

Permit.

§15. HOLDING TANKS

(A) Holding tanks are allowed for replacement systems only and must be approved by the regulatory officer.

(B) Newly installed holding tanks shall: 1) be vehicle accessible; 2) have an access port above grade not to exceed 8" in diameter; 3) have a capacity of four days storage based upon design flow of 150 gallons/bedroom/day; 4) have an audio or visual float alarm; and 5) have anchoring devices for areas where seasonal high water table are evident from soil investigations.

(C) All holding tanks shall be inspected by the regulatory officer on an annual basis at the time of pumping. Homeowners shall give the regulatory officer 48 hours notice prior to the inspection date.

(D) All existing holding tanks shall be equipped with an acceptable alarm device to alert the property owner that the tank is filled within 12 inches of the inlet pipe.

(E) Holding tanks shall be pumped by a New York State licensed septic tank pumping contractor when the tank is a minimum of 12" of the inlet pipe and documentation shall be sent to the Keuka Watershed Improvement Commission annually by the contractor.

§16. AEROBIC TANKS

(A) Only Class I aerobic tanks are acceptable for new or replacement systems and must be approved by the regulatory officer. For both new and replacement systems, aerobic tanks are considered a septic tank substitute and must be used in conjunction with a properly sited and designed filtration and/or absorption area approved by the regulatory officer. A permit from the DEC and a SPDES permit are required for surface discharge.

(B) A visual and audio warning device shall be installed in a conspicuous location so that activation of such warning device will alert property occupants of aerobic unit malfunction or failure. All warning devices shall be wired separately from the aerobic unit so that disconnecting the aerobic unit from electricity will activate the warning device.

(C) All aerobic tanks shall be wired and constructed so that electrical disconnection of the aerobic tank will result in closure in the sewer line and eventual system back-up.

(D) All aerobic tanks must have a continuous maintenance contract agreement with an authorized service contractor. Each aerobic unit shall be inspected at least two times a year by an authorized service contractor. All service contracts must be sent to the Watershed Department annually to verify that a continuous

contract exists for the aerobic tank. The service contractor shall have aerobic unit effluent tested by a certified laboratory to determine that the unit conforms with manufacturer's treatment specifications as required by the regulatory officer.

§17. PENALTIES

(A) Written Notice of Violation shall be issued to any property owner with a wastewater disposal system found in violation of these rules and regulations, stating the date(s) by which corrective action shall be completed. Any violation beyond that date shall be punishable by a fine not to exceed \$250 and/or imprisonment not to exceed 15 days per day of violation.

(B) Each week of violation shall be considered a separate offense. In the event of continued violations, the regulatory officer may apply for an injunction or other relief including property condemnation from the appropriate court or Municipality Board.

(C) In the event that the Municipality institutes proceedings either in local court or in supreme court to enforce the provisions of this statute, the offending parties shall be liable for all attorney fees, costs and disbursements incurred by the Municipality in bringing said enforcement proceedings. Nothing herein shall prevent the imposition of more severe penalties otherwise provided for by local, state or federal law.

§18. FEES

A fee will be set by the Keuka Watershed Improvement Commission and adjusted as needed to be charged for each Wastewater System Construction Permit and Wastewater System Inspection by the regulatory officer.

§19. DEFINITIONS

1. "Agent or Agents Thereof" shall mean a person requested, employed or contracted by any owner or owners, occupant or lessee to construct, repair, or perform excavation for the installation of a receptacle or sewage disposal facility or element within said facility.

2. "Construction Permit" shall mean a permit issued prior to construction or repair of a sewage disposal facility to serve any building, structure, or mobile home specifying the type, capacity and location of each element of the said facility in accordance with this Local Law. Said construction permit shall expire one year after date of issuance. Said permit shall comply with Article 9, Section G of the Uniform Fire Prevention and Building Code.

3. "Distances" shall mean the shortest horizontal linear distance from the nearest point of structure or object to the high water

mark of the nearest watercourse or the edge, margin or top of a precipitous bank forming the mean high water mark of a watercourse. In this regard the mean high water mark of Keuka Lake shall be 715.15 feet above sea level.

4. "Element" shall mean any part or parts thereof comprising a sewage disposal facility.

5. "Human excreta" shall mean feces, urine or other excretions. It shall include the contents of receptacles, septic tanks, seepage pits and privies.

6. "Person" shall mean an individual, firm, corporation, association, partnership, or municipality and agents, employees and servants thereof.

7. "Privy" shall mean a facility or structure for urinating or defecating which is not flushed. This shall include chemical toilets.

8. "Receptacle/Holding Tank" shall mean watertight structures or containers purpose of storage or disposal of human excreta and/or sewage, other than a sewage disposal facility.

9. "Regulatory Officer" shall be a person established by the Pulteney Town Board to administer and enforce the Wastewater Law of the Town of Pulteney. He shall be deemed to be the authorized representative of the Town Board of the Town of Pulteney, and may also be referred to as the Code Enforcement Officer.

10. "Septic Tank" shall mean a watertight structure usually constructed of concrete. Its purpose is to partially clarify sewage by retaining a substantial portion of the solids. The flow of sewage from the house is slowed up in its sewage through the tank so that the gross solids will settle to the bottom and accumulate as sludge. The finer particles will remain in suspension and pass out of the tank with the liquid. Scum and other floating solids are retained in the tank by means of a baffling device.

11. "Sewage" shall mean water liquids containing human excreta and decomposing matter, wastes liquid from bathrooms, kitchens, laundries, or polluted liquids of any kind in or from the drainage system or sewer of a domestic dwelling or any structure occupied for commercial, recreational, institutional or industrial purposes.

12. "Watercourse" shall mean a running stream of water; a natural stream fed from permanent or natural sources, including rivers, creeks, runs, and rivulets. There must be a stream, usually flowing in a particular direction, though it need not flow continuously. It may sometimes be dry. It must flow in a definite channel, having a bed or banks, and usually discharges itself into some other stream or body of water. It must be something more than a mere surface drainage over the entire face of the tract of land

occasioned by unusual freshets or other extraordinary causes.

13. "Watershed" shall mean that body of land from which or through which water drains into a watercourse within the Town of Pulteney.



