ENGINEERING REPORT - DISTRIBUTION SYSTEM IMPROVEMENT

Proposal to install approximately 45,000 feet of 16", 12", 8" and 6" inch water mains and 1", 1 ½" and 2" water services on various streets and properties in Wainscott, Town of East Hampton.

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I. Executive Summary

The Suffolk County Water Authority (SCWA) proposes to install new water mains and services on various streets in Wainscott in the Town of East Hampton for purposes of supplying public water to existing homes and businesses with private wells. Approximately 520 private wells in this area are threatened by contamination from perfluorinated chemicals. These include the emerging contaminates PFOS and PFOA, which have been found in a number of private wells, in some cases at concentrations above health advisory levels. In order to serve the impacted homes and businesses it will be necessary to extend the existing public water supply system of water mains into these areas. It will also be necessary to install water service lines between the water main and the structure to be served. Existing private wells will be disconnected from the structure's internal plumbing system so as to prevent a potential cross contamination of the structure and the public water system. The proposed 16", 12", 8" and 6" water main will be ductile iron pipe along with directional drills that utilize 16" and 8" H.D.P.E (DR-9) and 24" steel casing. Within the project area, the 1", 1 ½" and 2" water services will connect both existing water mains and the new water mains, within the road right of way and on private properties into existing structures. Water services will be copper and HDPE. The plans for all work contemplated under this project shall be developed in accordance with applicable AWWA standards, NYS Department of Health standards and Ten States standards.

The water mains to be installed will supply properties in an area of Wainscott south of East Hampton Airport in the Town of East Hampton. The project area is delineated on the north by Industrial Road, on the west by Town Line Road and the East Hampton Town line and eastern boundary of the Incorporated Village of Sagaponack, south by the Atlantic Ocean and east by Georgica Pond and Daniels Hole Road. The estimated cost of the main installation and water services is estimated to be $24,344,878, which is proposed to be financed by the issuance of bonds of the Town.

The SCWA performed a State Environmental Quality Review Act review of the project by preparing and reviewing a Long Environmental Assessment Form Parts I, II and III. The SCWA coordinated its review with the Town and Environmental Facilities Corporation (EFC). On May 4, 2018 the SCWA declared itself Lead Agency and issued a Negative Declaration. The EFC directed SCWA to review this project as a Type I action under SEQRA. The EFC was included within the SEQRA review because it is anticipated that the Town and the SCWA will apply jointly for an EFC Intermunicipal Grant to pay for some or all of this project.

II. Project Background and History

A. Background

The Hamlet of Wainscott lies to the south of the Town of East Hampton Airport. The project area is delineated on the north by Industrial Road, on the west by Town Line Road and the East Hampton town line, south by the Atlantic Ocean and east by Georgica Pond, Montauk Highway and Daniels Hole Road. Within this area are approximately 520 residential and commercial properties that are served by private wells. Sampling of these wells by the Suffolk County Department of Health services has revealed the presence of the compounds PFOS and PFOA in these wells. The current EPA Health Advisory for a combination of these compounds is 70 parts per trillion (PPT). Several of the wells have tested above the EPA Health Advisory level.

In order to protect public health, the Town has determined it will be necessary to extend the public water system into the general area of where contamination has been found. Connecting residents to the public water system and disconnecting their private wells from the potable water plumbing system within the structure will ensure that residents are consuming water that is free of contamination.

The Town has worked together with the SCWA to identify those structures that will require connection to the public water system. The SCWA has developed the plans whereby new water mains will be installed along with the house service lines in order to provide for a complete system. There are several locations where water mains had been previously been installed but where all structures along its route had not been connected. This project addresses those structures by including the costs and fees associated with the installation of the service lines needed to connect those structures to the existing main. Figure 1 below is a distribution map in the vicinity of the project area and shows the locations of existing water mains and the location of the proposed water main installations.

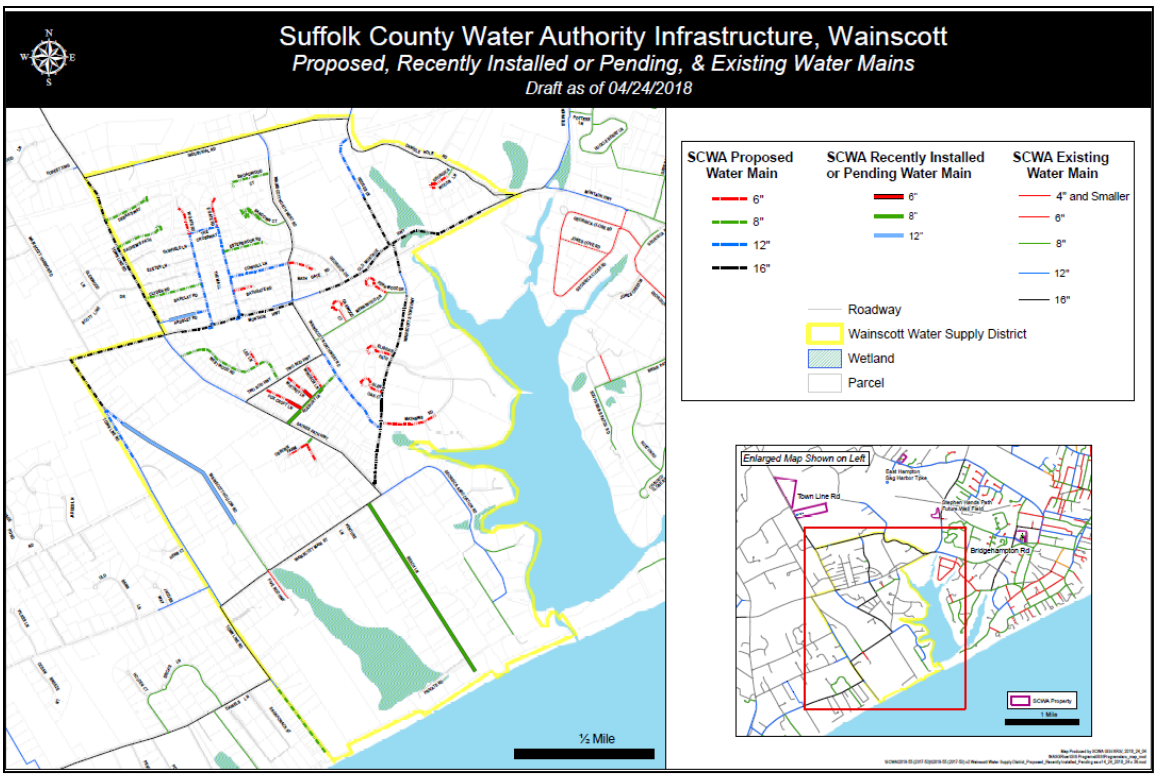

Figure 1 Distribution Map in the Vicinity of Exist Water Main and Proposed Main Improvement Project

