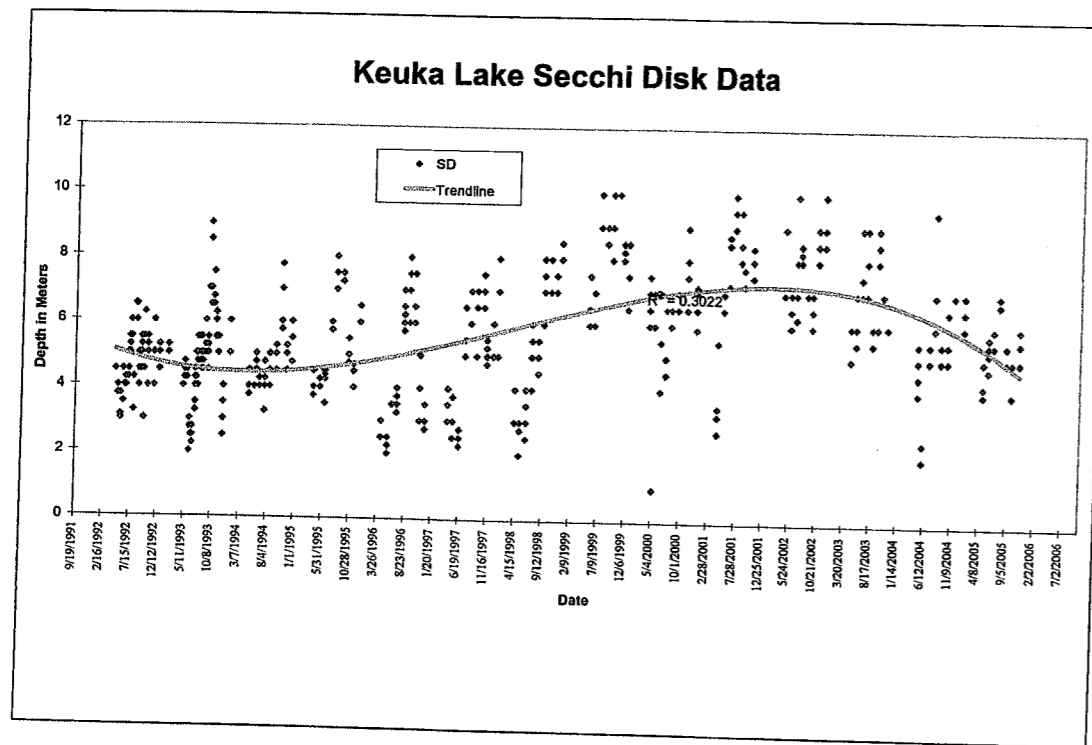
- *Nutrient levels averaged 8 ppb, up 1 ppb from 2004, near the long-term average of 7.7 ppb*
- *Water clarity averaged 5.5 m, identical to 2004 levels, and slightly below the long-term average of 5.8 meters*
- *Algae levels averaged 1.8 ppb, slightly up from 2004 (1.7 ppb), and well below the long-term average (3 ppb)*

## State of Keuka Lake

- *E. Coli and Fecal bacterial levels were very low, meeting all standards (drinking and swimming) for the lake*
- *Low densities of zebra mussel veligers*

