

**GOLDENS BRIDGE COMMUNITY ASSOCIATION, Inc.**  
**Colony Water User's Manual**

**INTRODUCTION**

**This Manual is intended to provide information required for Members of Goldens Bridge Community Association, Inc. (GBCA) and their tenants and guests for optimum usage of the community water system. Since the Colony (GBCA) consists of Members who are supplied by the Colony and those who have their own wells, the information is primarily intended to serve those who are supplied by the Colony (water users), although much of the information may be useful to those who have their own wells. It is also useful to members who have recently purchased homes in the Colony, those who may be considering such a purchase and existing Colony members who may consider connecting to the community water system. If any errors are discovered in this manual or any reader believes that the manual would be enhanced by including additional material, please advise a member of the Water Committee.**

**THE WATER SYSTEM**

**The community water system is a public water system licensed by the Westchester County Department of Health (WCDOH) which has the responsibility of monitoring compliance with Part 5 of the New York State Department of Health (NYSDOH) regulations and acts as the agent of NYSDOH in ensuring compliance with the Safe Drinking Water acts promulgated by the Federal Government. The permit is unrestricted and unconditional and is posted in the chlorination shed. The water system uses a subsurface source, chlorination disinfection and storage and a distribution system to supply water to homes in the Colony. The source is two aquifers that originate in the Adirondack Mountains and flows generally from the northwest to the southeast. The aquifers serve many communities and are recharged by reservoirs close to Goldens Bridge and other bodies of water and percolation through the soil and rock stata. Two deep wells located at the “Nursery” acre on Main Street and the chlorination shed on Branch Street, pump the water to the chlorination shed.**

At the chlorination shed sodium hypochlorite is injected into the water that then flows into two 10,000 gallon storage tanks. From these tanks, after the required residence time, the water is delivered to the distribution system by two 3 horsepower distribution pumps. The chlorination shed contains the controls for automatically turning on and off the well and distribution pumps.

The distribution system consists of water mains running along Pond Street, Hall Avenue, Hillside Avenue, Main Street from Danger Road to the end, West Main Street to 20 West Main and up Lake Street from Danger Road.

**a. Disinfection**

The term “disinfection” refers to the addition of chlorine in the form of sodium hypochlorite to the water as it enters the chlorination shed at Branch Street. Two metering pumps add just enough of the sodium hypochlorite solution to the water that, when it is delivered to the furthest points in the Colony System, there is still a detectable trace of residual chlorine. Much of the chlorine added evaporates or breaks down in the storage tanks before the water is pumped out. Disinfection destroys bacteria and *coliforms* that may enter the system and does not affect the taste or the uses of the water.

**b. Water Delivery**

The chlorinated water is delivered to the water mains by two 3 HP booster pumps which draw the water from the tanks and pump it into the mains. The booster pumps operate alternately and are controlled by a pressure switch and the pressure in a tank in the Branch Street well pit. To prevent the development of excess pressure at low points, a pressure reducing valve in the chlorination shed limits the pressure sent down Hall Avenue and to the portions of the Colony west of Lake Street. Maintenance and checking for problems is always required. Pat Killeen checks the shed daily to be certain that there are no obvious problems. Chlorine levels are checked daily at the chlorination shed and, for residual chlorine, at locations towards the end of the mains. Compressed air is added periodically to the Branch Street pit tank. Pump motors must be greased and checked to be certain they are not running hot. The piping is checked for leaks. Controls are checked to see that all level switches and relays are operating.

Every effort has been made to provide a separate curbcock (a below ground valve) individual to each water user. In some cases, because of the history of the water system, two users may be supplied by one curbcock and in some case there are no curbcocks and valves in the house are relied upon.

Each water user is responsible to observe the rules for preventing cross contamination and for implementing the GBCA back flow prevention program, that was approved by the WCDOH.

### **CHARGES**

Water charges are apportioned as follows: A basic amount is calculated by adding the projected operating cost (including taxes, electricity, supplies, equipment for maintenance and repair, tests, labor and parts), a sum of \$4,300.00 considered to be the annual amount needed for capital replacement and \$8,500.00 approved by the Colony as a continuation of an assessment for water mains replacement. (The \$4,300.00 and the \$8,500.00 are placed in the Water Reserve.) The sum is divided by the total number of units on the water system. The quotient is than broken down into summer water charges and winter water charges and is included in the budget.

The water reserve is intended to accumulate a fund for capital improvement and capital replacement in the water system. It consists of an annual contribution of \$4,300.00 and \$8,500.00 as collected from members. From the reserve, capital replacement expenditures for pumps, well strings, tanks and other large-dollar items are to be drawn. As the \$8,500.00 increments are accumulated, they will be drawn upon for water main replacement. Capital expenditures for the water system are apportioned traditionally at 80% drawn from the water reserve, 20% from the Colony capital improvement fund. This ratio is a historically based factor which recognizes that even non-users benefit from improvements in the water system.

