NEWTOWN CREEK COMMERCIAL NAVIGATION ANALYSIS

Prepared for the U.S. Environmental Protection Agency By the United States Army Corps of Engineers New York District



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US Army Corps of Engineers



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TABLE OF CONTENTS

1.0	Background and Purpose	1
2.0	Location and Study Area Description	2
3.0	New Work & Maintenance Dredging History	8
4.0	Physical Constraints	10
5.0	Operational Information	12
	5.1 Summary Data for Commodity Flow, Trips and Drafts	13
	5.2 Berth-by-Berth Analysis	15
6.0	Reasonably Anticipated Future Use	
7.0	Preliminary Findings	
8.0	References	38

LIST OF TABLES

LIST OF FIGURES

Figure 1. Study Area	1
Figure 2. Newtown Creek Federal Navigation Channel	3
Figure 3. Newtown Creek Federal Navigation Channel Reaches and Users	4
Figure 4. Southern LIRR NYC Rail Freight Bridge - "DB" Bridge Commodities	12
Figure 5. Southern LIRR NYC Rail Freight Bridge - "DB" Bridge Commodities	12
Figure 6. NYCDEP Aeriation Pipeline Alignment	12
Figure 7. Transported, Newtown Creek 2007-2017	13
Figure 8. Scrap Metal & Petroleum Products measured in Tons as a Segment of All	
Commodities, Newtown Creek, 2007-2017	14
Figure 9. Total Trips by Year and Barge Draft Size	14
Figure 10. Commercial Users along Newtown Creek	.19
Figure 11. Users in Reaches B, C, D and L	20
Figure 12. M/V Port Richmond & Water Quality Vessels Docked at Whale Creek	21
Figure 13. Turning Basin, Reaches E and G	25
Figure 14. Users within Reaches H, I, J and K	26
Figure 15: Current Bathymetry, Use and Future Proposed Alignment/	
Modification of the Turning Basin	32
Figure 16: Future Authorized Depths That Would Accommodate Future Use	37

Appendix A: Navigation Channel Conditions Survey Appendix B: Newtown Creek Commercial User Interviews

Newtown Creek Commercial Navigation Analysis U.S. Army Corps of Engineers, New York District January 10, 2024

1.0 Background and Purpose

Newtown Creek and its tributaries once constituted the busiest waterway of its size in the world and more than 50 industrial facilities were located along its banks. The Newtown Creek Superfund Site is situated at the border of the boroughs of Brooklyn (Kings County) and Queens (Queens County) in New York City, New York. The creek is a 3.8-mile-long, tidally influenced tributary to the Lower East River. The defined Study Area of the Superfund Site includes the main channel of Newtown Creek and its five tributaries (Whale Creek, Dutch Kills, East Branch, English Kills, and Maspeth Creek) (Figure 1). The Site was placed on the National Priorities List in September 2010, and a Remedial Investigation and Feasibility Study (RI/FS) commenced in 2011 pursuant to an Administrative Settlement Agreement and Order on Consent (AOC) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, more commonly known as Superfund) between the U.S. Environmental Protection Agency (USEPA), the New York City Department of Environmental Protection (NYCDEP), and a group of five parties known as the Newtown Creek Group (NCG) (Anchor QEA, 2020; USEPA, 2020). The Newtown Creek Group consists of five companies which are ExxonMobil, Phelps Dodge, Texaco, BP and National Grid.



Figure 1: Newtown Creek Study Area

The overall objectives of the RI/FS are to 1) collect sufficient data to understand the nature and extent of contamination including current contaminant loading, 2) support the human health and ecological risk assessments, 3) develop remedial alternatives, and 4) select a remedy. Remedial alternatives must also consider current and reasonably anticipated future use of the creek and must comply with numerous regulations and statutes. Specifically, Sections 10 and 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403 and §408) associated with the federally authorized navigation channel must be considered in the development of the remedial alternatives.

In August 2019, the USEPA entered into an Interagency Agreement (IA) with the U.S. Army Corps of Engineers (USACE) New York District (NYD) to obtain technical assistance in preparing a Commercial Navigation Analysis for Newtown Creek. This analysis will inform the Superfund investigation and support the remedial alternative development process. Specifically, the commercial navigation analysis outlines commercial users' past, current and future reasonably anticipated use of Newtown Creek's Authorized Channel (Figure 2) and presents information that would influence the depth of a future dredging and capping remedial action. The analysis also identifies impacts and restrictions to future operation and maintenance dredging of the channel and identifies potential opportunities for deauthorization and/or modification to the authorization of the federal channel through future legislation. At the time of this publication, the NYD suggests that USEPA does not modify channel segments where future coordination may be needed to finalize the navigation depth for future reasonably anticipated use including Dutch Kills and the mainstem to river mile 1.37.