B. Site Information

1. Location

The accompanying map entitled “Location of Water Main Installation - Suffolk County Regional Map” Figure 2 presents a generalized regional illustration of the location of the main installation in Wainscott. Figure 3 is a contour map of the Wainscott area made from the Light Detection and Ranging (LiDaR) Suffolk County Digital Elevation Model, and Figure 4 is an aerial of the immediate vicinity of the proposed main installation.

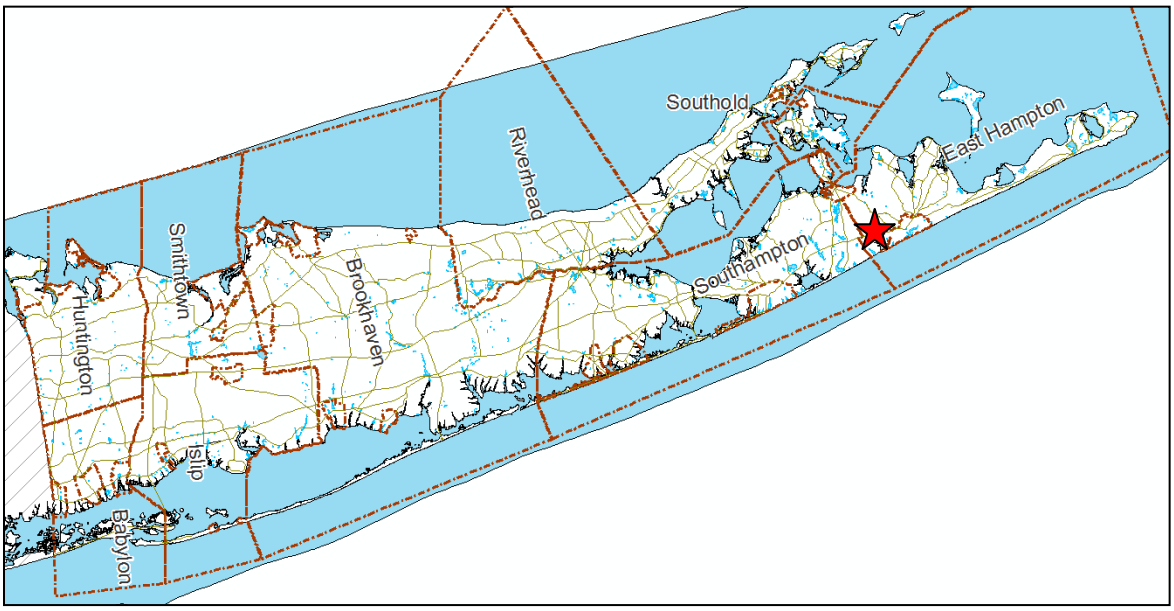

Figure 2 Location of Water Main Installation - Suffolk County Regional Map

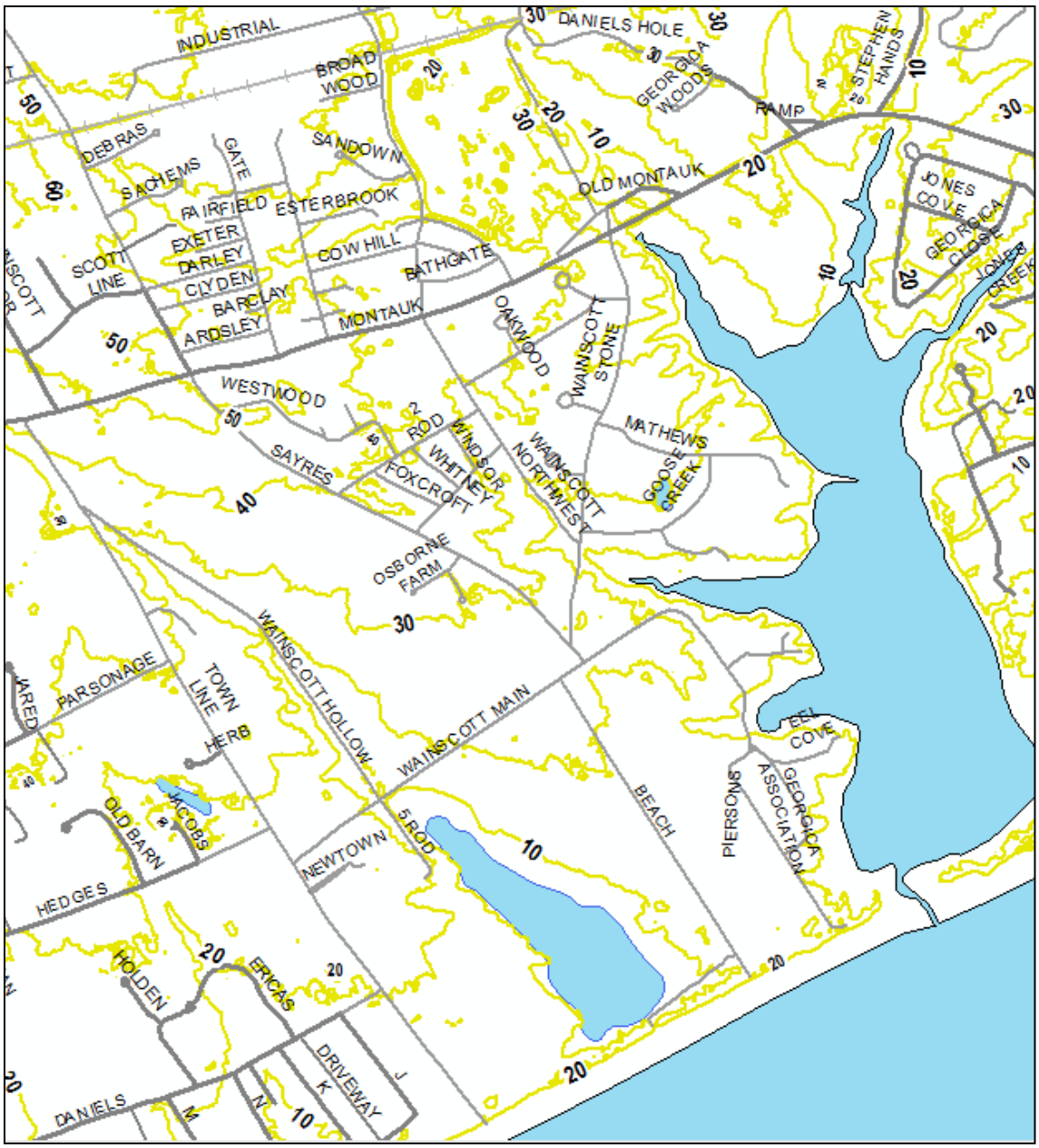

Figure 3 Light Detection and Ranging (LiDaR) Suffolk County Digital Elevation Model

Figure 4 Aerial of the Immediate Vicinity of the Proposed Main Installation

1. Natural Resources On or Near Project Site

The average depth to bedrock near the project area is approximately 1,350 feet below grade and the predominant soil types present are Carver and Plymouth Sands. Drainage status of the project site soils are well drained. The average depth to the water table in the area of the project site is between 11 and 50 feet below grade.

C. Ownership and SCWA Service Area

1. SCWA Service Area

The overall SCWA service area presently consists of over 40 individual pressure zones, most of which are interconnected. The South Fork Low water supply system serves most of the South Fork. Within the South Fork Low water supply system, there are several intermediate pressure zones that serve higher elevations as well and water from the South Fork Low is boosted to the Montauk Low water supply system during peak demand periods. During the calendar year 2017, the SCWA produced 68.7 billion gallons of water for 386,935 customer accounts providing water to approximately 1.5 million people in Suffolk County. Figure 5 shows SCWA existing facilities in the South Fork Low water supply system and Figure 6 shows SCWA existing facilities in the vicinity of the Wainscott Water Supply District.

