

**REGIONAL GROUND-WATER STUDY  
TOWN OF MOUNT HOPE  
ORANGE COUNTY, NEW YORK**

Prepared for

Orange County Water Authority

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**MAP**

Groundwater Inventory Map ("GIM")

**REGIONAL GROUND-WATER STUDY  
TOWN OF MOUNT HOPE  
ORANGE COUNTY, NEW YORK**

**INTRODUCTION**

The Town of Mount Hope maintains no municipal water system, however, four private Water Districts are present along with the State and Federal Correctional Facilities. There is one incorporated Village within the Town limits. The Town has no plans to develop any municipal water systems, and will rely on private systems. However, the Village of Otisville, which is currently supplied by the surface supply of the State Correctional Facility is pursuing the development of its own groundwater well supply.

**EXISTING WATER SUPPLY SYSTEMS**

**Hidden Valley Estates**

The Hidden Valley Estates Water Company, which is owned by William Miele was created to service the water supply needs of Hidden Valley Estates, which is located off of Guymard Turnpike in the Town of Mount Hope (Groundwater Inventory Map ["GIM"], Well MH-1). The water company serves approximately 94 homes.

**Well Supply In Service**

The Hidden Valley Estates Water Company currently operates two wells (Wells 2 and 3) to service its needs. Well 2 (GIM, Well MH-1) was constructed in 1970 and is a bedrock well with an estimated flow rate of 56 gpm. Well 3 (GIM, Well MH-2) was constructed in 1986 and produces approximately 100 gpm. Both wells have been determined not to be under the influence of surface water bodies by the Orange County Department of Health. At this time, there are no plans to expand the service of the water system (Miele, 1993) (E&H 1986). Further well data is presented on Tables 1 and 2A.

**Lake Linda**

The Lake Linda Property Owners Association owns and maintains the water system to service 9 homes located off of Pine Road south of the Village of Otisville in the Town of Mount Hope.

**Well Supply In Service**

Lake Linda Water System currently maintains one bedrock well to supply its needs, (GIM, Well MH-3). The system is currently unmetered, however, original pump tests indicate a safe yield of 35 gpm. The well was constructed in 1950. No further extension of the water system is anticipated at this time (Conklin, 1993). Further well data is presented on Tables 1 and 2B.

**New Vernon Estates**

The New Vernon Water Company which is owned and operated by Edwin Silvers was created to service the water supply needs of the New Vernon Subdivision, which is located off of County Route 18 in the northern portion of the Town of Mount Hope. At present, the system provides water service to approximately 70 homes.

**Well Supply in Service**

The New Vernon Estates Water District maintains the use of 2 bedrock wells (GIM, Wells MH-4, MH-5). The water system is currently granted a disinfection waiver from the Orange County Department of Health. In addition, Orange County Department of Health has determined that this source is not under the influence of any surface water (Silvers, 1993). For further well data information, please refer to Tables 1 and 2C.

**Whitlock Farm**

The Whitlock Farm Water Company which is owned and operated by Edwin Silvers was created to service the water supply needs of approximately 28 homes located off of Whitlock Road in the Town of Mount Hope (GIM).

**Well Supply In Service**

The Water Company currently has two wells on line (GIM, Wells MH-6 and MH-7) with the additional capability to add a third well, which has been drilled and tested. Mr. Silvers reported this third well is a sand and gravel well with a yield of 330 gpm, (GIM, Well MH-8). However, due to initial test results which

MH-2

indicates a high iron and manganese content the owners would only place this well in service, if required (Silvers, 1993). Of the two existing wells, Well 1 is currently utilized to supply water to the community, and Well 2 is utilized as a back up source due to its lower production. Both Wells 1 and 2 have been granted a disinfection wavier by Orange County Department of Health. In addition, the Orange County Department of Health has determined that the sources is not under the influence of any surface water (Silvers, 1993). For further information on the wells, please refer to Tables 1 and 2D.