FACT SHEET

Need for Licensed Design Professionals - Residential Onsite Wastewater Treatment Systems

Purpose: Provide guidance to regulatory officials and interested parties regarding the need for a licensed professional engineer or architect to design residential onsite wastewater treatment systems (OWTSs). The State Education Department has reviewed this document with the State Department of Health and offers the following as guidance in applying the requirements of the New York State Education Law relating to the design of OWTSs.

Licensed Design Professional: The Department of Health and the State Education Department recognize that, generally, OWTS design activities come within the definition of the practice of professional engineering or architecture under Article 145 or 147 of Title VIII of the New York State Education Law and that OWTS designs must be prepared by a design professional appropriately licensed or otherwise authorized under such law. Please be advised that licensees providing OWTS design services must be qualified to provide those services based upon education, training, and experience. Any licensee providing services that they are not qualified to provide may be subject to professional misconduct charges. OWTS design activities include the evaluation of surface and subsurface site conditions at a defined parcel of land, which may include the investigation of soil characteristics, the performance of soil percolation tests, the determination of subsurface boundary condition and depths, the measurement and recording of existing surface features both natural and manmade, and the subsequent application of these data and the data related to proposed wastewater generation to design an OWTS. These activities generally fall within the scope of practice of professional engineering or architecture.

New Residential Construction: The design of all new residential OWTSs (including conventional systems) shall be performed by an appropriately licensed design professional, as defined above. The design may also be issued/approved by county health departments where such issuance/approval is performed and authorized by an appropriately licensed design professional on staff. Private practice engineers and architects, and engineering and architectural firms with appropriately licensed design professionals may also provide such services.

Additions or Alterations: An OWTS evaluation shall be performed and submitted by a licensed design professional for home alterations resulting in an increase in the number of bedrooms, for complete home replacements (including those resulting in the same number of bedrooms) and for alterations resulting in significant increases in wastewater generation. The evaluation must document if the existing OWTS complies with applicable State and local design standards, if the OWTS and its components are in satisfactory condition and functioning properly and if the existing OWTS can properly treat the proposed increase in wastewater generation. If the existing OWTS does not comply with regulatory design standards or needs significant modification, the licensed design professional shall prepare plans and oversee the installation of the alterations to the OWTS. This may include incorporating appropriate mitigative measures and/or designs as such ordinarily come within the scope of practice of professional engineering.

Repairs and Replacements: The repair or replacement of OWTS components "in kind" or "like-for-like" may not require the involvement of a licensed design professional. However, repair or replacement of any

type of absorption field that involves relocating or extending an absorption area to a location not previously approved for such, does require a licensed design professional. A licensed design professional is required when repair or replacement involves installation of a new subsurface treatment system at the same location or the use of an alternative system (i.e., raised system, mounds, or sand filter) or innovative system design or technology.

Note: In all cases: 1) local government, watershed protection agencies or other jurisdictional agency rules and regulations may also apply; 2) All OWTS design plans must be prepared by a design professional licensed to practice in New York State; 3) When no regulatory agency is responsible for inspection of a constructed OWTS, it is recommended that a written certificate of compliance be submitted by a New York State licensed professional engineer or architect prior to occupancy.

For questions concerning this Fact Sheet:

Residential Sanitation Section
Bureau of Water Supply Protection
New York State Department of Health
(518) 402-7650 or FAX (518) 402-7659
E-mail: bpwsp@health.state.ny.us

Sewage seeps into Keuka Lake

Official blames faulty septic systems in area

By **BRIAN C. RITMEYER**
and **JEFFREY BLACKWELL**
Of The Leader staff

HAMMONDSPORT — Failing and overwhelmed septic systems on Keuka Lake and its tributaries may be pumping raw sewage into the Finger Lakes.

Peter Landre, a water quality agent with the Cornell Cooperative Extension of Yates County, said testing of water from Keuka Lake last year showed the highest level of fecal bacteria ever recorded at the lake.

Human and animal feces alone are not dangerous, but they can cause illnesses such as typhoid, viral gastritis and other diseases.

Fecal bacteria counts during last August were more than 30 times above the limit for safe drinking water. Landre said residents on the lake should be disinfecting their drinking water.

The average level was also above the limit suitable for swimming, fishing and recreation.

A lake carrying an "AA" rating, the highest available, has no more than 50

WHO TO CALL

Watershed inspectors can be reached at 569-3700 in Hammondsport, 569-2708 in Urbana, 292-3450 in Wayne and 868-3801 in Pulteney.

The watershed manager, James C. Smith, can be reached at (315) 536-5110.

fecal bacteria colonies in a sample the size of a cup. The standard for swimming is 200.

The average fecal bacteria count was more than 500 counts per sample during the summer of 1994.

"Sure, some of the levels were at times at the point where swimming might be compromised during the summer, but that does not condemn the lake for swimming," Landre said. "Some days tested very high, but the tests only measure one point in time like taking your temperature."

• See LAKE, Page 2A

Lake

• *Continued from Page 1A.*

Samples from the lake are taken once a month during the summer and possibly more often at the lakes' two swimming beaches. Water tests last year showed erratic levels of fecal bacteria from month to month.

In June, bacterial counts reached 450 colonies, fell to 50 in July, but soared to 1,522 in August. In September, colony counts fell back to about 100.

The bacterial counts seem to be a function of human population during the year. The peak of activity on the lake and at homes and cabins surrounding the lake is in the summer.

Landre said many of the septic systems near the lake are failing because of age or overuse. The result is raw sewage passing from homes to the lake without enough soil between the two to filter bacteria.

The problem significantly increased last year. The count was at or near the 50-count limit for those same four summer months in 1992 and 1993.

"What a failing septic system means is that raw sewage is draining into the lake," Landre said. "There may not be enough soil to treat the waste or it breaks out of an old system, rises to the surfaces and is washed into a creek 10 feet away."

He said there are residents on the lake still using 50-gallon tanks as a septic system, where a 1,000-gallon tank is required. Landre said some

residents are also failing to have their systems flushed and checked regularly.

"Many of the old systems were set up to get rid of the waste, not to treat it," he said. "But just because you flush the toilet doesn't mean it's gone."