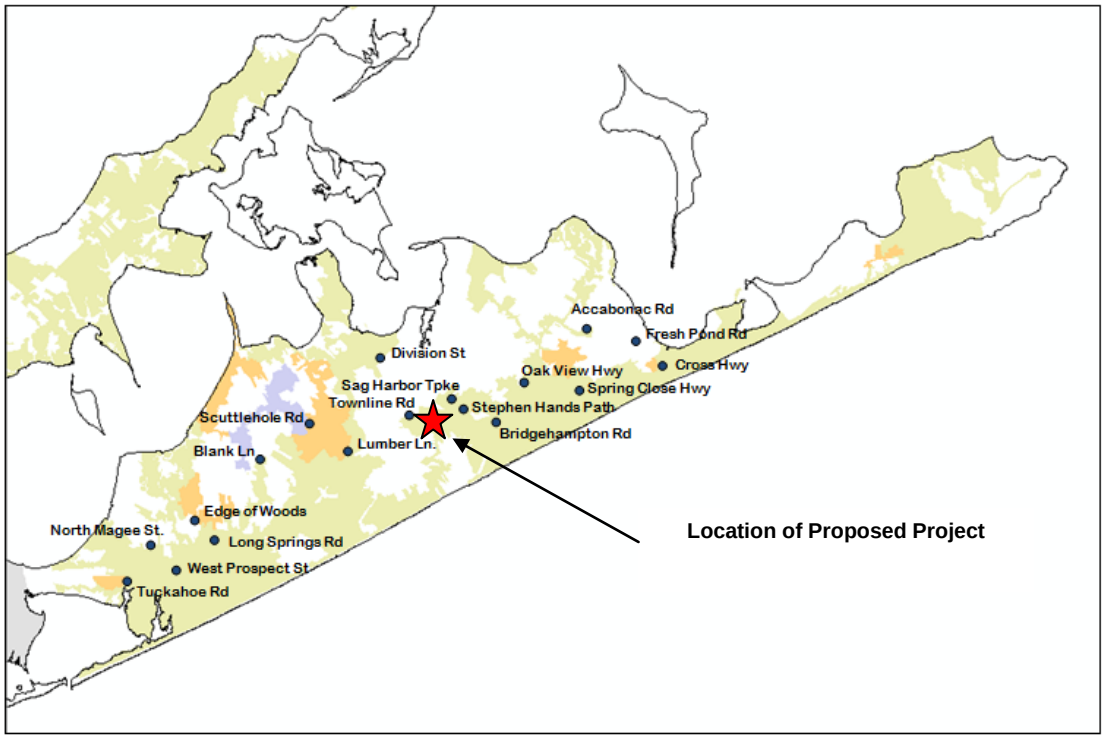

Figure 5 Suffolk County Water Authority
Existing Facilities in the South Fork Low Water Supply System

Figure 6 Suffolk County Water Authority Existing Facilities in the Vicinity of the Wainscott Water Supply District

2. Population Trends and Growth

The SCWA has been studying the population of its water supply systems since 1987, when the Suffolk County Department of Planning (SCDP) compiled its first report. Immediately after that study, the boundaries of some SCWA systems changed, and the population growth in Suffolk County as a whole leveled off. In January of 1996, the original study was updated using more recent data, and predictions were made to the year 2020, accounting for more recent population trends. The SCDP also estimates the seasonal population is 56,225 for this area. According to the Town of East Hampton Hamlet Report January 2018, the population of Wainscott is 719. The SCDP has made the following predictions as to the population within the South Fork Low water supply system service area through 2020:

YEAR	POPULATION
1995	26,470*
2000	30,016*
2010	37,137*
2015	39,181*
2020	40,485

* Figures do not include seasonal population

3. Proposed Town of East Hampton Wainscott Water Supply District

As part of the plan to fund the project the Town of East Hampton will create the Wainscott Water Supply District. Figure 7 shows the boundaries of the district, parcels (872 properties), as well as existing SCWA water main. The Wainscott Water Supply District is the hamlet of Wainscott, in the Town of East Hampton, south of East Hampton Airport. Such area is delineated on the north by Industrial Road, on the west by Town Line Road and the East Hampton Town line and eastern boundary of the Incorporated Village of Sagaponack, south by the Atlantic Ocean and east by Georgica Pond and Daniels Hole Road.