#### **Federal Correctional Facility**

The United States Federal Correctional Facility located in the northwest portion of the Town of Mount Hope maintains its own water supply system. This water system is supplied from two active sand and gravel wells and one emergency sand and gravel well located in the neighboring Town of Deerpark (GIM, Wells MH-9, MH-10 and MH-11). Each sand and gravel well has a yield in excess of 350 gpm. The facility also maintains six drilled bedrock wells on site as auxiliary back up (GIM, Wells MH-12, MH-13, MH-14, MH-15, MH-16, and MH-17). However, these are low producing wells which have a production range from 5-26 gpm, and they are not currently utilized. According to the Orange County Department of Health, both sand and gravel Wells 1 and 2 are located 75' from the Basherkill Stream with no confining layer between the surface and the water bearing strata. Therefore, Orange County Department of Health recommends that investigations start immediately to determine if the wells are under the direct influence of surface water (OCDOH, 1993). For further well data please refer to Tables 1 and 2E.

### **PROPOSED COMMUNITY WATER SUPPLY SYSTEMS**

The following are proposed community water supply systems, which are currently proposed within the Town of Mount Hope.

### **WATER SUPPLY DEMAND**

#### **Hidden Valley**

#### **Village of Otisville**

The Village of Otisville is located adjacent to New York State Route 211, south of the New York State Correctional Facility in the Town of Mount Hope (GIM). According to the 1990 U.S. Census, Otisville has a population of 1,076 (OCPD, 1993). The Village water system currently is supplied through an interconnection with the State Correctional Facility Surface Water Supply. Due to growing complaints of poor water quality, the Village is pursuing the development of its own water source located within the Village (GIM, Well MH-20). Currently, the Village's daily average consumption is 50,000 gallons. Initial investigation of the proposed sand and gravel well supply indicated greater than 200 gpm or 168,000 gallons per day (Chumard, 1990). The well is a gravel packed well reported as having a depth of 47.6 feet. Although the Village has received a water taking permit from the New York State Department of Environmental Conservation WSA #8921, no further action by the Village has taken place (NYSDEC, 1993) (L-H, 1968).

#### **Mill Pond Estates**

As proposed, the Mill Pond Estates Subdivision would consist of approximately 110 single family homes. According to the applicant, the homes are proposed as three bedroom units. Water supply requirements of a three bedroom home would have an average water demand of approximately 39,600 gpd or 28 gpm (Hudson, 1993).

Well locations for Mill Pond Estates are presented on (GIM, Well MH-18, MH-19). According to Planning Board and the applicant's records, two wells exist on site. However, the wells are quite old and no records could be found about their construction or original well logs. Flow tests conducted by the applicant indicate a sustained yield of 69 gpm and 58 gpm for Wells 1 and 2 respectively. According to Orange County Department of Health, a maximum daily yield of 79,000 gpd is required for this Subdivision. In addition, as no records exist, extensive monitoring of the wells will be required to ensure adequate quality of the supply (OCDOH, 1993).

The present supply meets the 1993 average daily water demand of .023 mgd (million gallons per day)

and the 1993 maximum daily water demand of .030 mgd with the existing bedrock wells in service (OCDOH, 1993). The average yield supply of the 2 wells is estimated at .043 mgd. Therefore, there are no plans to expand the groundwater supply.

#### **Lake Linda**

Although the present system is unmetered, it would appear that the present supply is capable of meeting both the 1993 average daily water demand of .003 mgd and the 1993 estimated maximum daily water demand of .01 mgd with the existing bedrock wells in service (OCDOH, 1993). However, this system has no auxiliary well supply; and, in the event of a system breakdown, no alternative supply is available.

#### **New Vernon**

The present supply is capable of meeting both the 1993 average daily water demand of .015 mgd and the 1993 maximum daily water demand of .018 mgd with both its existing bedrock wells in service (OCDOH, 1993).

#### **Whitlock Farms**

Although the present system is unmetered, it appears that the present supply is capable of meeting both the 1993 estimated average daily water demand of .007 mgd and the 1993 estimated maximum daily water demand of .011 mgd with its existing bedrock wells. There is a 330 gpm sand and gravel well but, there is no immediate plan to incorporate the well into the water supply system (Silvers, 1993).

#### **Federal Correctional Facility**

The present water supply meets the 1993 average daily water demand and the 1993 maximum daily water demand of the Federal facility (Wehran, 1993).

