

REVIEW OF MCKOWNVILLE WATER SUPPLY

December 30, 1964

For many years it has been necessary for residential property owners of the McKownville Water District to restrict the use of water from May to Fall. This was due to limited facilities of the Water Filtration Plant and to uncertainty of the supply of water available.

The Directors of the McKownville Improvement Association felt that some steps could be taken to make more water available and on their recommendations, the Town Board appointed the McKownville Water Advisory Board. This water advisory group was to study the matter and make a recommendation to the Town Board.

It was determined by the Advisory Board that in years of normal rainfall, an increase in Filtration Plant capacity would permit more outdoor use of water by the existing users of water in the McKownville District. It was also determined that it would be advisable to increase the storage capacity of the McKownville Reservoir as much as possible by dredging. The Town Board approved these proposals, the estimated cost of which could be approximately \$100,000. Reservoir dredging work is now in progress and plans are about ready to improve the filtration plant.

During 1964, a year of subnormal rainfall, a daily record of the actual consumption of water and the water available for use, was kept from May until August. Similar drought conditions existed in September and October.

The following was definitely established during 1964, in a period when water use restrictions were in effect:

Water available for use (water pumped plus discharge over spillway of reservoir dam):

May 21 to June 18 - Water used averaged 250,000 gallons per day plus 150,000 over spillway, totaling 400,000 which would indicate

the total amount of water entering the reservoir.

June 19 to July 30 - All water entering the reservoir was used, averaging 285,000 gallons per day. This included water obtained by syphon from upper Church Pond which is not owned by the Water District. The greatest use for a single day was 370,000 gallons. There were 12 days when daily usage exceeded 350,000 gallons. Water obtained from Church Pond, estimated at 46,000 per day, is included.

July 31 - August 12 - Average daily usage 282,700 gallons and highest single day 350,000. Additional water from rainstorms caused temporary overflow of a nominal amount in this period.

Future Increase in Reservoir Capacity

The Reservoir capacity is now being increased from 1,250,000 gallons to 3,250,000 gallons. Please note that it is not possible to increase the capacity to 5,000,000 unless the reservoir dam is raised 2 feet. Town Engineers Fraser and Associates state this would present many problems, including approval from the Water Resources Commission and Public Works Department. Therefore, in the immediate future the top capacity will be 3,250,000 gallons.

The Water District has attempted to acquire the privately owned Church Pond, but the owners have refused to sell. The dam on this pond is in questionable condition and leaking. Consequently the installation of proper valves, whereby water can be withdrawn, presents problems. Under these circumstances the Advisory Board must conclude that the taking of water from Church Pond is a temporary resource. To be assured that this use become permanent, definite control must be obtained.

High-Rise Apartments

It has been proposed that changes be made in Zoning Regulations, reducing lot area requirements per dwelling unit. This change makes it possible to erect high-rise apartments. A proposed single project for approximately 300 apartments will increase water system loads by 45,000 gallons per day. This figure is based on actual metered consumption of existing apartments of a like nature. There are various locations in McKownville where requests for permits to build high-rise apartments may be expected in the future.

The result could be extensive increased loads on the water supply available. This would defeat the purpose of the water system improvements, which were to benefit primarily the present occupants of residential property in McKownville. The future outlook is that it may be necessary to impose drastic water restrictions on residential users, due to the limited water available. Installation of water meters is a possibility.

The conclusion of the McKownville Improvement Association Board of Directors and the Water Advisory Board is that irrespective of the increased Filtration Plant capacity, the records of the proven water supply available over the long term, under peak loads and under adverse conditions, warrant a respectful request to the Town Board of Guilderland to deny any change in regulations or ordinances, which would allow such increased uses of water in McKownville. It appears that a disservice will be imposed on the existing residential property owners of McKownville if high-rise apartments are allowed.

Another important consideration is the question of fire protection for high-rise apartment buildings.

Issued by Water Advisory Board of McKownville

Fred B. Abele, Chairman