Figure 7 Town of East Hampton Wainscott Water District with existing Suffolk County Water Authority Water Main

4. Growth Inducing Impact and Zoning

The Wainscott Water Supply District is being created to insure a source of clean drinking water throughout an area where perfluorinated chemicals have been detected in numerous private wells (Testing is ongoing, but as of early May, PFCs at varying levels have been detected in 140 out of 268 wells sampled.)

At present, water mains serve only a part of the at-risk area; their extension is not to serve further development and growth outside the hamlet center but specifically to provide safe water to existing residents.

The district includes the Wainscott hamlet center and business district, which contains the largest developable parcel within the water supply district. This parcel is identified in an East Hampton Town planning study, the Wainscott Hamlet Study, as a potential mixed-use development site that could potentially accommodate a transit center, housing, business uses, and open space for recreation.

Outside the hamlet center, the potential for further development and sprawl is constrained by a combination of factors, including the zoning code (most of the large remaining lots are not subdividable, or could be subdivided into only a small number of lots), and various legal restrictions on development of the large parcels, which include farmland protection statutes, town purchases of development rights over agricultural lands and open space, and town land purchases through the Community Protection Fund, which prohibits development.

There is currently a moratorium on development in Wainscott. In addition, a goal of the East Hampton Town Comprehensive Plan is “protection of the existing character” of the town, which includes “prohibiting commercial sprawl between hamlet centers, protecting scenic approaches to hamlet centers, and limiting traffic-producing new development along main arterial roadways.” (East Hampton Town Comprehensive Plan, 2005, p. 110). Land acquisition, upzoning, and other tools and legislation, as mentioned above, have been employed to achieve these goals in Wainscott as in the rest of the town.

5. Land Use

Table 1

Wainscott Water District Parcel Breakdown

SCWA Category	
CUSTOMER	172
DEVELOPED, NON-CUSTOMER	520
PROTECTED	28
SERVICE NOT REQUIRED	71
VACANT	57
Total	848

EH_Category	
Improved	762
Protected	29
Vacant	57
Total	858

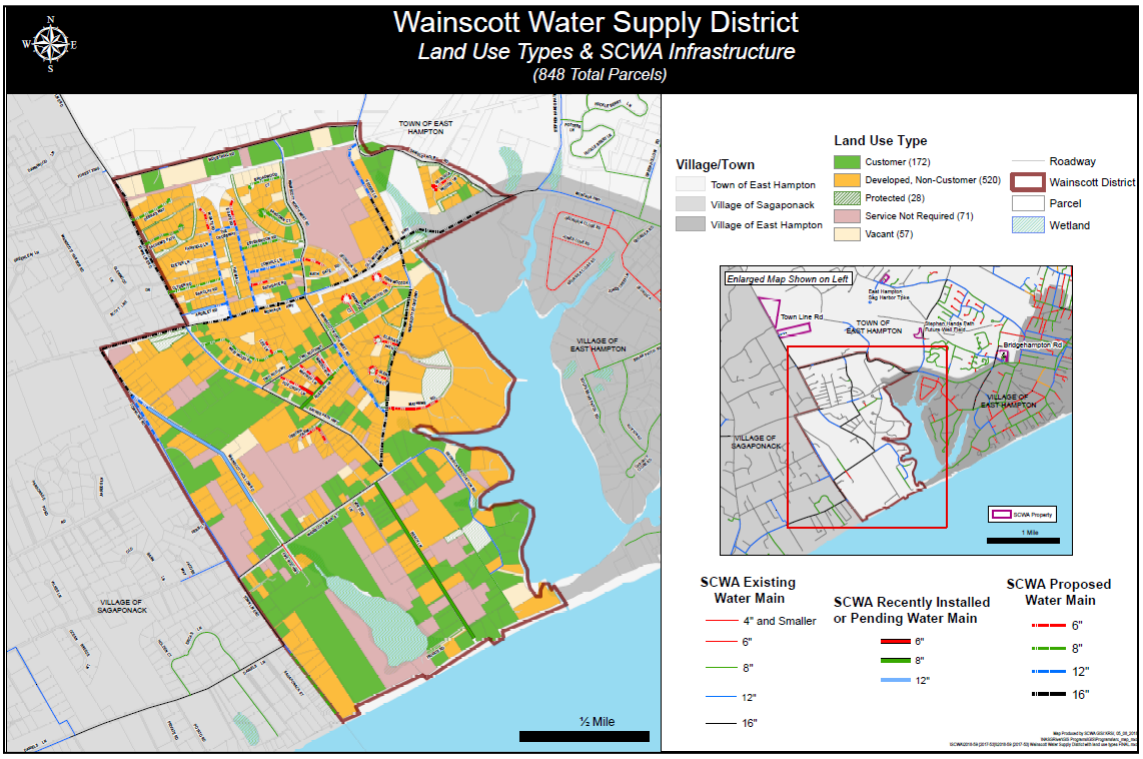

Figure 8 Town of East Hampton Wainscott Water District Land Use Types and Suffolk County Water Authority Infrastructure

6. Non-Community Water Supply Systems

According to available data there are eight non-community water supply systems within the area of the proposed project area. The installation of the proposed new water mains will give establishments served by non-community water supply systems the opportunity to connect to the SCWA's water supply system. In addition to improved water quality connecting to the public water supply system will also enhance fire protection and resiliency.