### **Projected Water Demand**

#### **Hidden Valley**

Table 4 indicates that the existing wells have an estimated maximum yield capacity to meet the projected water demand for this water district for the year 2020. As the Subdivision is at or near its "buildout" condition, there is no indication of an increase from its present daily demand. The Town of Mount Hope currently has no plans to accept responsibility for this water district or to expand it. Any expansion of this or any private Water District is beyond the Town's immediate control.

#### **Lake Linda**

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**Federal Correctional Facility**

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**INVENTORY OF GROUNDWATER  
CONTAMINATION PROBLEMS**

**Existing Ground-Water Contamination  
Problems**

Lanc & Tully Engineering and Surveying, P.C. reviewed existing known groundwater contamination sites, including New York State Department of Environmental Conservation (NYSDEC) inactive hazardous waste sites, remediation project (NYSDEC Spill Response), solid waste sites, and Resource Conservation and Recovery Act (RCRA) sites for the Town of Mount Hope. The information was provided by Lawler, Matusky and Skelly Engineers (LMS, 1993) and gathered from a Freedom of Information Law (FOIL) request from the NYSDEC. The FOIL request from the NYSDEC did not inventory any sites for the above categories, which are known to have contaminated ground water in the Town of Mount Hope.

**Potential Ground-Water Contamination  
Problems**

Information about potential groundwater contamination sites was obtained from:

- ! FOIL request to NYSDEC (LMS, 1993); and
- ! Land use data from the Orange County, New York Real Property Tax Assessment database (Space Track, 1993)

The following summarizes the potential groundwater contamination sites, including the NYSDEC's potential inactive hazardous waste sites and solid waste facilities from the FOIL request from the NYSDEC. In addition, a list of possible groundwater contamination sites has been developed

by Lanc & Tully Engineering and Surveying, P.C. in conjunction with Town personnel.

**Solid Waste Facilities**

Albert Mydos and Sons, Box 94, Otisville, New York is located off of New York State Route 211 in the Town (LMS, 1993).

**Town Highway Salt Storage**

Town Highway Department Salt Storage location, the salt storage area is located off of County Route 11, and currently is covered (L&T, 1993).

**Town Waste Water Treatment Facility**

Town-operated Waste Water Treatment Facility located north of Hidden Valley Estates (L&T, 1993).

**Industrial Complexes**

- ! Alliance Pharmaceutical, is a pharmaceutical development complex located off of Sanitarium Road in the northwest portion of the Town (L&T, 1993).
- ! Wallace Oil Storage Facility, which is located off of New York State Route 211 road within the Village of Otisville (L&T, 1993).

Each property in Orange County has a land use code number. Properties with land use code numbers associated with potential contamination of ground water were identified through analysis of the Real Property Tax Assessment database by Space Track, Inc. The types of land uses in the potential contamination category include:

- ! industrial facilities
- ! gas stations
- ! dry cleaners; and
- ! auto repair facilities

Where possible, approximate locations of these sites are shown as triangles on the GIM.

**Petroleum Bulk Storage Facilities**

The FOIL request from the New York State Department of Environmental Conservation inventoried the petroleum bulk storage facilities presented on Table 5.

These sites should be listed as potential groundwater contamination sites. However, further investigation would be required to determine if contamination exists at the respective locations.

TABLE 1

## TOWN OF MOUNT HOPE

## Summary of Available Well Data

Well ----- Water District	Tax Map Municipality ----- Section -- Block ---- Lot	Map Location ----- I.D. #	Well Sta- tus	Reported Yield (gpm) Original ----- Present	Depth of Well (feet)	Well Diame- ter (inche- s)	Length of Casing (feet)	Well Screen Length (feet) ----- Setting Interval (feet)	Aquifer	Date Drilled	Comments
Well 1 ----- Lake Linda	Mount Hope 11 -- 1 -- 5	Mount Hope ----- MH-3	In Service ----- Active	35 ----- 8	270	6	70	NA ----- NA	Bedrock  On	1950	
Well 2 ----- Hidden Val- ley Estates	Mount Hope 21 -- 3 -- 2	Mount Hope ----- MH-1	In Service ----- Active	60 ----- 50	495	6	44	NA ----- NA	Bedrock  On	1970	
Well 3 ----- Hidden Val- ley Estates	Mount Hope 21 -- 3 -- 2	Mount Hope ----- MH-2	In Service ----- Active	100 ----- 100	285	8	72	NA ----- NA	Bedrock  On	1986	Best well in service
Well 1 ----- New Vernon Estates	Mount Hope 1 -- 1 -- 33.4	Mount Hope ----- MH-4	In Service ----- Active	35 ----- 30	93	8	87	NA ----- NA	Bedrock  On	1968	
Well 2 ----- New Vernon Estates	Mount Hope 1 -- 1 -- 33.4	Mount Hope ----- MH-5	In Service ----- Active	10 ----- 10	254	6	109	NA ----- NA	Bedrock  On	1972	Utilized as Auxiliary Well