Efforts are underway to correct the water problems on Keuka Lake. The new Keuka Watershed Improvement Cooperative (KWIC) is in the process of inspecting the 3,000 septic systems on the lakes' shores and tributaries.

Septic systems within 200 feet of the lake or a lake tributary, labeled "Zone One," are now required to pass an inspection at least once every five years.

Landre said many residents are not waiting for the required inspection and are volunteering by contacting their watershed inspector.

"We are not happy about the level of fecal bacteria in the lake, but we are doing something about it," he said.

The good news for Keuka Lake is that in terms of nutrients, water clarity, plankton and fish production the lake is in excellent condition.

The fisheries, and the native lake trout population, are in excellent condition, Landre said. However, a consumption advisory stemming from levels of toxic materials in fish flesh remains in effect

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Managing a Wastewater Program in the Keuka Lake Watershed

James C. Smith
Keuka Watershed Improvement Cooperative

Are on-site wastewater treatment systems really a threat to water quality in my lake? Can something be done that is responsible and uniform in addressing on-site wastewater treatment systems at lakefront properties? Does the public really want and support an effective regulatory program? Eight municipalities bordering Keuka Lake asked these questions, and were answered with a resounding yes! The Keuka Watershed Improvement Cooperative (KWIC), is the wastewater management program crafted by the towns of Barrington, Jerusalem, Milo, Pulteney, Urbana and Wayne and the villages of Penn Yan and Hammondsport in order to "protect and improve the purity of waters in Keuka Lake". The KWIC exists through an intermunicipal agreement (IMA) vested with the responsibility of implementing a model wastewater law adopted in identical format, but independently in each municipality.

One characteristic of the IMA and local law very important to acceptance is the retention of home rule powers by each municipality. Other critical characteristics of the uniform local law are:

- construction or alteration of an on-site wastewater treatment system requires a permit and construction inspection;
- technical standards for new and replacement work are established;
- on-site wastewater treatment systems that would pose an immediate threat to the lake in the event of failure are subject to a continuing and thorough inspection program; and,
- water quality in Keuka Lake is high, and the program is recognized as preventive rather than remedial.

To assure adequate maintenance, and improve inadequate wastewater systems at appropriate times, the law creates a substantial inspection authority. A *critical water protection zone*, designated as Zone One, is defined in the law as all that land within 200 feet of a lake or a tributary entering a lake. All on-site wastewater treatment systems within Zone One, as it occurs in each municipality, are subject to a thorough

inspection at least once every five years. An estimated 3,000 sites fall within the Zone One of Keuka Lake alone! It is interesting to note that the township of Milo, in adopting the local law, created a Zone One authority along a portion of Seneca Lake as well. In addition to Zone One responsibilities, inspections must be made annually of any aerobic wastewater treatment unit and holding tank, regardless of location. The inspection of aerobic systems does not leave all maintenance and operation to the system owner. Evidence of a service contract with a qualified installation or service contractor must be presented at each annual inspection.

In recent years, inspection of on-site wastewater treatment systems as part of real estate transfers has become a habit for lending institutions, realtors, and real estate attorneys. In order to assure the adequacy of these inspections and identify problems before a change in SUE or occupancy, all real estate transfers must be accompanied by an inspection provided by the cooperative program. Use of apparently functional systems cannot be denied at that time based on failure to meet current design standards. Maintenance and repair problems, obvious threats to public safety and welfare, and irresponsible disposal methods usually can be identified. Such circumstances are treated as a violation of the local law, and necessary corrective action by the owner is identified in the inspection report.

To carry out the provisions of the uniform wastewater law, and to provide service to the community in matters of wastewater management, the cooperative agreement establishes the positions of Watershed Manager and Watershed Inspector. Duties of the Manager, hired directly by the KWIC, are to review and approve technical standards in wastewater permits, and to coordinate activities of Watershed Inspectors. Watershed Inspectors are hired by each municipality. Responsibilities assigned to the inspectors are enforcement of the local law, performance of all required property transfer, construction, aerobic unit, holding tank, and Zone One inspections. By establishing such a staff

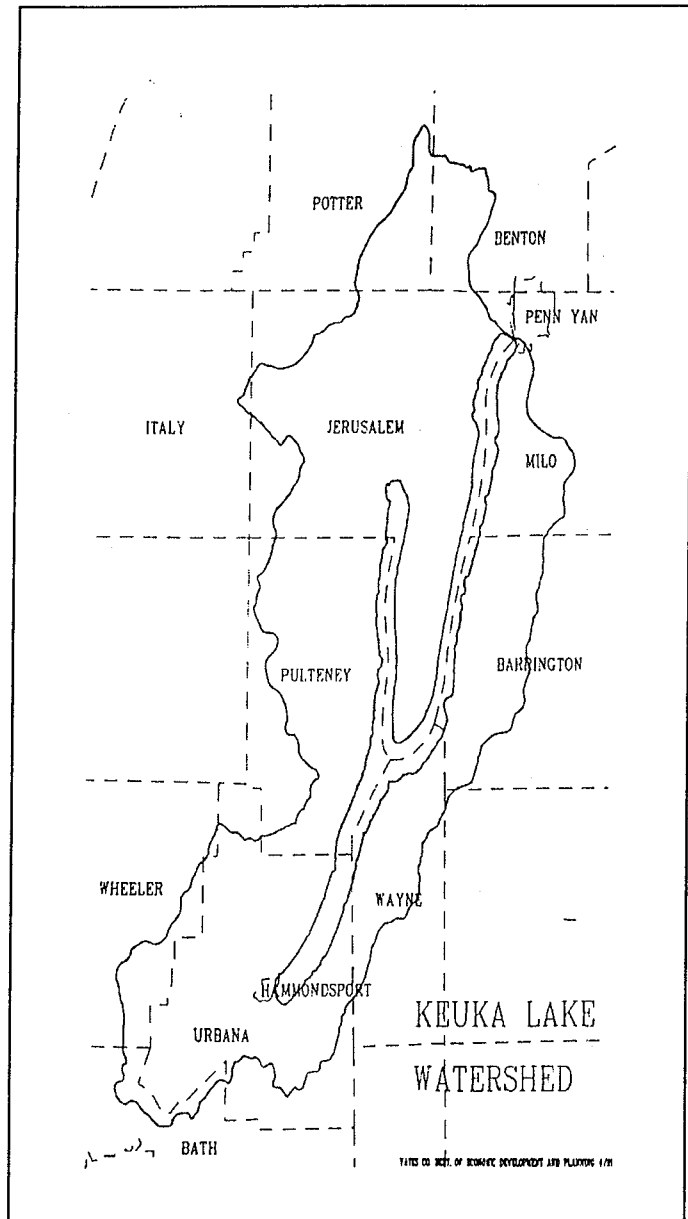
arrangement, the KWIC ensures involvement of each municipality in all aspects of the cooperative program. At the same time, a uniform technical and administrative function is created to develop uniformity and enhance program implementation.