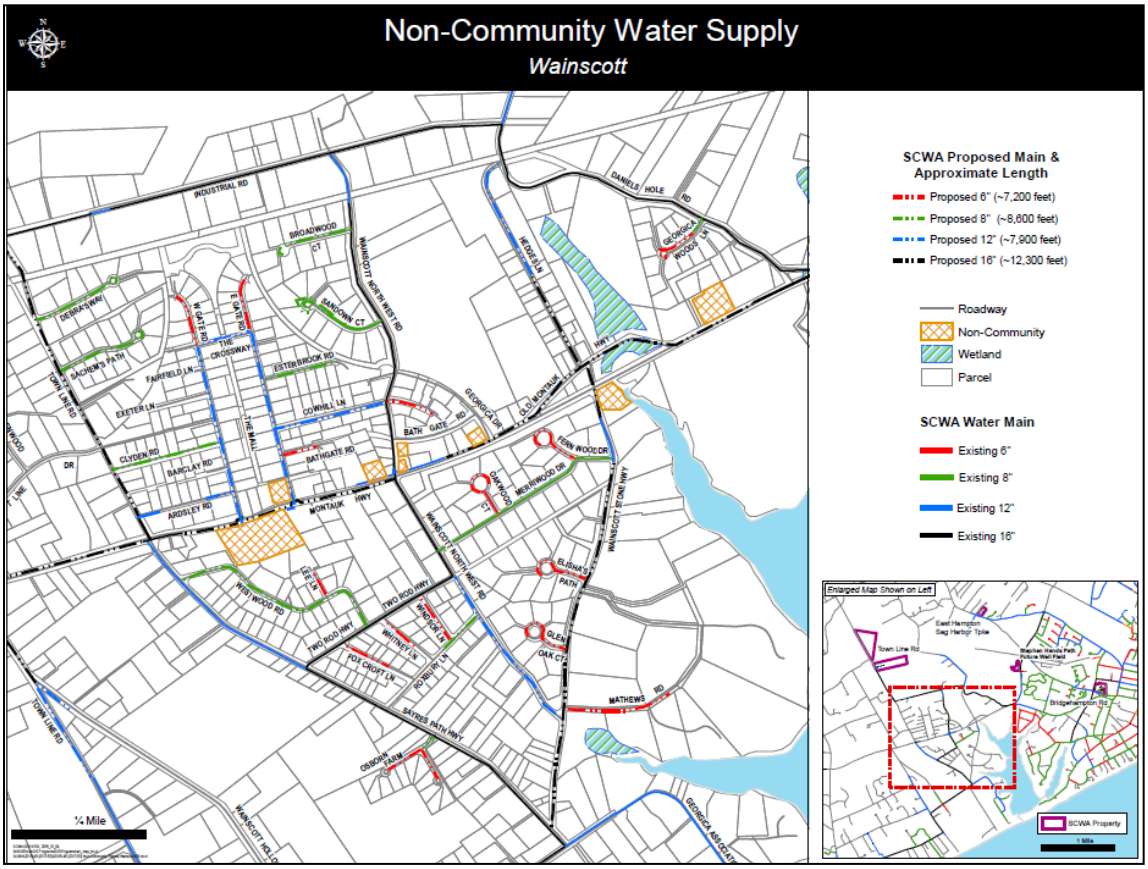

Figure 9 Non-Community Water Supply Systems

D. Existing Facilities and Present Conditions

1. South Fork Low Physical System

Within the South Fork Low water supply system there are seventeen well fields, fifty eight wells and four elevated tanks. In general the number of services in water supply system has remained constant over the past several years. The SCWA expects approximately 520 new customers when service is expanded in the Wainscott area. As shown on the Table 2 there is adequate capacity in the South Fork Low water supply system to serve the addition of 520 potential new customers however it is anticipated that the area will continue to experience growth in the future. In order to meet future peak demand it will be necessary for the SCWA to develop additional sources of supply through the construction of new wells and new well fields. The most recent analysis of customer growth is shown below:

	2013	2014	2015	2016	2017	2018
Number of Services	20,321	20,516	20,629	21,094	21,116	21,169

Table 2
Peak Demand Analysis

	2018	Addition of 520 Potential New Services
2018 SCWA Services	**21,169**	**21,689**
Peak Demand Rate per Service		
Highest GPM peak demand rate between 2012 and 2016 (39,862 GPM/20,629 Services in 2015)	**1.93**	**1.93**
Projected System Peak Demand Rate (GPM)	**40,856**	**41,860**
Total system capacity (GPM) from Table 3	**42,770**	**44,070****
Includes capacity from the future Stephen Hands Path well field **		
Less 5% capacity from wells that are Out of Service due to Maintenance	**(2139)**	**(2204)**
Difference (GPM)	**(225)**	**6**