2.0 Location and Study Area Description

The Newtown Creek, New York, Federal Navigation Channel was first authorized by the Rivers & Harbors Act of 1919 (Pub. L. No. 65-323) and the Rivers & Harbors Act of 1937 (Pub. L. 75-392). The Newtown Creek navigation channel extends from a point where the creek meets the East River and continues south to Metropolitan Avenue at the border of northern Brooklyn and southern Queens. The existing federal navigation project provides for a channel that is 23 feet deep and 130 feet wide from the East River to 150 feet north of Maspeth Avenue, with a triangular area at the north side of the entrance. A turning basin is also authorized at 23 feet deep; however, the channel becomes shallower and narrower approaching Metropolitan Avenue. The turning basin was formed in 1931 following the removal of Mussel Island, a small 3.7- acre mudflat that divided Newtown Creek into two narrower channels in that area. Congress authorized the removal of Mussel Island in 1921 in favor of the turning basin (hereinafter referred to as the Mussel Island turning basin).

The Creek can be divided into 13 reaches with authorized depths ranging from 23 feet at the confluence to 12 feet in the English Kills (Figure 3 and Table 1). Each reach's location, dimensions (authorized and constructed), and commercial users are described in Table 1, which also presents the results of the June 16, 2023 Hydrographic Condition Survey (USACE, 2023) (Attachment A). Table 1 indicates that Reaches E, G, H, I and J were constructed at a lower depth than authorized and Reach K was not constructed at all.



Figure 2: Newtown Creek Federally Authorized Navigation Channel

All reported depths are relative to mean lower low water (MLLW) datum. The channel reach lengths are in nautical miles. All distances and dimensions are approximate. Observation and analysis confirm that the channel along reach L is blocked by low train and street bridges and does not receive any marine traffic. Therefore, only the main channel where water dependent users are utilizing the creek is being assessed in this report. However, the investigation indicated that SRM Concrete, LCC (the parent of SRM-NYCON, LLC) located at the terminus of Dutch Kills is a potential future user of the authorized channel subject to the future removal/repair of the freight bridges.



Figure 3. Newtown Creek Federal Navigation Channel Reaches

Deceb	Authorized Project		Constructed	Range of Depths in Channel Entering from Seaward (feet) ¹				
Reach	Width (feet)	Length (nautical miles/miles)	Depth (feet)	Depth (feet)	Left Outside Quarter	Middle Half	Right Outside Quarter	Commercial Users
Reach A: From the junction with the East River, to the Pulaski Bridge.	130 - 1000	0.55 m 0.6325 mi	23	23	6.2-34.9	13.2-34.5	12.8-35.0	No Users
Reach A1 (Triangular Area): Parallel to Reach A and extends for approximately 1,335 feet.	Irregular	Irregular	23	23		7.9 - 35.5		No Users
Reach B: From Pulaski Bridge to approximately 400 feet seaward of the junction with Whale Creek.	130	0.26 m 0.299 mi	23	23	14.4-20.9	18.9-23	14.9-21.5	 Zenith Energy (formerly Motiva)
Reach C: From the approximately 400 feet seaward of the junction with Whale Creek to Greenpoint Avenue Bridge.	130	0.44 m 0.506 mi	23	23	11.0-20.9	16.1-23	10.4-21.7	 Sims Metal NYCDEP Allocco Recycling United Metro Energy
Reach D: From Greenpoint Avenue Bridge to Kosciuszko Bridge.	130	0.66 m 0.759 mi	23	23 (only 100 feet wide)	10.7-21.1	15.6-23.4	10.1-21.9	 Kinder Morgan (formerly AMOCO/BP) Green Asphalt 37-50 RR, LLC (Future User)
Reach E (Main Channel adjacent to Turning Basin): From the	130-300	0.50 m 0.575 mi	23	20	4.3-21.0	12.3-25.3	9.3-23.4	Maspeth Recycling (Future User)