Aside from inspections, the KWIC uses a number of tools and services to carry out the on-site wastewater treatment system management program. A program and design handbook has been prepared to document policy designs, define roles and responsibilities of staff, and provide administrative and technical guidance to staff and directors. Jurisdictional matters are coordinated, and review of design strategies may often be a collaborative effort of the Watershed Inspector and Manager, county Health Department, and consulting engineers. The KWIC was the first program in the state to be granted a local waiver that allows the construction of certain alternative residential systems without site specific designs by licensed engineers, or oversight by an licensed staff engineer. To date, generalized plans are available for sand filter/shallow trench leach systems and effluent pump stations.

Development of a computerized database for all work and inspection responsibilities has been completed. Overlay of this information with geographic information systems being constructed in Yates and Steuben Counties is expected to assist in tracking ownership and inventory of Zone One work. Success of the program is tracked by a sophisticated water quality monitoring program, and reported monthly to the KWIC Board of Directors and distributed to the public as an annual report.

The growth and development of the Keuka Lake Improvement Cooperative is exciting and vigorous. The local communities, government officials, KWIC directors and employees take pride in this program as an example of appropriate and effective water quality stewardship. Regulatory authority remains with the municipalities, where government officials are most accessible to citizens. Technology,

regulation and service are combined to protect Keuka Lake and the quality of life in the surrounding landscape.



Map of the Keuka Watershed Improvement Cooperative boundaries.

Resolution: Adoption of revisions to current policy and procedure, as recorded in the KWIC Program Handbook, amending and clarifying standards for septic system inspection for purposes of real property transfer and Zone One requirements. Old language is presented in parenthesis. New language is presented in italics.

Sanitary Inspection

The following represents the minimum standard for inspection of wastewater and septic systems in the towns of Barrington, Jerusalem, Milo, Pulteny, Urbana, and Wayne, and the villages of Hammondsport and Penn Yan. These standards are applicable to inspections performed for reasons of real property transfer certification and Zone One requirements as defined by local wastewater management law.

1) *In general, a complete septic system inspection for Zone one or real property transfer purposes shall document the discharge of all wastes to a suitable septic tank, assess of the condition and size of the septic tank(s), and evaluate the apparent function of the leach system given the wastewater discharge encountered at the site up to the time of inspection.* The owner or owner's agent is responsible for uncovering septic tanks, holding tanks, and pump stations.

2) The owner or owner's agent will make provisions for water so that a flow test of the system can be performed. The inspector may choose to perform the flow test before the septic tank is pumped out to assess the flow of wastewater through the tank and into the absorption area. Access must be provided to allow the inspector to assure that all appropriate plumbing fixtures, including bathroom, kitchen, laundry and wash basin fixtures drain to the wastewater treatment systems.

3) *Pump out of a septic tank or holding tank is required at the time of real property transfer or Zone One inspection, unless waived by the watershed inspector according to the following criteria; the size, condition and location of the tank was documented by a complete inspection previously completed under the authority of the KWIC program, the tank was pumped out at that time under the supervision of the watershed inspector, the tank was uncovered for the current inspection, and the presence of necessary baffles, liquid level in the tank, and accumulation of sludge and scum was made known and visible to the inspector. Local law does require pump out of septic tanks for real property transfer inspection if more than one year has passed since the last documented pump out.* Pump out will begin only after the arrival and concurrence of the inspector.

4) Tanks must be found to be water tight, free of cracks, corrosion or other structural defect. Tops, lids or covers must also be in a satisfactory condition. Baffles must be in place and securely fastened. If a tank is found to be in unsatisfactory condition, the replacement tank shall meet the standard for size established by the NYS sanitary code. Local law in the municipalities of Barrington, Hammondsport, Jerusalem, Milo, Pulteny, Urbana and Wayne allows the regulatory officer to require additional tank volume to meet system use and capacity standards.

5) Pump stations shall be inspected where applicable. Pump tanks shall meet the same standards concerning integrity and suitability as other tanks, *and shall be uncovered for inspection.* Adequate function of the pump station shall be demonstrated at the time of inspection. *Pump tanks must be equipped with g emergency high water to pass inspection.*

6) A surface inspection of the leach field or absorption area will be made to determine its apparent function. Drainage pipes or other features found during inspection may require additional investigation to address any potential surface discharge of sewage or septic system effluent. Dye tests may be required by the regulatory officer at the time of initial inspection, and sufficient follow-up visits performed as a means of investigating suspect conditions.

7) Inspection of septic systems is required by local law at least 10 days prior to closing, even in those circumstances where a site may have passed a previous Zone One inspection. Tanks shall be uncovered in all cases, and pumped, unless specifically waived by the inspector as noted in # 3 above.

8) A certificate of inspection will be issued by the regulatory officer. Where systems are found to be unsatisfactory, a written Notice of Violation will be issued by the regulatory officer providing the property owner with instructions on corrective action and date by which such action must be undertaken. Any repair or modification will require a permit issued by the Keuka Watershed Improvement Cooperative.

11

Funds approved for Keuka Lake Watershed

PENNYAN—The Keuka Lake Watershed has been awarded \$120,000 from USDA's new Environmental Quality Incentives Program for fiscal year 1999, according to Alan McGuffie, district conservationist for the Natural Resources Conservation Service. This will be the third and perhaps, final year that such funding will take place.

The award from USDA culminates a lengthy review process of all watersheds in Yates County by a local working group that identified the Keuka Lake Watershed as the number one priority area to be submitted to a state level working group for funding consideration. The major reasons why the Keuka Lake Watershed was chosen for funding are that thousands of people rely on Keuka Lake for drinking water and because a high percentage of land in the watershed is used for agriculture.