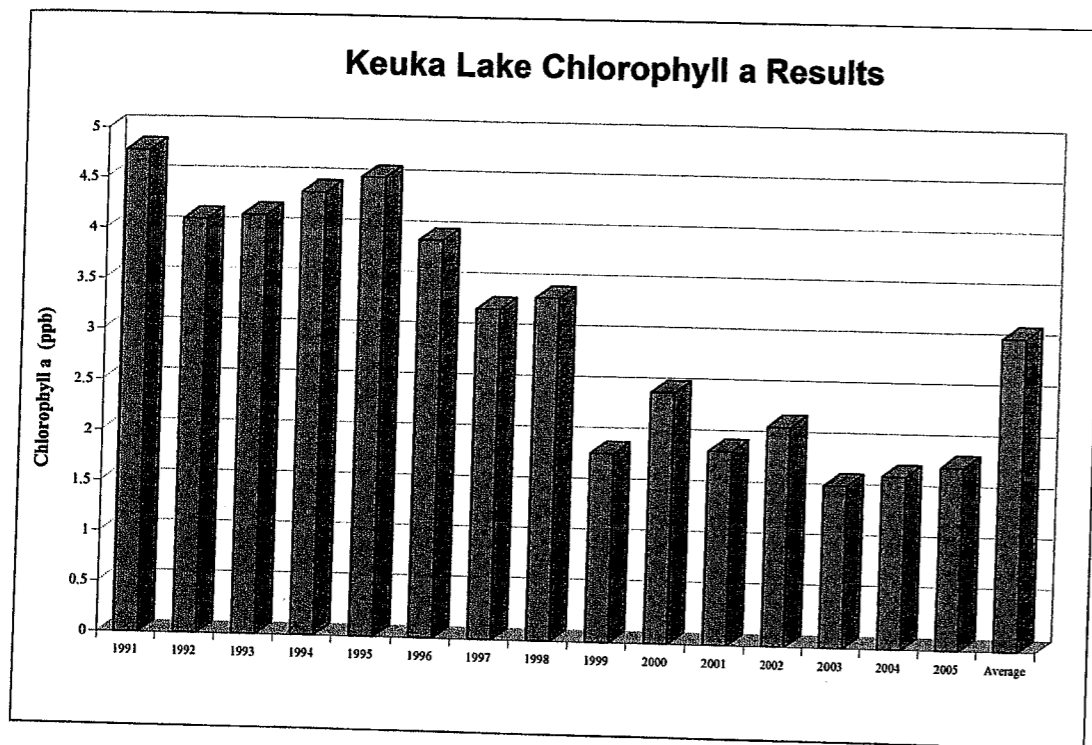


P levels continued to decline and were at historic lows

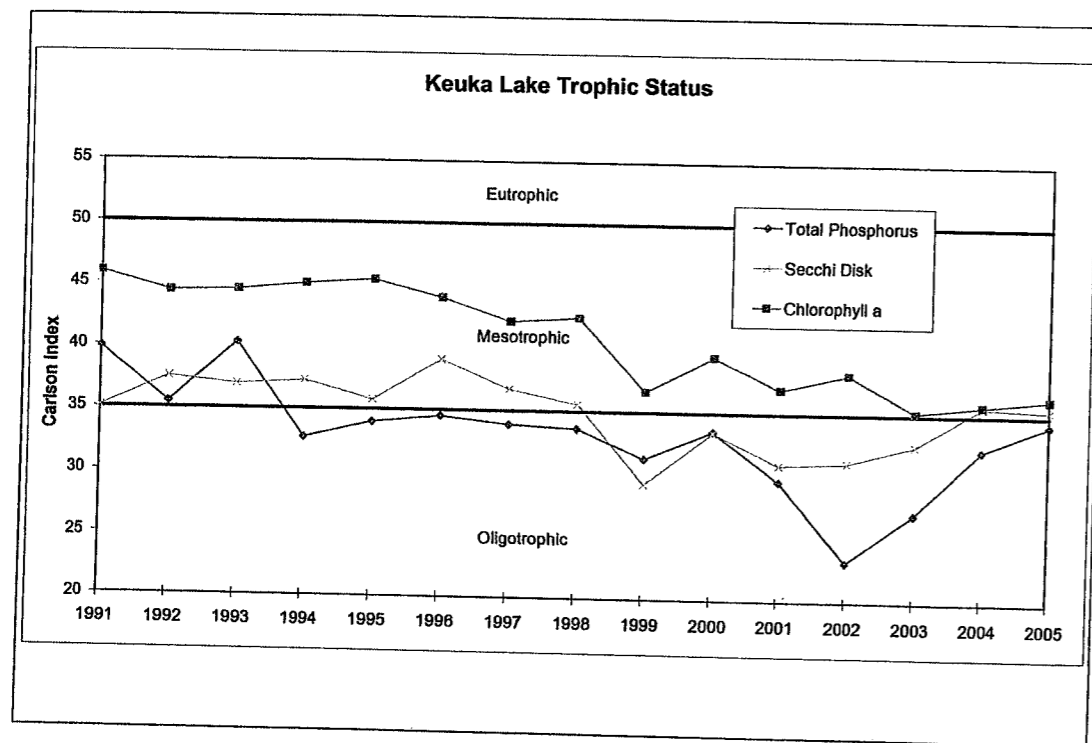


Water clarity levels were slightly lower than 2001 overall, but near the 1999 record levels. The highly clear water we see today is a direct result of zebra mussel filtration in the lake.