Table 1: Newtown Creek Reaches, Authorized Depths, Condition Survey Results and Commercial Users

Baaab	Authorized Project		Constructed	Range of Depths in Channel Entering from Seaward (feet) ¹			Commercial Upper	
Reach	Width (feet)	Length (nautical miles/miles)	Depth (feet)	Depth (feet)	Left Outside Quarter	Middle Half	Right Outside Quarter	Commercial Users
Kosciuszko Bridge, to approximately 150 feet seaward of Maspeth Ave.								
Reach E1 (Branch Channel adjacent to Turning Basin): From the northernmost corner of Mussel Island turning basin at the junction with the Main Channel, to the east corner of the Mussel Island turning basin at the entrance of Maspeth Creek.	115-565	0.14 m 0.161mi	23	20	7.0-19.1	6.0-20.1	5.0-21	No Users
Reach G (Mussel Island Turning Basin): Area between Branch Channel (Reach E1) and Main Channel	Irregular	4.77 acres	23	20		1.0-19.2		Utilize Turning Basin: • United Metro • Kinder Morgan
Reach F (Maspeth Creek) ²	100	2,000 ft	20	20	-	-	-	No Users
Reach H (To Entrance to English Kills): From approximately 150 feet seaward of Maspeth Avenue, to the junction with English Kills	150-280	0.14 m 0.161 mi	20	16	0.2-17.8	13.0-21.3	2.3-19.5	No Users
Reach I (Partial³): Survey coverage exists from the	125-150	0.29 m 0.3335 mi	20	16	6.2-16.3	10.4-17.8	3.3-15.6	No Users

Deceb	Authorized Project		Constructed	Range of Depths in Channel Entering from Seaward (feet) ¹				
Reach	Width (feet)	Length (nautical miles/miles)	Depth (feet)	Depth (feet)	Left Outside Quarter	Middle Half	Right Outside Quarter	
junction with the Main Channel to the Grand Street Bridge.								
Reach J (English Kills): From junction with Main Channel to the Metropolitan Avenue Bridge.	80-240	0.47 m 0.5405 mi	20	16	6.6-20.2	10.1-21.3	1.7-21.1	 Empire Transit Mix (Future User) Empire Metal Trading (formerly Charles King) TNT Scrap
Reach K (Partial ³): Survey coverage exists from Metropolitan Avenue Bridge landward approximately 1,450 feet landward.	80-215	0.35 m 0.4025 mi	12	0	5.4-16.7	3.5-17.5	3.5-17.6	Bayside Fuel
Reach L (Dutch Kills, includes L1 Turning Basin) (Partial ³): Survey coverage exists from the junction with the Main Channel at the beginning of Reach C, to approx. 350 feet landward of the beginning of this reach.	40-315	0.50 m 0.575 mi (2,800 ft long)	20	20	8.6-16.9	8.5-19.4	7.2-17.8	 No Current Active Users SRM Concrete - Potential Future Use-TBD)

1

2

Minimum value reported in range represents "minimum depths in channel" as published in June 2023 conditions survey table. No Condition Survey Data available. **Partial:** Range in depth measured and reported only for a portion of the reach during the hydrographic conditions survey in 3 2023 (Attachment A).

3.0 New Work & Maintenance Dredging History

Based on dredging history records, the USACE dredged Newtown Creek from 1922 through 1974. The USACE's dredging history is presented in Table 2 and resulting constructed depth in each reach is presented in Table 1. The constructed channel dimensions presented above are not automatically the maintenance dimensions due to the consideration of current vessel user requirements and the conditions of the bulkheads. For example, the construction width of Reach D was only 100-feet wide of the 130-feet authorized width due to the instability of the northern shoreline.

Maintenance dredging in the federal navigation channel within Newtown Creek and Whale Creek Canal was last conducted by New York City Department of Environmental Protection (NYCDEP) in April-May 2014. NYCDEP dredged to a depth ranging from 17-19.5 feet below Mean Low Water, removing 24,000 CYD to provide sufficient depth for safe navigation of new sludge vessels to the sludge loading facility on Whale Creek Canal. The exposed sediments were then covered with 6 inches of clean material over all dredged area (NYCDEP, 2014).