EQIP replaces the Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program and the Colorado River Basin Salinity Control Program. The objective of the program is to control soil erosion and to protect water quality in cooperation with state, federal and local agencies.

Eligible Producers are those farmers having an interest in a farm in the Keuka Lake Watershed that produces crops such as grain or row crops, or livestock such as beef or dairy cattle. Producers with existing EQIP contracts cannot have more than one EQIP contract on a tract of land at the same time.

Eligible land is land that is cropland, pasture, hayland, forestland or vineyards in the Keuka Lake Watershed.

The program utilizes 5 to 10 year contracts to provide technical assistance and to pay up to 75 percent of the costs of conservation practices such as manure management systems, pest management and erosion control. Cost sharing and incentive payments are limited to \$10,000 per person

annually and to \$50,000 for the life of the contract.

The first step in the EQIP process is the development and submission of a conservation plan that:

- protects the soil, water, air or related natural resources;
- meets the purposes and priorities established for EQIP concerns where the producer's farm is located;

- is acceptable to NRCS and approved by the County Soil and Water Conservation District.

Conservation Practices are those, as defined by NRCS that are:

- specific treatments or management techniques;
- commonly used to meet specific natural resource needs;
- are science based and field tested over years for which standards and specifications have been developed.

Ineligible practices are those:

- that enhance productivity,
- that the producer has already adopted, and,
- that the producer is likely to apply without EQIP financial assistance.

Applications for EQIP contracts will be prioritized by working with the producer to evaluate the conservation needs and to determine the offer index. All contract applications will be ranked at the state level to assist the Yates and Steuben FSA County Committees in selecting applications for contract development.

Farmers who have an interest in land located in the Keuka Lake Watershed can apply for EQIP assistance for fiscal year 1999 beginning Feb. 1, 1999 through March 2, 1999. Applications for Yates County land can be filed at the USDA Service Center at 270 Lake St., Penn Yan. Call (315)536-3203 or 536-4012 for more information and an appointment to apply. Applications for Steuben County land can be filed at the USDA Service Center, 415 West Morris St., Bath, call (607)776-7308

KWIC
Keuka Watershed Improvement Cooperative
Suite 205
1 Keuka Business Park
Penn Yan, NY 14527
315-536-0917

ADDITIONAL LOCAL WAIVERED WASTEWATER TREATMENT PLANS

Present Condition:

KWIC currently has a local waiver from NYSDOH for an intermittent sand filter with a modified shallow trench absorption area.

Canandaigua Lake Watershed Commission obtained a local waiver for three wastewater treatment systems in August of 2000. The waived systems included the following:

1. Holding tank
2. A raised fill system
3. An aerobic system with three modified absorption areas.

Need:

Currently the local waived sand filter helps in some situations, many others result in hiring an engineer for either a raised fill system or some type aerobic system with a modified absorption area.

This would not solve all of the situations but would certainly reduce the number that would have hire the services of an engineer.

Estimated Cost:

Fagan Engineers estimated the cost of the waived plans at between \$3000 and \$5000.

We would utilize the plans that were engineered by Fagan Engineers for the Canandaigua Watershed as much as possible. If Fagan Engineers were to assist us they would like to so in February and/or March, before their workload increases.

NYSDOH:

The Geneva office is in favor of the waiver, although they would like to see some changes in the present waived plans. The Hornell office is ready to converse on the waivers.

Canandaigua Watershed's Fee System:

Refer to the attached table

OTSEGO Lake



STATE OF NEW YORK DEPARTMENT OF HEALTH

Geneva District Office 624 Pre-Emption Road Geneva, New York 14456-1334 (315)789-3030 FAX (315)781-0831

Antonia C. Novello, M.D., M.P.H., Dr.P.H.
Commissioner of Health

Dennis P. Whalen
Executive Deputy Commissioner

August 23, 2000

Canandaigua Lake Watershed Commission
482 North Main Street
Canandaigua NY 14424

RE: PRIVATE SEWERAGE
Local Waiver Issuance
Canandaigua Watershed

Attn: Louis Loy, Chairman

Gentlemen:

Based on a review of plans prepared by Dennis A. Fagen of Fagen Engineers for three alternative wastewater treatment system designs, and of George Barden's training and experience qualifications, we are pleased to inform you that the New York State Department of Health hereby grants the Commission a LOCAL WAIVER (Waiver) to NYS Sanitary Code (Code) Appendix 75-A, Section 75-A.9(a)(1) for use within the Canandaigua Lake Watershed boundaries. The Waiver is for use of three accepted alternative system designs: a watertight holding tank (for use on existing residential properties only); a septic tank/raised bed treatment system; and, a NSF-approved Class I aerobic treatment system utilizing a raised area dispersal bed. In addition, a pump station may be used in conjunction with the systems where appropriate, in accordance with an accepted pump tank design. Signed mylar sheets of the two treatment system and the holding and pump tank designs are enclosed for your use. Your Waiver is subject to the following conditions:

1. The Waiver will remain in effect for five years from this date of issuance, until August 23, 2005. The Department may rescind the Waiver at any time in the interim due to loss of Mr. Barden from the program, or for unsatisfactory design application or system performance. Renewal of the Waiver will require a written request from the Commission and a review by the Department.

2. Continuance of the Waiver is contingent on the availability of Commission staff who meet training and experience qualifications (as determined by this Department) for oversight of the program, including determining the appropriate system plan for each application, overseeing installation of the approved system and providing an 'As-Built' certification for the project.

3. Copies of each project application, plans (including inspector's property sketch), soil analysis results and system approval and certification notifications shall be maintained at the Watershed Office and are to be provided to the building department of the municipality within which the property is located. The Department reserves the right to review records and field activities periodically during the term of the Waiver.

4. The installation of these alternative systems is limited to residential sites within the Canandaigua Lake watershed. Sites which meet all slope and all horizontal and vertical boundary conditions as specified in the Code may be considered for use of the system designs under the following conditions or as otherwise allowed in writing by the District Engineer on a case-by-case basis:

Holding Tanks - may be used to serve an existing residence only, on a lot where it is deemed infeasible to design and construct an acceptable subsurface treatment system. A holding tank IS NOT to be used for new residential construction.