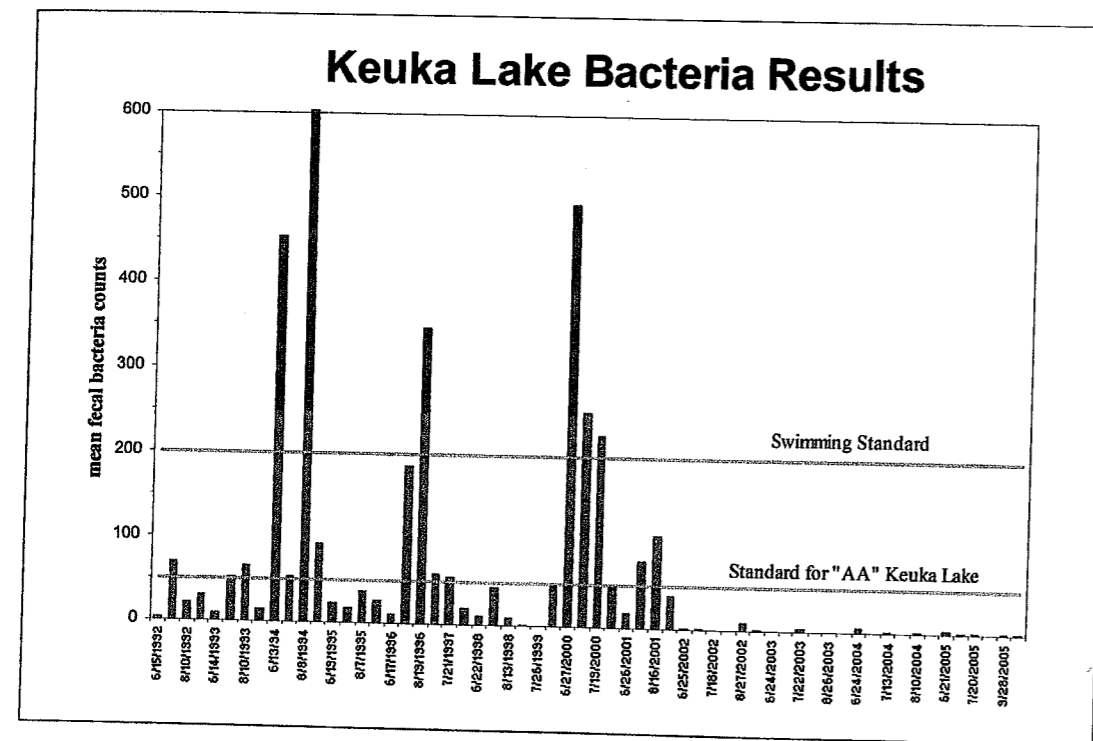




Chlorophyll levels were near record lows and nearly half the long-term average as a result of zebra mussel filtration, reduced chlorophyll levels are the reason the secchi disk levels are so high, the water so clear, this also means of course less food at the bottom of the food chain, however, if we follow Canandaigua Lakes example, the algae levels have bounced back since the zebra mussels have started to die off



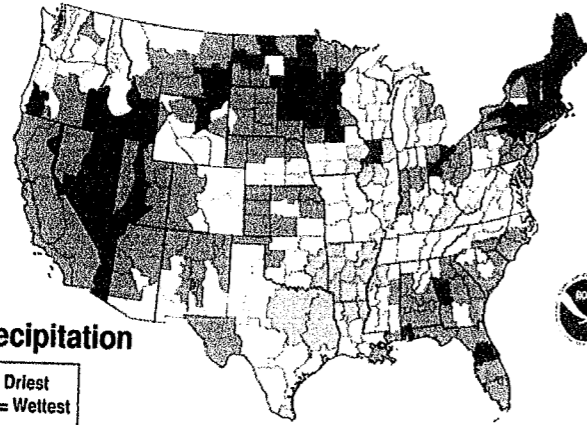
TP, secchi disk and clarity levels indicate the overall status of Keuka is oligotrophic or low nutrient status and the algae levels are at the low end of mesotrophic and approaching oligotrophic. Keuka has always had unusually high algae levels given the low nutrients levels and this has helped produce the strong lake fishery.