TOWN OF MOUNT HOPE  
Summary of Available Well Data

Well ----- Water District	Tax Map Municipality ----- Section -- Block ---- Lot	Map Location ----- I.D. #	Well Sta- tus	Reported Yield (gpm) Original ----- Present	Depth of Well (feet)	Well Diame- ter (inche- s)	Length of Casing (feet)	Well Screen Length (feet) ----- Setting Interval (feet)	Aquifer	Date Drilled	Comments
Well 1 ----- Whitlock Farms	Mount Hope 20 -- 1 -- 20	Mount Hope ----- MH-6	In Service ----- Active	31 ----- 31	156	6	154	NA ----- NA	Bedrock  On	1966	Best Well in Service
Well 2 ----- Whitlock Farms	Mount Hope 20 -- 1 -- 20	Mount Hope ----- MH-7	In Service ----- Stand By	28	140	6	151	NA ----- NA	Bedrock  On	1972	Auxiliary Well
Well 3 ----- Whitlock Farms	Mount Hope 20 -- 1 -- 20	Mount Hope ----- MH-8	In Active ----- Equipped	330 ----- 0	117	8	117	NA ----- NA	Sand and Gravel	1973	
Well 1 ----- Federal Correctional Facility	Deerpark* 9 -- 2 -- 3	Deerpark* ----- MH-9	In Service ----- Active	360 ----- 350	60	8	40	10 ----- 42-52	Sand and Gravel	1984	
Well 2 ----- Federal Correctional Facility	Deerpark* 9 -- 2 -- 3	Deerpark* ----- MH-10	In Service ----- Active	360 ----- 350	60	8	40	10 ----- 42-52	Sand and Gravel	1984	



TOWN OF MOUNT HOPE

Summary of Available Well Data

Well ----- Water District	Tax Map Municipality ----- Section -- Block ----- Lot	Map Location ----- I.D. #	Well Sta- tus	Reported Yield (gpm) Original ----- Present	Depth of Well (feet)	Well Diame- ter (inche- s)	Length of Casing (feet)	Well Screen Length (feet) ----- Setting Interval (feet)	Aquifer	Date Drilled	Comments
Emergency Well	Deerpark* 9 -- 2 -- 3	Deerpark* ----- MH-11	Emergency ----- Equipped	N/A ----- 400	60	8	42	10 ----- 42-52	Sand and Gravel	1984	Non- chlorinated emergency source
Well 2 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-12	In Service ----- Equipped	12 ----- 0	320	6	To Rock	NA ----- NA	Bedrock  Sbs	1975	Auxiliary Well Supply
Well 6 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-13	In Service ----- Equipped	35 ----- 0	1,000	8	To Rock	NA ----- NA	Bedrock  Sbs	1982	Auxiliary Well Supply
Well 7 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-14	In Service ----- Equipped	35 ----- 0	500	8	To Rock	NA ----- NA	Bedrock  Sbs	1982	Auxiliary Well Supply
Well 8 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-15	In Service ----- Equipped	25 ----- 0	500	6	To Rock	NA ----- NA	Bedrock  Sbs	1981	Auxiliary Well Supply