Fiscal Year ¹	Dredging Date	Depth (ft)	Reach	Construction (CYD)	Maintenance (CYD)
1923	July 1921 - Aug 1922	20	Entrance to Hobson Ave. (Lombardy St)	409,828	
1924	Apr - Nov 1923	20	Dutch Kills & T.B W.W.+ Maintenance.		192,371
1929	Dec 1928 - Jan 1929	20	Channel- Manhattan Ave & Lombardy St.		76,098
	Jan - Feb 1931	23	Widening Channel at Mouth of Creek	37,246	
1932	Apr - June 1931	20	Mussel Island.	128,297	
	July - Sept 1931	20	Maspeth Creek	192,853	
	July 1931	20	Mussel Island	108,598	
1932	Jan - June 1932	23	Entrance to Meeker Ave.	167,328	
	June 1932	23	at Union Ave	900	
	1933	23	Entrance to Meeker Ave.	150,889	
1933	Aug - Dec 1932	23	Entrance		
	Aug 1932 - June 1933	23	Vernon Ave to Meeker Ave.		
1935	May - June 1935	23	Mouth to Maspeth Ave (Main Channel)		34,160
1026	July 1935	23	Mouth to Maspeth Ave (Main Channel)		7,108
1930			English Kills to 16' from Maspeth Ave to		

Table 2: USACE Dredging History of Newtown Creek

Fiscal Year ¹	Dredging Date	Depth (ft)	Reach	Construction (CYD)	Maintenance (CYD)
1937	Apr - May 1937	16	Metropolitan Ave Br. (Prev Project)		108,255
1943	Jun 1943	18	Remove Obstructions to Dutch Kills		
1944	Dec 1943	16	Remove Obstructions to Dutch Kills		
1044	Dec 1040		East Branch from Maspeth Ave. to Grand Street		
1945	Apr 1945	18	Bridge		19,244
1947	Oct - Nov 1946	16	English Kills to 16' from Entrance to Metropolitan Ave		103,910
1949	July 1947 – July 1948	16	East Branch from Grand St Br to Metropolitan Ave		35,303
1950	May - June 1950	23	East River to Vic. Of Maspeth Creek		146,552
1952	July 1950 – July 1951	23	Same as above		80,546
1952	Jan - Feb 1952	16	Newtown Creek, English Kills		63,387
1956	Apr - June 1956	15	Channel - Dutch Kills		10,200
1958	January 1958	18&16	East Br. Maspeth Ave - Metropolitan		
1959	June - Aug 1958	18&16	East Br. Maspeth Ave - Metropolitan		44,003
1961	March 1961	16	Entrance to Metropolitan Ave (English Kills)		38,120
1964	Jan - Apr 1964	18&16	Removal of Shoals (East Shoals)		27,768
1972	May - July 1971	16	English Kills to Metropolitan Avenue		84,044
1974	April 1974	16	East Branch		32,127
Total					1,103,196

¹ Fiscal Year prior to 1974 is from July 1 to June 30 and October 1 to September 30 after 1974. ²Some of the dredging operations expanded through two fiscal years. The most recent FY in which the dredging was completed is represented.

The project was about 64% complete per the Conditions of Improvement report in September 1986. The work remaining to be done consists of completing the project dimensions, the 23-ft main channel from Greenpoint and Meeker Avenues, and between 800 and 150-ft north of Maspeth Avenue; the 20-ft channel in the East Branch; and the 20 and 12-ft channels in English Kills. A portion of the authorized project in Maspeth Creek extending down to West Avenue (49th Street) has been filled in by the Defense Plant Corp. under a Department of Army Permit issued in 1942. Incompleted work is considered inactive (USACE, 1986).

Under current law, future operation and maintenance dredging could be conducted only up to the maximum depth of that constructed per 31 U.S.C. §1301 <u>https://www.law.cornell.edu/uscode/text/31/1301.</u> Any future dredging to the authorized channel depth in reaches E, E1, G, H, I, J and K (inactive segments) would require the approval of USACE Headquarters, support and funding from a non-federal sponsor and construction funds. No matter the depth, future operation and maintenance dredging would include an additional mandatory 2-ft of over depth (paid volume) beyond the authorized/constructed depth to the bottom of the maintenance prism.

4.0 Physical Constraints

Bridges are examples of constraints that may be obstacles to certain types of waterborne traffic. The dimensions and functionality of a bridge (lift, swing, etc.) will restrict traffic that exceeds the available horizontal and vertical clearance. The commercially navigable portion of the Newtown Creek has a total of 10 bridges, two of which are active railroad bridges (Table 3).