Raised Bed Systems - may be used for replacement* or new home system: within 2' of a property line; all other boundary conditions are to be met.

*Code standards are to be conformed with wherever possible.

Aerobic Treatment Systems - may be used for replacement* or new home system: on steeper slopes than allowed by Code; within 50' horizontally from a body of surface water or steep embankment; and/or, within 2' of a property line; all other boundary conditions are to be met.

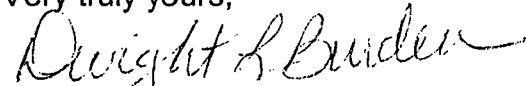
*Code standards are to be conformed with wherever possible.

5. A copy of each approval notification and AS-BUILT System Plan Sketch shall be submitted to this Department on a form acceptable to the Department.

6. A SPECIFIC WAIVER must be obtained from this Department for sites where an alternative wastewater treatment system is required, but conditions can not be met for one of the accepted Waiver systems, or as where deemed advisable by your inspector.

Please do not hesitate to contact me if you have any questions concerning your Waiver or if you would like assistance in the use of it. We wish you success with Waiver administration.

Very truly yours,



Dwight L. Burden

District Director

DLB:RMR:jm\260-00
encs.

pc: Canandaigua Lake Watershed Department - Attn: Mr. Barden, Inspector
Ontario County Soil & Water Conservation District - Attn: Mr. DeRue, Manager

CANANDAIGUA LAKE WATERSHED COMMISSION

- City of Canandaigua
- Village of Rushville
- Village of Palmyra
- Village of Newark
- Town of Gorham

FEE SCHEDULE

ON-SITE WASTEWATER TREATMENT SYSTEM

SOIL TEST INVESTIGATION:

- Witness/inspect deep hole and percolation tests (maximum 2 locations per lot).
Check to be submitted prior to issuance of inspector's report.....\$150

NEW HOME CONSTRUCTION:

- Single lot **conventional system** plan review (in addition to soil test fee).
Check to be submitted with plan and application.....\$ 50
- Single lot **Local Waiver** system plan issuance (in addition to soil test fee).
Check to be submitted with application.....~~\$250~~ ^{\$}400
- Completed system inspection.
Check to be submitted prior to issuance of inspector's **Completed Works Approval Notice**.....\$ 50

EXISTING SYSTEM INSPECTION:

- Real property / deed transfer.
Check to be submitted prior to issuing of inspector's written report...\$150

Make checks payable to "ONTARIO COUNTY SWCD"

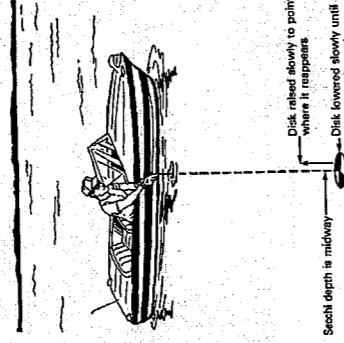
Send or deliver to: Canandaigua Lake Watershed Inspector
480 North Main Street
Canandaigua NY 14424

* REPLACEMENTS SYSTEMS USING LOCAL WAIVER THEY JUST CHARGE FEE \$400 barden1

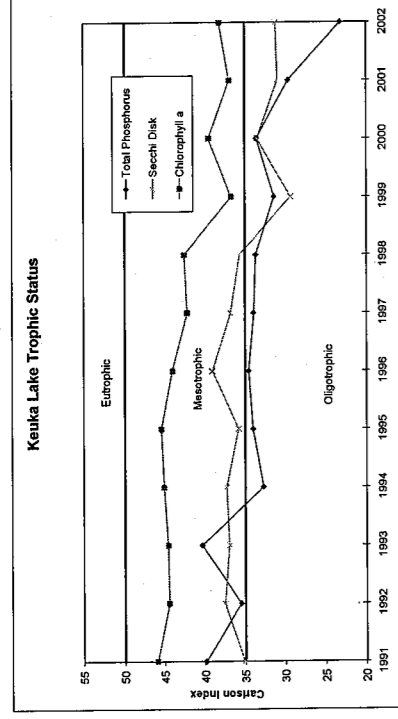
Keuka Lake Watershed Testing-Peter Landre, Cornell Cooperative Extension

This year the Keuka Lake Association's water testing program continued to focus on documenting baseline water quality conditions while exploring two areas of concern in more depth. Baseline testing consists of measuring a number of physical, chemical and biological levels to determine the overall "health" of the lake. These measurements include secchi disk (a measure of water clarity), temperature, oxygen, total phosphorus, nitrate, pH, conductivity, chlorophyll a (algae concentration) and bacteria. Plankton net tows are also used to evaluate the zooplankton and zebra mussel population status. Finally, tributary testing in the Willow Grove Creek watershed is also ongoing. Water samples are collected on a monthly basis (April through January) and are analyzed at NYS certified laboratories.

The water testing program is major focus of the KLA and represents nearly a \$25,000 a year commitment in testing services, professional support and volunteer time. A number of individuals and organizations collaborate on the effort including Cornell Cooperative Extension, Yates and Steuben Soil and Water Conservation District, Keuka College, Cornell University, and SUNY Brockport. This year, Dr. Al Wahlig and Pete Robbins dedicated their time and boats (including gas) for the monthly outings. Amy Bartley, Keuka College graduate, again helped out as our summer water quality intern.



Preliminary results from the 2002 water quality monitoring program reveal a continuing trend toward historically low nutrient and algae levels. Lower algae levels combined with little to no runoff during the spring and summer again created very high water clarity levels, averaging nearly 7.5 meters. The observed conditions continue to show the dominating effects of a large zebra mussel population.



The chart above illustrates the "trophic status" of the lake and provides a good overall picture of nutrient, algae and water clarity conditions in the lake. The trophic status of a lake indicates the overall productivity of a lake. Eutrophic lakes contain high nutrient and algae levels and tend to have lower visibility or clarity. These lakes are prone to algae blooms and sometimes fish kills if oxygen levels become too low. They also can support a greater fish population per acre of lake surface because of increased plant production. On the other end of the spectrum, oligotrophic lakes have low productivity and tend to be very clear because of low algae levels. Mesotrophic lakes are somewhere in the middle range of productivity and clarity. Prior to zebra mussel invasion, Keuka was clearly in the mesotrophic range. Now, both phosphorus and secchi disk (water clarity levels) would indicate Keuka is in the oligotrophic range. Assuming that the zebra mussel population will die back to lower levels at some point in the future, as has happened on Seneca and Canandaigua Lakes, the trophic status should return back into the mesotrophic range.