## TOWN OF MOUNT HOPE

## Summary of Available Well Data

Well ----- Water District	Tax Map Municipality ----- Section -- Block ----- Lot	Map Location ----- I.D. #	Well Sta- tus	Reported Yield (gpm) Original ----- Present	Depth of Well (feet)	Well Diame- ter (inche- s)	Length of Casing (feet)	Well Screen Length (feet) ----- Setting Interval (feet)	Aquifer	Date Drilled	Comments
Well 9 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-16	In Service ----- Equipped	25 ----- 0	500	6	To Rock	NA ----- NA	Bedrock  Sbs	1982	Auxiliary Well Supply
Well 10 ----- Federal Correctional Facility	Mount Hope 2 -- 1 -- 43	Mount Hope ----- MH-17	In Service ----- Equipped	35 ----- 0	500	8	To Rock	NA ----- NA	Bedrock  Sbs	1982	Auxiliary Well Supply
Well 1 ----- Mill Pond Estates	Mount Hope 14 -- 1 -- 48.354	Mount Hope -- MH-18	In Active ----- Not Equip- ped	69** ----- NA	NA	NA	NA	NA	Bedrock  On	NA	Proposed Well Supply
Well 2 Mill Pond Estates	Mount Hope 14 -- 1 -- 48.354	Mount Hope -- MH-19	In Active ----- Not Equip- ped	58** ----- NA	NA	NA	NA	NA	Bedrock  On	NA	Proposed Well Supply

TOWN OF MOUNT HOPE

Summary of Available Well Data

Well ----- Water District	Tax Map Municipality ----- Section -- Block ----- Lot	Map Location ----- I.D. #	Well Sta- tus	Reported Yield (gpm) Original ----- Present	Depth of Well (feet)	Well Diame- ter (inche- s)	Length of Casing (feet)	Well Screen Length (feet) ----- Setting Interval (feet)	Aquifer	Date Drilled	Comments
Well 1 ----- Village of Otisville	Mount Hope 102 -- 1 -- 11.1	Mount Hope ----- MH-20	In Active ----- Not Equip- ped	200 ----- 0	47.6	8	47.6	10 ----- 37.6 - 47.6	Sand and Gravel	1968	Proposed Well Supply

gpm - Gallons per minute.  
NA - Not available.

Well Status: In service-active; In service-stand by; Inactive-equipped; Inactive-not equipped; Abandoned

mhtbl1/orange

TABLE 2A

**REGIONAL GROUND WATER STUDY  
TOWN OF MOUNT HOPE  
ORANGE COUNTY, NEW YORK**

-----  
**HIDDEN VALLEY ESTATES**

**Summary of Well Yield Capacities  
Consolidated Water District**

Well ----- Water District	WSA No. ----- Permitted Yield (gpm)	Average Yield Capacity (gpm) ----- (gpd)	Maximum Yield Capacity (gpm) ----- (gpd)	Comments
Well 1 ----- Hidden Valley Estates	5965 ----- NA**	50 ----- 17,720	50 ----- 53,300	
Well 2 ----- Hidden Valley Estates	5845 ----- NA**	100 ----- 26,580	100 ----- 78,000	
<b>TOTALS</b>	<b>(Total Permitted Yield)</b>  <b>150* gpm</b>	<b>(Total Yield Capacity)</b>  <b>44,300</b>	<b>(Total Maximum Yield Capacity)</b>  <b>131,300</b>	

gpm - Gallons per minute.

gpd - Gallons per day.

NA - Not available

WSA No. - Water Supply Application Number.

\* Maximum withdrawal permitted

\*\* Information unavailable from New York State Department of Environmental Conservation files

**TABLE 2B**  
**REGIONAL GROUND WATER STUDY**  
**TOWN OF MOUNT HOPE**  
**ORANGE COUNTY, NEW YORK**

-----  
**LAKE LINDA**

**Summary of Well Yield Capacities**  
**Consolidated Water District**

Well ----- Water District	WSA No. ----- Permitted Yield (gpm)	Average Yield Capacity (gpm) ----- (gpd)	Maximum Yield Capacity (gpm) ----- (gpd)	Comments
Well 1 ----- Lake Linda	2141 ----- NA**	unmetered ----- 2,700	8 ----- 11,500	
<b>TOTALS</b>	<b>(Total Permitted Yield)</b>  NA*	<b>(Total Yield Capacity)</b>  2,700	<b>(Total Maximum Yield Capacity)</b>  11,500	

gpm - Gallons per minute.  
gpd - Gallons per day.  
NA - Not available

WSA No. - Water Supply Application Number.