Table 3

Suffolk County Water Authority Wells
South Fork Low Water Supply System

			Decision				Date			Authorized
	S#	WSA#	Date	Dia.	Depth	Aq.	In Service	Structure	Pump	Cap. (GPM)
Accabonac Rd 1	123717	10700	12/1/2004	20 x 14	163	G	3/22/06	Bldg.	DWT	1,000
Accabonac Rd 2	123718	10700	12/01/2004	20 x 14	153	G	3/22/06	Bldg	DWT	1,000
Blank Ln 1	128774	10935	8/15/2006	12 x 10	118	G	10/13/11	Bldg	SUB	350
Blank Ln 2	130299	10935	8/15/2006	12 x 10	118	G	8/10/11	Bldg	SUB	350
Blank Ln 3	134150	10935	8/15/2006	12 x 10	118	G	6/28/16	Bldg	SUB	350
Bridgehampton Rd 2A	83707	7557	1/23/1986	12	123	G	5/10/82	Vault	DWT	500
Bridgehampton Rd 3A	120485	10403	10/18/2002	20 x 14	120	G	10/3/03	Bldg.	DWT	1,020
Bridgehampton Rd 4	49422	6259	5/1/1973	16 x 12	148	G	7/2/74	Vault	DWT	700
Bridgehampton Rd 5A	131191	11553	1/10/2012	16 x 14	134	G	10/15/12	Bldg.	DWT	1,000
Cross Highway 1	30227	6532	5/1/1975	12	151	G	5/28/05	Bldg.	DWT	750
Cross Highway 2	30228	6748	5/5/1977	12	151	G	4/24/78	None	Sub	350
Division St. #1A	128139	11172	7/28/2008	20 x 14	163	G	5/27/09	Bldg.	DWT	500
Division St. #2A	132776	5722	2/24/2014	20 x 10	170	G	3/3/15	Bldg.	DWT	1,000
Division St. #3	62855	6733	4/18/1977	20 x 10	167	G	3/13/80	Vault	DWT	700
Division St. #4	96352	8253	8/1/1989	16 x 10	272	M	5/28/92	Vault	DWT	700
Edge of Woods Rd. #1	69511	7017	12/28/1979	20 x 10	268	M	5/10/82	Vault	DWT	1,000
Edge of Woods Rd. #2	71892	7156	8/17/1981	16 x 10	366	M	8/17/81	Vault	DWT	1,000
Edge of Woods Rd. #3	120091	10342	5/11/2004	20 x 14	258	M	8/12/02	Bldg.	DWT	1,000
Fresh Ponds #1	132094	11592	8/10/2012	20 x 10	123	G	6/16/14	Bldg.	SUB	300
Fresh Ponds #2	132095	11592	8/10/2012	20 x 10	283	M	6/16/14	Bldg.	SUB	300
Long Springs Rd. #1A	117831	10322	10/31/2002	20 x 14	100	G	3/18/02	Bldg.	DWT	800
Long Springs Rd. #3B	122603	10606	4/1/2004	20 x 14	99	G	2/18/05	Bldg	DWT	500
Long Springs Rd. #4B	122602	10605	4/1/2004	20 x 14	108	G	2/18/05	Bldg	DWT	500
Long Springs Rd. #5B	122601	10595	4/1/2004	20 x 14	99	G	2/18/05	Bldg	DWT	700
Long Springs Rd. #6	67819	6928	4/13/1979	16 x 10	284	M	6/26/80	Vault	DWT	700
Long Springs Rd. #7	112293	9584	11/20/1997	16	265	M	5/19/99	Bldg.	DWT	700
Lumber Lane #4A	131131	11549	10/14/2011	16 x 14	168	G	8/27/12	Bldg.	DWT	500
Lumber Lane #5	78612	8767	1985	12 x 8	250	M	5/15/92	Bldg.	DWT	1,000
Lumber Lane #6	123937	10712	3/17/2005	16	263	M	1/4/06	Bldg.	DWT	700
Lumber Lane #7	130044	11397	10/27/2010	16 x 14	263	M	7/13/11	Bldg.	DWT	1,000
N. Magee St. #1	74865	7318	8/22/1983	20 x 10	193	G	7/15/84	Vault	DWT	700
N. Magee St. #2	79293	7355	8/23/1983	16 x 12	158	G	7/18/86	Vault	DWT	1,000
N. Magee St. #3	115706	9967	4/5/2000	20 x 14	158	G	2000	Bldg.	DWT	1,000
N. Magee St #4	133926	11782	6/17/15	20 x14	209	G	6/16/16	Bldg	DWT	1,000
Oak View Highway 1A	99275	8621	4/16/1991	16 x 12	222	M	5/27/94	Bldg.	DWT	500
Oak View Highway 2A	119865	10327	5/01/2002	20 x 10	458	M	7/23/03	Bldg.	DWT	700
Oak View Highway 3	78310	7488	12/21/1984	16 x 12	303	M	8/27/86	Vault	DWT	500
Oak View Highway 4	133799	11779	6/2/2015	20 x 10	226	G	7/5/2016	Bldg.	DWT	500
Sag Harbor Turnpike 1	102721	8789	1/19/1993	20 x 10	383	M	11/20/96	Bldg.	DWT	1,300
Sag Harbor Turnpike 2	115545	9895	4/1/2000	20 x 10	293	M	1/26/01	Bldg.	DWT	1,300

Scuttlehole Rd. # 1A	128458	11219	1/30/2009	20 x 10	458	M	12/1/09	Bldg.	DWT	1,000
Scuttlehole Rd. #2	106977	9134	9/26/1994	20 x 10	480	M	5/1/97	Bldg.	DWT	1,300
Scuttlehole Rd. #3	115975	9961	5/12/2000	20 x 10	453	M	7/6/02	Bldg.	DWT	1,300
Spring Close Hwy 1A	118818	10213	8/1/2001	20 x 14	125	G	7/6/02	Bldg.	DWT	1,000
Spring Close Hwy 2	66733	6844	8/29/1978	16 x 12	245	M	8/5/81	Vault	DWT	1,000
Spring Close Hwy 3	121048	10439	1/13/2002	20 x 14	128	G	12/3/03	Bldg.	DWT	1,300
Spring Close Hwy 4	134571	12207	3/28/17	20 x 10	130	G	Future	Bldg	DWT	500
Town Line Rd 1	118737	10398	1/9/2002	20 x 14	435	M	2003	Bldg.	DWT	1,000
Town Line Rd 2	120019	10398	1/9/2002	20 x 14	175	G	2003	Bldg.	DWT	1,000
Town Line Rd 3	130940	11506	6/23/2011	20 x 14	173	G	6/15/12	Bldg.	DWT	1,000
Tuckahoe Rd 1	25449	10218	1/15/2002	10	125	G	11/8/00	Bldg.	DWT	500
Tuckahoe Rd 2	31471	10218	1/15/2002	10	125	G	7/10/01	Pitless	SUB	500
W. Prospect St. #1	55028	6470	10/3/1974	10	160	G	4/30/76	Pitless	SUB	350
W. Prospect St. #2A	99014	8622	3/8/1991	12	252	M	5/25/94	Bldg.	DWT	350
W. Prospect St. #3	125974	10921	7/18/2006	12 x 10	158	G	8/1/07	Pitless	SUB	300
W. Prospect St. #4	125975	10921	7/18/206	12 x 10	154	G	8/1/07	Pitless	SUB	300
W. Prospect St. #5	128475	11212	12/04/2008	12 x 10	153	G	8/12/09	Pitless	SUB	300
W. Prospect St. #6	131738	11596	7/20/2012	12 x 10	163	G	5/24/13	Pitless	SUB	300

CURRENT SYSTEM CAPACITY	**42,770**

Future Well Supply

Stephen Hands Path wells nos. 1 and 2 each at 650 GPM	1,300

FUTURE SYSTEM CAPACITY	**44070**

STORAGE FACILITIES	**Type**	**Size (gal.)**	**Date In Service**
Division St.	Standpipe	1,500,000	8/28/1972
Edge of Woods Rd.	Reservoir	2,000,000	4/15/1986
Spring Close Highway	Hydropillar	500,000	4/15/1986
W. Prospect St.	Elevated	1,000,000	7/19/1990

TOTAL STORAGE CAPACITY	**5,000,000**

E. Definition of the Problem

1. Water Quality in the Wainscott Water Supply System

The Suffolk County Department of Health Services confirmed the presence of PFOS and PFOA in private wells located south of the East Hampton Airport. Some of the collected samples levels exceed the United States Environmental Protection Agency Health Advisory Levels of 70 parts per trillion.