Bacteria levels were at all time lows in 2002, and did not spike in July and August as in previous years. We changed the protocol in 2002 to include both fecal and E. coli tests. E. coli are considered better indicators of a public health risk than are fecal bacteria tests. All test sample results in 2002 and the June run this year were all below 10 counts per 100/ml which is very good and most (73%) were 0.

# Jan - Dec 2005

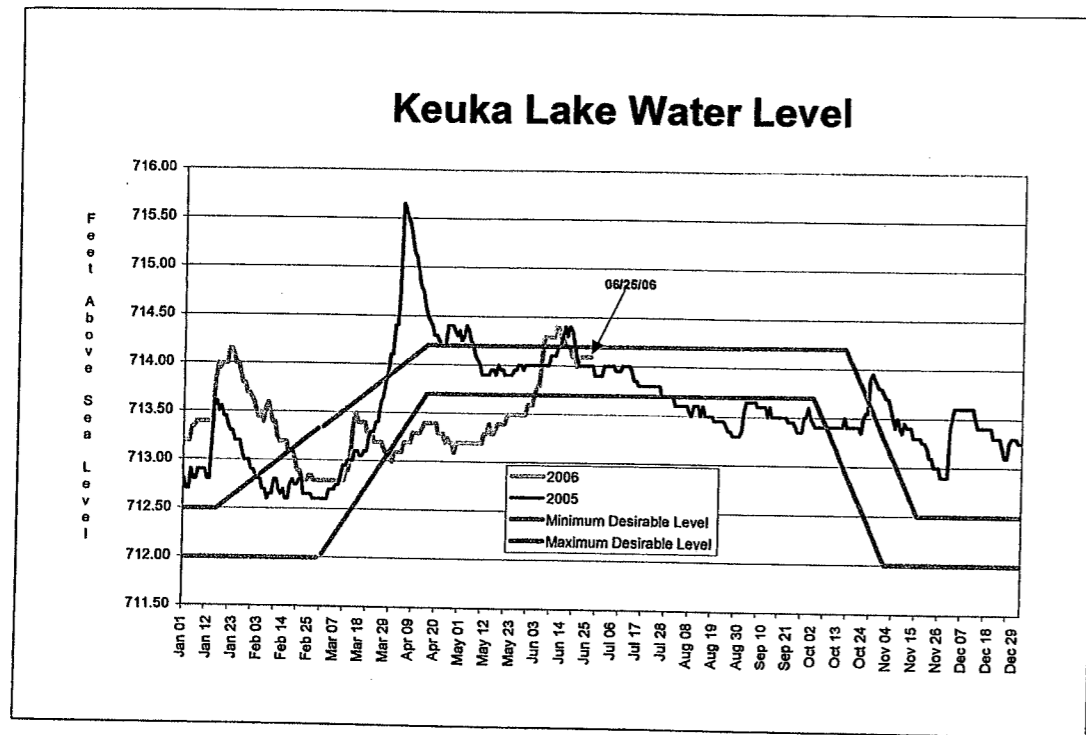
National Climatic Data Center/NESDIS/NOAA