\* Maximum withdrawal permitted

\*\* Information unavailable from New York State Department of Environmental Conservation files

TABLE 2C

**REGIONAL GROUND WATER STUDY  
TOWN OF MOUNT HOPE  
ORANGE COUNTY, NEW YORK**

-----  
**NEW VERNON ESTATES**

**Summary of Well Yield Capacities  
Consolidated Water District**

Well ----- Water District	WSA No. ----- Permitted Yield (gpm)	Average Yield Capacity (gpm) ----- (gpd)	Maximum Yield Capacity (gpm) ----- (gpd)	Comments
Well 1 ----- New Vernon Estates	7563 ----- NA**	30 ----- 15,000	30 ----- 43,000	Main Well Supply
Well 2 ----- New Vernon Estates	7563 ----- NA**	0 ----- 0	10 ----- 15,000	Auxiliary Well
<b>TOTALS</b>	<b>(Total Permitted Yield)</b>  NA**	<b>(Total Yield Capacity)</b>  15,000	<b>(Total Maximum Yield Capacity)</b>  58,000	

gpm - Gallons per minute.  
gpd - Gallons per day.  
NA - Not available

WSA No. - Water Supply Application Number.

\* Maximum withdrawal permitted

\*\* Information unavailable from New York State Department of Environmental Conservation files

**TABLE 2D**  
**REGIONAL GROUND WATER STUDY**  
**TOWN OF MOUNT HOPE**  
**ORANGE COUNTY, NEW YORK**

-----  
**WHITLOCK FARMS**

**Summary of Well Yield Capacities**  
**Consolidated Water District**

Well ----- Water District	WSA No. ----- Permitted Yield (gpm)	Average Yield Capacity (gpm) ----- (gpd)	Maximum Yield Capacity (gpm) ----- (gpd)	Comments
Well 1 ----- Whitlock Farms	5285 ----- NA**	30 ----- 6,500	30 ----- 43,000	Main Well
Well 2 ----- Whitlock Farms	6376 ----- NA**	0 ----- 0	20 ----- 28,000	Auxiliary Well
Well 3 ----- Whitlock Farms	NA** ----- NA**	0 ----- 0	0 ----- 0	New Well -- Not Connected High Manganese and Iron
<b>TOTALS</b>	<b>(Total Permitted Yield)</b>  NA**	<b>(Total Yield Capacity)</b>  6,500	<b>(Total Maximum Yield Capacity)</b>  71,000	

gpm - Gallons per minute.  
gpd - Gallons per day.  
NA - Not available

WSA No. - Water Supply Application Number.

\* Maximum withdrawal permitted

\*\* Information unavailable from New York State Department of Environmental Conservation files

TABLE 2E

**REGIONAL GROUND WATER STUDY  
TOWN OF MOUNT HOPE  
ORANGE COUNTY, NEW YORK**

-----  
**FEDERAL CORRECTIONAL FACILITY**

**Summary of Well Yield Capacities  
Consolidated Water District**

Well ----- Water District	WSA No. ----- Permitted Yield (gpm)	Average Yield Capacity (gpm) ----- (gpd)	Maximum Yield Capacity (gpm) ----- (gpd)	Comments
Well 1 ----- Federal Correctional Facility	NA** ----- NA**	350 ----- 155,887	350 ----- 229,950	Run alternately with Well #2
Well 2 ----- Federal Correctional Facility	NA** ----- NA**	350 ----- 155,887	350 ----- 229,500	Run alternately with Well #1
<b>TOTALS</b>	<b>(Total Permitted Yield)</b>  NA**	<b>(Total Yield Capacity)</b>  155,887	<b>(Total Maximum Yield Capacity)</b>  229,500 *	

gpm - Gallons per minute.

gpd - Gallons per day.

NA - Not available

WSA No. - Water Supply Application Number.