The Suffolk County Groundwater Model (Suffolk County Water Authority, Suffolk County Department of Health Service, and Camp, Dresser, McKee) was used to illustrate the general direction of groundwater flow in the area surrounding the proposed project location (Figure 10).

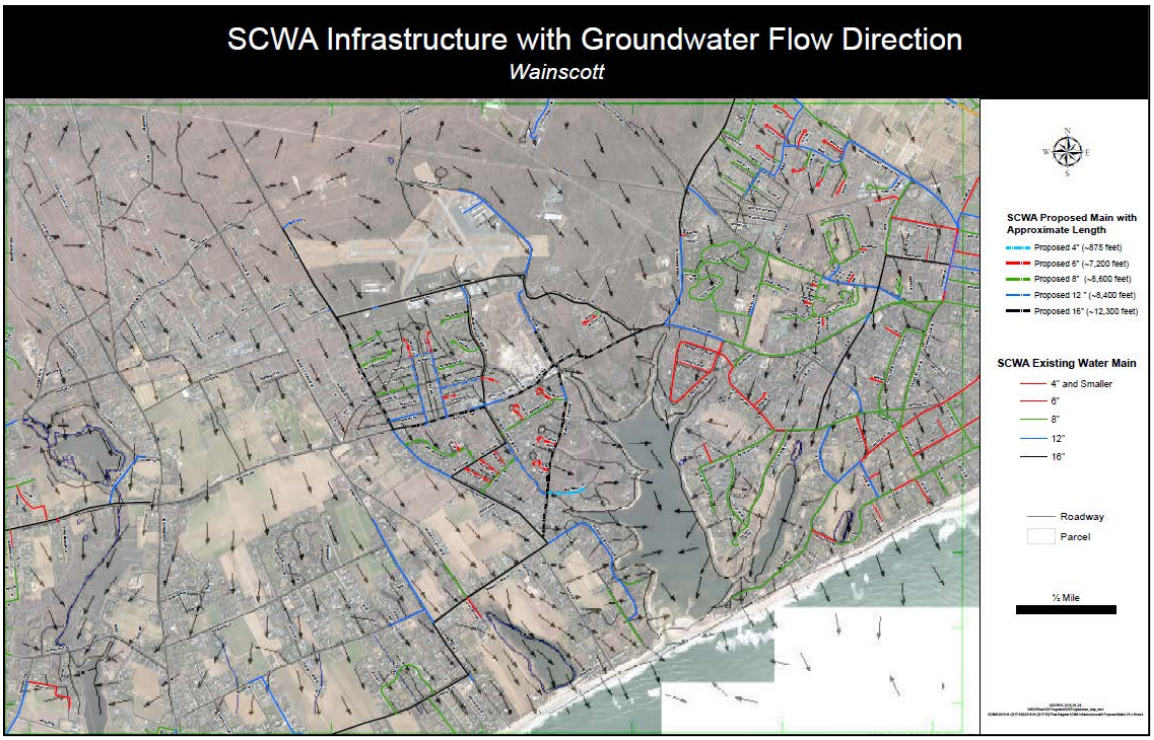

Figure 10 Suffolk County Water Authority Infrastructure with Groundwater Flow Direction

F. Secondary Project Benefits

1. Fire Flows

Prudent engineering practice would be to provide a minimum of 1,500 GPM available to fight fire at all times for residential customers and business requirements are typically higher. The project area does not have fire flow protection. The proposed water main installations would tie into the existing SCWA distribution system and bring new fire flow protection to the area.

2. Resilience and Redundancy

Expanding water main in Wainscott will greatly improve service redundancy by improving the distribution system in the immediate area especially along Town Line Road, Wainscott Stone Highway, and Montauk Highway. The improvement will allow the SCWA to more easily move water to areas in need especially during extended periods of power outages where only pump stations with auxiliary power provide the system with water and pressure.

Consideration of future physical climate risk due to sea-level rise, storm surge, and/or flooding was taken into consideration. A small portion of the proposed main installation at the southern end of Town Line Road is within a designated flood zone, however this is not a concern because the mains are pressurized and buried approximately 4 to 5 feet below grade and thus are unaffected by any overland flooding. If portions of the distribution system were damaged by flooding the SCWA has the capability to isolate broken water main and repair or retire accordingly.

Table 4

Stand-by Power in the South Fork Low Water Supply System

STATION	AVAILABLE PUMPS	# OF WELLS GENERATOR WILL OPERATE	# OF WELLS AVAILABLE ON GENERATOR
BRIDGEHAMPTON RD	ALL	4	4
DIVISION ST	ANY TWO	2	3
EDGE OF WOODS RD	ALL 3 BOOSTERS	BSTR	2
LONG SPRINGS RD	ANY 4	4	6
LUMBER LANE STATION	ALL	4 + 1 BSTR	4 + 1 BSTR
OAKVIEW HY	ANY TWO	2	3
SCUTTLEHOLE RD	ALL	3	3
SPRING CLOSE HY	ALL	3	3

G. Financial Status

1. Town of East Hampton Finance Plan

The project will be funded through the creation of a water supply district by the Town of East Hampton. At a meeting of the Town Board of the Town of East Hampton on May 8, 2018, the Town of East Hampton adopted a resolution that provides in relevant part the following description of its financial plan:

> WHEREAS, the maximum amount proposed to be expended for the construction of the Water Improvement is estimated to be $24,344,878, which is proposed to be financed by the issuance of bonds of the Town; and
>
> WHEREAS, the costs of the Water Improvement, including payment of principal of and interest on said bonds as the same may become payable, shall be borne partly by the area of the Town outside of any village and partly by the lands benefited thereby; and
>
> WHEREAS, such costs to be borne partly by the area of the Town outside of any village shall be paid by the assessment, levy and collection of assessments from the several lots and parcels of land in said area in annual installments in the same manner as other Town charges, and such costs to be borne partly by the lands benefited thereby shall be paid by assessment, levy and collection of assessments from the several lots and parcels of land within the Wainscott Water Supply Area which the Town Board shall determine to be especially benefited by the Water Improvement, so much upon and from each as shall be in just proportion to the amount of benefit which the Water Improvement shall confer upon the same, to pay the principal of and interest on said bonds as the same shall become due and payable; and
>
> WHEREAS, any funds received from the United States of America and/or the State of New York shall be applied towards such cost of construction or payment of the principal and/or the interest on the Town's obligations issued therefor, or will be budgeted as an offset to the taxes for the payment of the principal and interest on said obligations; and
>
> WHEREAS, the annual cost of operation and maintenance of said Water Improvement shall be paid by a charge upon the entire area of the Town outside of any villages and shall be levied and collected in the same manner and at the same time as other Town charges;

2. Suffolk County Water Authority Estimate for Water Service

Table 5

Suffolk County Water Authority 5/8/2018 **Wainscott - East Hampton Proposed Wainscott Water Supply District: Estimate for Water Service**	
Number of Properties:	520
Existing Water Mains Water Tap/Service Line Costs	
Surcharges for existing mains	$ 1,032,050
Tap fees	$ 413,050
Subtotal Taps & Surcharges	**$ 1,445,100**
Property Service line costs**	**$ 4,165,718**
Existing Water Main: Total Taps & Service Lines total	**$ 5,610,818**
New Water mains (no surcharge)	
Tap fees	**$ 904,450**
Property Service line costs**	**$ 8,386,370**
New water mains Taps and Service Lines total	**$ 9,290,820**
Subtotal for all Taps and Service Lines on New and Existing Mains	**$ 14,901,638**
Recent Main extensions Installation cost - Ardsley & Foxcroft/Roxbury	**$ 252,433**
Total Water Mains to be constructed: Proposed Wainscott Water Supply District	**$ 9,190,807**
Grand Total:	**$ 24,344,878**
**Estimate using contract bid prices not yet awarded,	

III. Alternatives Analysis

1. Point of Use and Point of Entry Water Treatment

Point of Use and Point of Entry water treatment devices are designed to treat domestic water use. The amount of water that can be treated varies however in general, a Point of Use device is installed on a single sink and a Point of Entry device is installed on the water line entering the house. The use of either device would require the homeowner to test regularly to ensure that standards for levels of contaminants are maintained. In addition, monitoring the efficiency of the device and replacement of the filtration medium would be an on-going task and expense at each of the approximate 520 new services.

Treating water at the well field to serve the community is considered a more viable option. The SCWA utilizes Granular Activate Carbon adsorption systems which are capable of treating hundreds of gallons of water per minute. Figure 11 shows four locations where Granular Activated Carbon adsorption systems are in service in the South Fork Low water supply system. In addition, the SCWA has adopted a policy to impose limits which are more restrictive than New York State standards for many contaminants.

Furthermore, Point of Use and Point of Entry water treatment devices do not improve fire protection to properties and do not contribute to system wide resiliency or redundancy.

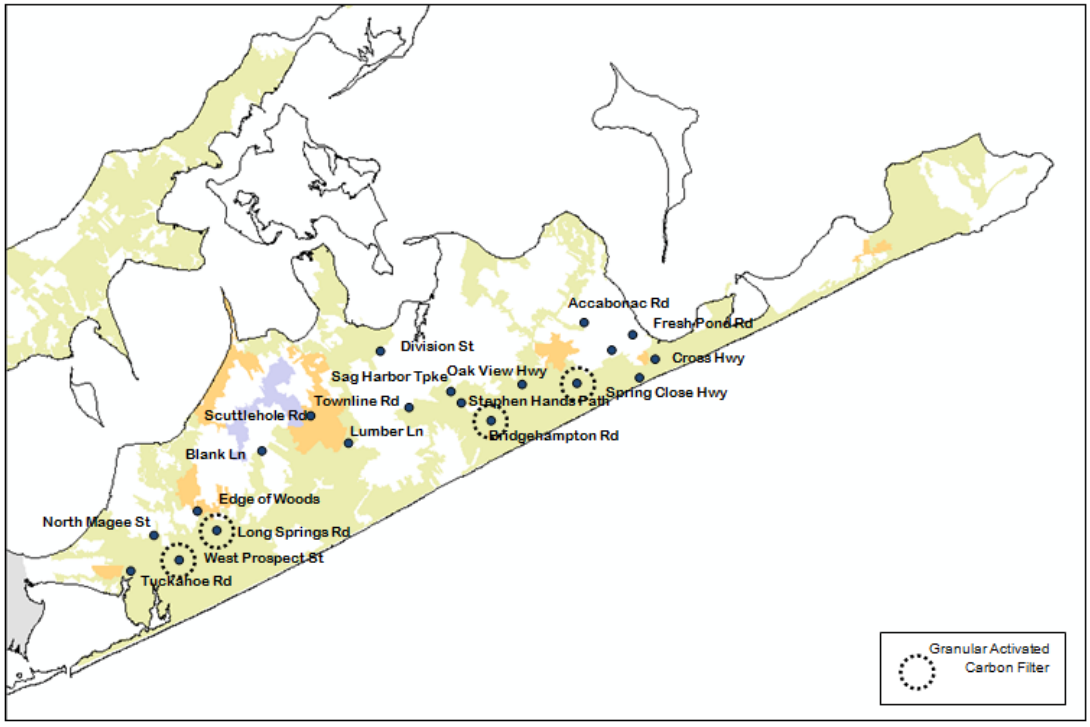

Figure 11 Map of Suffolk County Water Authority Well Fields with Usage of Remediation/Filtration Equipment in the South Fork Low Water Supply System

2. No Action

With no action taken the water supply to homes and businesses on private wells that are threatened by contamination from perfluorinated chemicals in the project area would remain the responsibility of the property owners. The installation of new water mains and water services will provide the option for these homes and businesses to connect to the public water supply system.