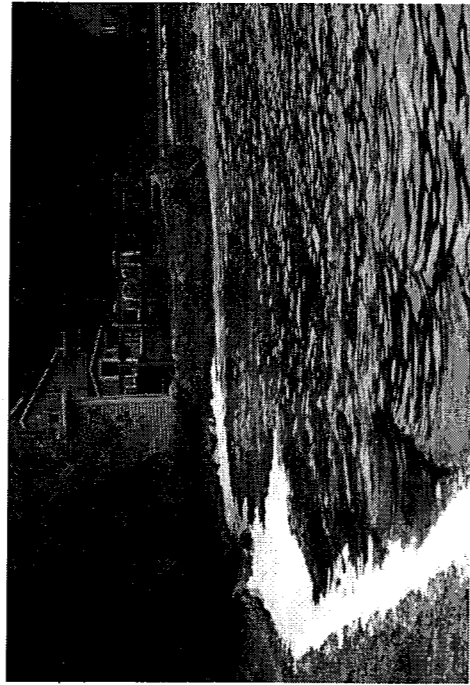
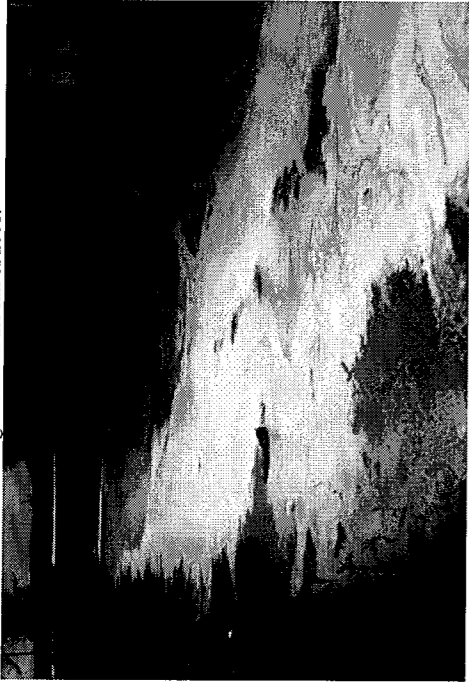
Bacteria Testing

A modified approach to the bacteria testing program this year looked at both fecal and *e.coli* bacteria. Fifteen pre-determined sites were tested once a month, June-August (instead of 50 randomly selected sites). The results were interesting and showed no high levels (all were less than 10) of either fecal or *e. coli* bacteria at any of the sites. Out of 82 samples analyzed, only 29 showed the presence of bacteria, the remaining were <1. Unlike many previous years, there was not an elevation of bacteria levels in July and August. The levels were all below swimming standards (200 counts/100 ml sample) the standard for a "AA" quality lake (50 counts/100 ml sample).

Willow Grove Tributary Sampling

Due to the very dry conditions throughout the spring and summer, water flow in Willow Grove Creek was non-existent. Water samples collected in early spring showed higher nutrient and sediment levels due to runoff from a road construction project. Bacteria and nutrient samples collected at the mouth of the creek during lake monitoring trips on a monthly basis did not exceed levels found at other sites. More testing is needed during higher water flow conditions.

Pictures taken from Canandaigua Lake in the fall of 2001.





March 16, 2004

To: KWIC Board

Re: DOH Fact Sheet – Education Law

Attached you will find information regarding the NYS DOH Fact Sheet and the Educational Law. The NYS DOH Fact Sheet deals with the requirement that all onsite wastewater treatment systems (conventional systems, alternative systems, and all replacement systems) be designed by a professional engineer licensed in NY State. We felt it necessary for you to have this information available to go over prior to next week's meeting, as this subject is on the agenda.

Also included with the Fact Sheet are two letters and a proposed amendment to the Educational Law that might ease this burden.

Feel free to contact our office if you have any questions.

Thank you,

Cris White
KWIC Clerk/RMO

Keuka Watershed Improvement Cooperative
1 KEUKA BUSINESS PARK, SUITE 205
PENN YAN, NY 14527
315-536-0917
FAX: 315-536-2389





SENECA LAKE PURE WATERS ASSOCIATION, INC.

207 FRANKLIN SQUARE • P.O. BOX 247
GENEVA, NEW YORK 14456-0247

315-789-3052

February 18, 2004

Senator John R. Kuhl, Jr.
Box 153
18 Buell Street
Bath, New York 14810

Dear Senator Kuhl:

I am providing information for your review on a draft proposed amendment in its very early stages to Education Law Article 143, Section 7208. We hope this information will provide you with an opportunity to explore whether there is legislative merit for this proposed amendment and that you could provide your valuable insight to local programs such as that on Seneca Lake and our neighboring Keuka and Canandaigua Lakes, who would eventually need to encompass any state directives in the area of onsite wastewater management.

As background information, the draft amendment enclosed is a follow-up response to a recently released FACT SHEET (also enclosed) dated 1/13/04 by the New York State Department of Health regarding the "Need for Licensed Design Professionals - Residential Onsite Wastewater Treatment Systems" providing guidance to regulatory officials and interested parties regarding the need for a licensed professional engineer or architect to design residential onsite wastewater treatment systems (OWTS). The FACT SHEET was reviewed by the State Education Department with the New York State Department of Health prior to its issuance as a guidance document for the application of the requirements of the New York State Education Law relating to the design of OWTSs.

A sample draft letter of support for the amendment serves as a template example of the type of support framework that could be built through key regional organizations and stakeholders should the amendment proceed legislatively. The information attached also includes some comments or thoughts received by Paul Bauter from Erica Heinze at Assemblyman DiNapoli's office. The Assemblyman is apparently working on some legislative actions related to onsite wastewater management for the state (A4080/S887). Apparently, the Department of State will also be proceeding with actions related to the FACT SHEET, making it available to code enforcement officers very soon as a guidance document.