The taxes (9% of Colony real estate and school tax) paid by the water system are calculated based on the following: While the amount of land on which the fixtures of the water system, namely, the pump shed, the well pits, the storage tanks, the distribution mains and the wells are located is substantially less that the 9% of the land on which the

Colony pays its real estate and school taxes, the wetlands, lake and like properties which serve as a recharge basin are taxed to the water system.

## **TESTS**

The Colony water system is a Municipal Water System under State, Federal and Local Law and its operation is governed primarily by Part 5 of the New York State Health Code. It also must comply with the Federal Safe Drinking Water acts and regulations and orders as issued by the Westchester County Department of Health (WCDOH). WCDOH is the administrative agency delegated by the New York State Department of Health (NYSDOH) to ensure compliance with Part 5 and the State is delegated by the Federal authority to ensure compliance with the safe drinking water act. An annual Drinking Water Quality Report is available from the Water Committee of the Board of Directors and is sent to all Colony Members. Chlorine levels are tested daily at the shed and at sites remote from the shed. Coliform (bacterial) tests are done monthly by the Water Committee. Random bacterials are also taken by WCDOH. We have an ongoing program of testing homes for lead and copper (first draw tests) and this is required testing every 3 years. Organics, pesticides and inorganics are also tested every 3 years. The water system has an unqualified permit to operate issued by WCDOH.

*Note: Some municipal water systems require filtration because of surface water contamination problems and phosphate addition (to line pipes in the case of lead contamination). Neither filtration nor addition of phosphate is required for the GBCA system.* All tests are filed by a certified water operator who is licensed by the State Health Department. The certified operator also solicits from the Westchester Department of Health approval for capital projects and supervises all maintenance.

## **CONNECTION TO THE WATER SYSTEM**

At the present time, there are Colony mains along Hillside Avenue, Pond Street, Hall Avenue, behind the houses on Route 138, Branch Street, Main Street, above Danger

Road and West Main Street. Connection to these mains is possible. You will be obligated for the cost of connection. Pat Killeen is responsible for turning on/off the water and must be present for installation of the curbscock. If you have never had Colony water, or just had summer water, there is a \$700.00 connection charge for all year service. Piping from the curbscock to the house must use 160lb test plastic pipe. There must be a brass adapter between the curbscock and the plastic. There must be a check valve or other backflow preventer in the house between the house piping and the plastic. The plastic pipe and curbscock must be installed at least 4.5 feet deep and below the frost line.

If you are not accessible to one of the existing mains contact a member of the water committee so that the feasibility of extending a main can be discussed in the context of the mains replacement program.

The WCDOH encourages connection to the Colony system. It is aware that most private wells in this area are shallow and thus susceptible to contamination by ground water in the event of heavy rain or by migration of organic contaminants. While private wells can be equipped with disinfection, few are. Contamination by *coliform* bacteria has occurred even quite recently in private wells in the Colony. Any private well is an opening into the subsurface below bedrock and thus is potential danger to aquifers serving others. Connection to the Colony system provides a safe and reliable source of water at good pressure. While connection to the Colony system will eliminate the need for costly repairs to a private well, you will have to bear your share of the apportioned costs and the connection costs as well. *Note: If you connect to the Colony system, you cannot leave your private well connected.* There must be absolutely no risk of cross-contamination. The WCDOH also recommends that individual well owners test their wells on a regular basis for *coliforms* and inorganic contamination. There is no fixed interval for checking private wells, but an annual *coliforms* test is recommended.

#### CROSS CONNECTION (Also; see appended document)

Contamination is a major danger to any water system, incurring very serious consequences, and the WCDOH has strict regulations designed to prevent cross connection and contamination as a result. A cross connection is any connection which will permit a bacterial bridge between a potential contamination source and the water system. For

example, a hose dipping into an animal waterer or child's pool, a private well which has not physically been cut off, an old hot water tank which is no longer in use but has not been physically separated all pose a danger of contamination. Since backflow by gravity is a potential danger, backflow preventers on all hoses, check valves where the water enters the house and similar devices should be used wherever backflow is possible. Information as to how to prevent cross contamination is available from WCDOH and from the Water Committee.

### **WATER COMMITTEE**

GBCA is a membership corporation governed by a Board of Directors, half of which are elected each year, and officers who are elected annually. The community prizes volunteerism and has numerous committees responsible for the day-to-day functioning of various aspects of the community. These committees report to and take direction from the Board of Directors. The Water Committee is responsible to the Board of Directors and the membership for the water system.