## Precipitation

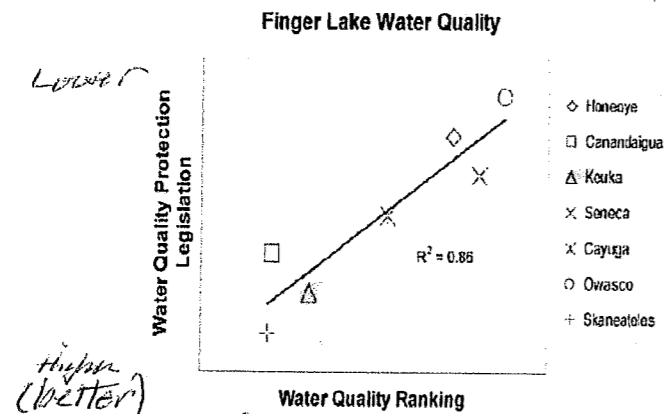
1 = Driest  
111 = Wettest





Lake Level Curve. Last summer (2002), the gates were periodically opened through June because the Lake was above the top curve. They were closed on July 8<sup>th</sup> and not opened again until December 11<sup>th</sup>. The red line indicating lake level last summer shows the effects of a very dry August and September. It's important to note that whenever docks are being installed or adjusted, the lake level at that time must be known to ensure that the dock gets installed to the proper elevation. One of the biggest complaints I get is that "when I installed my dock, the level was just right. Now the lake is too high and my dock is half under water!!". When asked what the lake level was the day the dock was installed, the owner has no idea.

# Watershed Protection



Source: Halfman and Bush, 2006.

“Whatever you do, please always remember: She is big, she is blue, she is very beautiful, and it’s the duty of each and every one of us to keep her that way.”

-Merton Plaisted  
Supervisor, Town of Wayne

**Appendix 5-B**

**Standards for Water Wells**

**(Statutory Authority: Public Health Law 206(18))**

Sec.

5-B.1 Application and Definitions

5-B.2 Water Well Location and Protection

5-B.3 Water Well Construction

5-B.4 Well Yield and Water Flow

5-B.5 Water Well Pumps: Construction, Installation, Repair and

Maintenance

5-B.6 Water Well Capping and Abandonment

5-B.7 Separability

Table 1 - Required Minimum Separation Distances to Protect Water

Wells From Contamination

Table 2 - Standards for Well Casing, Grouting, Diameter, and Screens

**Effective Date of November 23, 2005**

(2) Air lift test means a method of performing a water well yield test by pumping air through an inductor pipe to force water out of an eductor pipe. The inductor pipe is submerged to a depth generally about 60 percent below the static water level to allow for successful completion of the test. The drill pipe is utilized as the inductor pipe/air delivery mechanism and the casing and/or borehole as the eductor. The flow rate of water in gallons per minute (gpm) is determined as the water exits the top of the well. The drop of air pressure in the inductor pipe can be used to estimate the drawdown in the well.

(3) API means American Petroleum Institute.

(4) ASTM means American Society for Testing and Materials.

(5) Bailing test means a method of estimating well yield by bailing a known quantity of water from static water level and maintaining a stabilized water level over a measured period of time.

(6) Contaminant includes but is not limited to any physical, chemical, microbiological or radiological substance or matter in water that can be present at levels of public health concern.

(7) Decommissioning means the act of filling, sealing and plugging water wells in accordance with the requirements of Section 5-B.6(a) of this regulation such that the continued existence of the well will neither pose a health or safety hazard nor serve as a conduit for contaminant migration to or within the aquifer.

(8) Department means the New York State Department of Health.

(9) Drive shoe means a beveled cutting edge attachment to the bottom of the first section of permanent steel casing to protect the casing as it is being driven and to provide firm seating in consolidated geologic materials.

(10) gpm means gallons per minute.



(20) SDR means "standard dimension ratio" which means the ratio of average outside pipe diameter to minimum pipe wall thickness.

(21) Stabilized water level occurs when water in a well has achieved steady state during a period of constant rate withdrawal of groundwater (i.e. stabilized drawdown).

(22) Static water level is the natural water level in a well not being pumped or in a well fully recovered after pumping, as measured from the top of the well casing or the ground surface.

(23) UL means Underwriters Laboratories.

(24) USDA means the United States Department of Agriculture.

(25) USFDA means the United States Food and Drug Administration.

(26) Water well (well) shall mean any excavation for the purpose of obtaining ground water for drinking, culinary and/or food processing purposes, with installed components (including well casing, screen, grout, adapters, et. al.).

(27) Water well drilling or water well drilling activities shall mean the construction or reconstruction of water wells, the establishment or repair of a connection through the well casing and the repair of water wells including repairs which require the opening of the well casing.

(28) Well casing means watertight, non-porous material used to maintain a well opening and provide access to the interior of the well.

(29) Well development or redevelopment of a water well means actions to remove clay, silt, fine sand and/or organic/inorganic deposits from the aquifer and/or gravel packing to increase porosity and permeability of the aquifer formation and to minimize continued pumping of clay, silt and fine sand while obtaining water without