Communications and activities leading up to the issuance of this FACT SHEET were discussed at some of the 2003 SLAP-5 Oversight Committee meetings with regard to the state of onsite wastewater management in the Seneca Lake Watershed, as well as regional programs in place in neighboring Finger Lakes watersheds. Your Aide, Colleen Banik, attended some these preliminary meetings and I have therefore initially discussed some of the preliminary details regarding the draft amendment response prior to sending information on to your office.

The soundness of existing local programs such as the Keuka Watershed Improvement Cooperative (KWIC) and Canandaigua Lake Watershed Inspection Programs, and the direction of efforts for the Seneca Lake Watershed, support the application of appropriate design principles utilizing experienced and trained personnel already in place in local programs or which in special instances where local capacities are not adequate to meet site restrictions, existing programs then refer property owners to design professionals. These same programs are also fostering support for training and certification of inspection personnel through the developing curriculum at the NYS Onsite Wastewater Treatment Training Network.

You have been a knowledgeable and key supporter of onsite program initiatives for Seneca, Keuka, and Canandaigua Lakes within your local region over the years. Noting your knowledge of the critical need for programs

with such demonstrated successes as those in place in this region and elsewhere, you undoubtedly would realize the importance of sustaining the successes established by these locally based programs throughout New York State. And you are well aware of the process undertaken to build local programs and reach consensus with the related stakeholders charged with the responsibility for onsite wastewater management.

My perception of the proposed amendment is that it is meant to allow for continued functioning of existing locally supported and endorsed programs with personnel who possess the necessary expertise to apply appropriate design principles in the larger majority of instances, while recognizing that in some instances, certified engineers would be more expedient in providing designs. The amendment also recognizes and lends support to the New York State Onsite Treatment Training Network (OTN) which is working toward a curriculum based educational process that would provide certification to inspectors, and potentially contractors, lending further credence to the formalization of local programs. The amendment still recognizes that in some instances where local programs may not have the capacity at the time to provide design work, design professionals are the key alternative to the success of onsite wastewater management in lieu trained and certified local personnel. Therefore, the amendment is attempting to maximize the success in matching sound onsite designs with each individual site to provide the best possible treatment and management of wastewater sources in our state while also recognizing the value of inspection personnel who are or ultimately may be trained and certified.

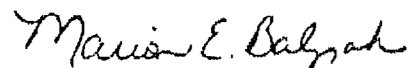
This preliminary draft amendment would have direct bearing on the Onsite Wastewater Management Programs and Projects currently in place on Seneca, Keuka and Canandaigua Lakes, and as well as other such programs throughout New York State. We would not want to see reversals take place in the momentum built in sound local programs that would lead to corresponding concerns regarding the increases in pollutant potential to the valuable water resources of our state, especially noting the rich resource the Finger Lakes is to New York State.

Edith Davey and I would be happy to provide additional information about this. In addition, further insights can be provided by contacting some of the following individuals or programs:

Paul Bauter, Keuka Watershed Improvement Cooperative (KWIC) 315-536-0917
George Barden, Canandaigua Lake Watershed Inspection Program 585-396-9716
Erica Heinze, Assemblyman DiNapoli's Office 518-455-3711
Ken Smith or Cheryl Fisher (Codes), NYS Department of State 518-474-4073
Mark Noga, Chairman New York State Onsite Wastewater Treatment Training Network 315-575-4676
Dave Rowley, Geneva Office, New York State Department of Health 315-789-3030
New York State Department of Health, Residential Sanitation Section 518-402-7650
Tom Boekeloo, Gerry Chartier, NYS DEC 518-402-8243

Thank you for your consideration of this.

Sincerely,



Marion E. Balyszak
Executive Director

Enclosures



FACT SHEET

Need for Licensed Design Professionals - Residential Onsite Wastewater Treatment Systems

Purpose: Provide guidance to regulatory officials and interested parties regarding the need for a licensed professional engineer or architect to design residential onsite wastewater treatment systems (OWTSs). The State Education Department has reviewed this document with the State Department of Health and offers the following as guidance in applying the requirements of the New York State Education Law relating to the design of OWTSs.

Licensed Design Professional: The Department of Health and the State Education Department recognize that, generally, OWTS design activities come within the definition of the practice of professional engineering or architecture under Article 145 or 147 of Title VIII of the New York State Education Law and that OWTS designs must be prepared by a design professional appropriately licensed or otherwise authorized under such law. Please be advised that licensees providing OWTS design services must be qualified to provide those services based upon education, training, and experience. Any licensee providing services that they are not qualified to provide may be subject to professional misconduct charges. OWTS design activities include the evaluation of surface and subsurface site conditions at a defined parcel of land, which may include the investigation of soil characteristics, the performance of soil percolation tests, the determination of subsurface boundary condition and depths, the measurement and recording of existing surface features both natural and manmade, and the subsequent application of these data and the data related to proposed wastewater generation to design an OWTS. These activities generally fall within the scope of practice of professional engineering or architecture.

New Residential Construction: The design of all new residential OWTSs (including conventional systems) shall be performed by an appropriately licensed design professional, as defined above. The design may also be issued/approved by county health departments where such issuance/approval is performed and authorized by an appropriately licensed design professional on staff. Private practice engineers and architects, and engineering and architectural firms with appropriately licensed design professionals may also provide such services.

Additions or Alterations: An OWTS evaluation shall be performed and submitted by a licensed design professional for home alterations resulting in an increase in the number of bedrooms, for complete home replacements (including those resulting in the same number of bedrooms) and for alterations resulting in significant increases in wastewater generation. The evaluation must document if the existing OWTS complies with applicable State and local design standards, if the OWTS and its components are in satisfactory condition and functioning properly and if the existing OWTS can properly treat the proposed increase in wastewater generation. If the existing OWTS does not comply with regulatory design standards or needs significant modification, the licensed design professional shall prepare plans and oversee the installation of the alterations to the OWTS. This may include incorporating appropriate mitigative measures and/or designs as such ordinarily come within the scope of practice of professional engineering.

Repairs and Replacements: The repair or replacement of OWTS components "in kind" or "like-for-like" may not require the involvement of a licensed design professional. However, repair or replacement of any