The members of the Water Committee currently are:

**Ron Arnstein (Chair and licensed Water Operator)**

**4 Hillside Avenue, Goldens Bridge, NY 10526**

**Phone/fax: 914-232-8260**

**E-mail: [rarnstei@optonline.net](mailto:rarnstei@optonline.net)**

**Norman Levine (Licensed Water Operator)**

**26 Branch Street, Goldens Bridge, NY 10526**

**Phone: 914-232-5681**

**E-mail: [janlev@msn.com](mailto:janlev@msn.com)**

**Dan Fast (Liaison to Board of Directors)**

**Pond Street, Goldens Bridge, NY 10526**

**Phone: 914-232-5397**

E-mail: [norfast@juno.com](mailto:norfast@juno.com)

**Water Emergency Contact:**

**First Ron Arnstein 914-232-8260**

**Than Pat Killeen, Phone: 914-232-4931**

**20 West Main Street, Goldens Bridge, NY 10526**

**Pat Killeen coordinates action in emergencies with the Water Committee.**

**WATER AND SEPTIC SYSTEMS**

Improperly installed, damaged or ineffectively maintained septic systems can pose a major health problem and can cause contamination of the water system or private wells in the path of contamination from septic-system waste. While septic systems are intended to operate biologically almost indefinitely, in practice accumulations for solids in septic tanks can cause back up. It is recommended that you pump your system regularly (usually every two to three years depending upon use). A reputable septic system pumping company will inspect on request and before pumping. Do not use household cleaners that can kill septic tank microorganisms, and to not dump organic solvents or other non-degradable materials into household drains. Maintain a distance of 25 feet from any water piping from the nearest point in a septic field and report any observed septic tank malfunction to the Water Committee

**DUMPING AND DISPOSAL OF OIL, GASOLINE AND ORGANIC SOLVENTS**

Motor oils, gasoline and organic solvents readily migrate through the subsurface strata to aquifers and wells. There are numerous nearby wells, that have been irreparably contaminated with organic solvents. These should never be dumped on the ground or in surface water anywhere in the Colony.

No dumping of any kind is permitted on any Colony property and leaves, limbs, clippings, trash and household wastes should not be deposited upon or allowed to migrate to any property near a Colony well. Dogs should be kept off well properties.

## **COLONY WATER REGULATIONS**

- 1. Since Colony water is supplied by electric power, if there is a power failure, notify the power company promptly and do not use any water for the duration of the failure. *The use of water during a power failure can empty the storage tanks and cause the booster pumps to run dry and burn out when power is restored.* Do not fill up tubs or pails with water after the power has failed. Wait to flush or use water for at least two hours after the power has been restored to allow the storage tanks to refill. If a serious storm is expected, you may wish to fill a pot or two with water in advance of the storm.**
- 2. Do not waste water. Do not leave hoses, faucets or pipes running. Any fountain or pool filled with Colony water must be of the re-circulating type and the filling hose/piping must have backflow protection. If the fountain or pool is large, it may be refilled only during nighttime hours and not at all during drought emergencies. Do not water lawns in the heat of the day. Observe County and Colony restrictions on lawn watering, car washing, etc. Cut back on water usage in drought periods. Cut off any private well when you connect to the Colony system with a physical disconnect of underground piping at the well.**
- 3. Provide backflow prevention on all hoses and a check valve at the incoming pipe to the house. Protect curbscocks from damage by vehicles and tampering. Do not pave over curbscocks, strike curbscocks caps with lawnmowers, plows or vehicles or cover curbscocks with asphalt or concrete. Remove all unused tanks of any kind.**
- 4. Install all new piping with leadfree solder and do all repairs with leadfree solder. Inspect old piping and, where the solder joints appear problematical, replace with leadfree solder joints. Members are responsible for repairs to lines from the property edge to the house or from the curbscock to the house. If closing a curbscock is necessary, notify Pat Killeen. Pat Killeen must be present for installation or replacement of a curbscock.**
- 5. Be observant for leaks anywhere in the Colony. If water appears where it should not be and you suspect that it may come from the Colony system, notify the Water Committee promptly.**



6. **Check your septic tank and field regularly. Follow maintenance and pumping procedures recommended by the DOH. Do not dump upon or contaminate well properties. Do not walk a dog on well properties. Do not dump organic solvents anywhere on Colony land or water. Do not construct a septic field within 200 feet of a Colony well.**

### **EMERGENCIES**

1. **In the event of a major pipe break in the house or on your property: Notify Pat Killeen and a member of the water Committee promptly, so that Pat can cut off the relevant curbcock. Arrange for repair of the break. Notify Pat when repair is completed so that curbcock can be turned back on. Be aware that a major break/leak can cause the water storage to be drawn down so that the booster pumps will run dry and burn out. This can disable the system for a long period and incur major costs which are passed along to the water users.**
2. **If you see a break in a summer line or water appearing along a road or wherever water should not be, notify Pat promptly. Water saved/conserved is money saved in operating costs and in wear and tear.**
3. **If you hear unusual noises from well areas or the chlorination shed or see anything out of the ordinary in these areas, notify Pat and the Water Committee.**
4. **If you see vandalism in progress on the water properties, notify the State Police and the Water Committee. Vandalism stopped is Colony property saved.**
5. **Unauthorized persons are not permitted to enter well pits or the chlorination shed unaccompanied and may not unlock well cap covers. If you believe that access to a well pit, the chlorination shed or the well shafts is necessary, contact Pat Killeen or a member of the Water Committee.**
6. **Every effort is made to telephone or E-mail those on the water system when a repair is planned to enable the water user to prepare for a water shutdown. When emergency repairs are necessary, there may be a shutdown without notice. Please be assured that every effort is made to keep shutdowns to a minimum and minimize the duration of any repair.**

**Thank You.**

**November 2006/ RA/ja**