\* Maximum withdrawal permitted

\*\* Information unavailable from New York State Department of Environmental Conservation files

! Due to interference both wells can not be run simultaneously



**TABLE 4**  
**REGIONAL GROUND WATER STUDY**  
**TOWN OF MOUNT HOPE**  
**ORANGE COUNTY, NEW YORK**

Project Water Demand  
1993 - 2020  
(mgd)

Water District	Current Maximum Yield Capacity (mgd)	Current and Proposed* Maximum Yield Capacity (mgd)	1993 Projected Water Demand ----- Water-Supply Adequacy	2000 Projected Water Demand ----- Water-Supply Adequacy	2010 Projected Water Demand ----- Water-Supply Adequacy	2020 Projected Water Demand ----- Water-Supply Adequacy
Hidden Valley	0.13	0.13	0.03 ----- +0.01	0.03 ----- +0.01	0.03 ----- +0.01	0.03 ----- +0.01
Lake Linda	0.01	0.01	0.01 ----- 0	0.01 ----- 0	0.01 ----- 0	0.01 ----- 0
New Vernon	0.05	0.05	0.018 ----- +0.032	0.018 ----- +0.032	0.018 ----- +0.032	0.018 ----- +0.032
Whitlock Farms	0.045	0.045	0.04 ----- +0.005	0.04 ----- +0.005	0.04 ----- +0.005	0.04 ----- +0.005
<b>TOTAL</b>	0.235	0.235	0.098 ----- +0.047**	0.098 ----- +0.047**	0.098 ----- +0.047**	0.098 ----- +0.047**

mgd - Million gallons per day.

\* Combined yield capacity of both current and proposed water supply(s).

\*\* Calculated by current maximum yield capacity minus projected water demands.

\*\*\* Calculated by current and proposed maximum yield capacity minus projected water demand.

**COMMENTS:**

! All water districts at or within 15% of maximum build out, therefore, no expansion is projected water demand or adequacy of water supply is forecasted.

! All Subdivisions are built out -- no further expansion is permitted, therefore, no increase in water demand is anticipated.

**TABLE 3**  
**REGIONAL GROUND WATER STUDY**  
**TOWN OF MOUNT HOPE**  
**ORANGE COUNTY, NEW YORK**

---

**Summary of Water-Supply Source**

The Town of Mount Hope has several private water utilities which rely on low-medium yielding bedrock wells. At this time three are no municipal owned or operated water systems within the Town.

**Existing Source**

	<b>Water District</b>	<b>Ground Water (mgd)</b>
Current Average Daily Water Demand	Hidden Valley Lake Linda New Vernon Whitlock Farms	0.023 unmetered estimate 0.002 unmetered estimate 0.015 0.015
Current Maximum Daily Water Demand	Hidden Valley Lake Linda New Vernon Whitlock Farms	0.030 unmetered - estimate 0.01 0.018 unmetered - estimate 0.04
Maximum Yield Capacity	Hidden Valley Lake Linda New Vernon Whitlock Farms	0.13 0.01 0.05 0.045
Average Yield Capacity	Hidden Valley Lake Linda New Vernon Whitlock Farms	0.043 0.002 0.015 0.011
<b>Proposed Sources (Average Day)</b>		
<b>TOTAL MAXIMUM YIELD CAPACITY (MGD)* =</b>		0.235
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<b>CURRENT MAXIMUM DAILY USE (MGD) =</b>		0.098

mgd - Million gallons per day.

\* Maximum daily water demand estimated for unmetered systems.

**COMMENTS**

! Does not include Federal Correctional Facility Water Systems.

**TABLE 5**  
**REGIONAL GROUND WATER STUDY**  
**TOWN OF MOUNT HOPE**  
**ORANGE COUNTY, NEW YORK**

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**Petroleum Bulk Storage Facilities**

Facility	LOCATION	MUNICIPALITY
Mount Hope Garage	Route 207 - 208	Mount Hope
Decker' Garage	Route 211 and Walker Road	Otisville
Federal Correctional Institution	P.O Box 600, Two Mile Road	Otisville
Mid-City Transit Corporation	29 Mount Hope Avenue	Otisville
Otisville	71 State Street	Otisville
Otisville Correctional Facility	P.O. Box 8	Otisville
Otisville Elementary School	School Street	Otisville
Otisville True Value Hardware	Wallace Street	Otisville
Town of Mount Hope	P.O. Box 471, Route 211	Otisville
Village of Otisville	66 Highland Avenue	Otisville