Bridge Name	Creek Mile (mi) ¹	Bridge Type	Maximum Horizontal Clearance (feet)	Maximum Vertical Clearance (feet)
Reach A				
Pulaski Bridge	0.6	Bascule	150	40
Reach C				
Greenpoint Avenue	1.31	Bascule	149	26 (MHW) 31 (MLW)
Reach D				
Kosciuszko Bridge	2.1	Fixed	249	129 (MHW) 125 (MLW)
Reach I				
Grand Avenue Bridge	3.1	Swing	58	10 (MHW) 15 (MLW)
Reach L				
LIRR NYCR Freight Bridge ("DB") (Southern)	1.1	Swing	46	1 (MHW) 5 (MLW)
LIRR NYCR Freight Bridge ("Cabin M. DB") (Northern)	1.15	Bascule	50	14 (MHW) 19 (MLW)
Borden Avenue Bridge	1.2	Retractable	49	4 (MHW) 9 (MLW)
Queens Midtown Expressway	1.23	Fixed	90	90 (MHW) 94 (MLW)
Hunters Point Avenue	1.5	Bascule	60	8 (MHW) 13 (MLW)
Reach J				
Grand Street/Metropolitan Avenue	3.4	Bascule	86	10 (MHW) 15 (MLW)

Table 3: Bridges by Reach along Newtown Creek (NYSDOT and USDOT, FHA, 2005)

¹ Creek Miles are from above mouth of East River Confluence.

MHW: Mean High Water

MLW: Mean Low Water

Known constraints along Newtown Creek are highlighted below:

• The low clearance or inoperable bridges are located in Reach L and thus restrict the current and future use of the channel within this reach. Recent communication with NYCDOT indicated that the Borden Avenue and Hunters Point Avenue bridges within Dutch Kills are operable (Email Communication, 2021a). Unfortunately, correspondence with the Long Island Rail Road (LIRR) indicated that the two freight bridges at the confluence are inoperable and do not allow marine traffic through.

The two LIRR bridges spanning Dutch Kills are referred to as the "DB" (Draw Bridge) and "Cabin M. DB", that were constructed in 1893 and 1908 respectively. The "Cabin M DB" northern bridge is located on the former Montauk Cutoff line which was officially abandoned 6 years ago. LIRR has attempted to secure funds to demolish the "Cabin M. DB" bridge and remove it from the Dutch Kills waterway; however, funding has not been available.

In the late 1990's/early 2000's, it was observed during routine inspections that the center pier of "DB Bridge" was significantly deteriorated and in 2001 permission was granted by the U.S. Coast Guard (USCG) to temporarily close the bridge for an extended duration to allow construction of a suspender system consisting of piles driven on both sides of the center pier, pile caps, suspender beams, and hanger rods to transfer load off the center pier (Figures 4 and 5). The LIRR has continuously attempted to secure funding through the MTA Capital Program to rehabilitate or replace the "DB Bridge" as well as remove Cabin M, albeit unsuccessfully to date. Funding for bridge rehabilitation and replacement in the Capital Program is very constrained, and other bridges (many of which carry hundreds of thousands of people per day in normal times) have received priority over the "DB Bridge". Consequently, both of these bridges are inoperable. Until the LIRR fixes or demolishes these 2 bridges, there would be no future use of Dutch Kills.

To better position itself for potential outside funding sources, such as competitive grant programs, MTA-LIRR intends to undertake early preliminary engineering work for the replacement of DB Bridge and removal of Cabin M Bridge. This work would help MTA-LIRR understand site conditions, requirements, and potential design options for a replacement DB Bridge (Email Communication, 2022d).

However, a final design for the bridge cannot be selected until there is a decision on whether Dutch Kills is to remain a federally authorized channel. Should no commercial use be identified and the channel deauthorized, LIRR would replace DB Bridge with a fixed span structure. Alternatively, maintaining Dutch Kills as a navigable channel would require a more costly and maintenance-intensive moveable bridge (Email Communication, 2022d).

 The sharp 90-degree angles in Reach K challenge the maneuvering of barges for Bayside Fuel. • An aeration pipe in Reach J, crossing the channel downstream of the Metropolitan Avenue Bridge (Figure 6), installed by NYCDEP decreases the channel depth in a portion of the Reach which impacts barge mobility.



Figures 4 and 5: Southern LIRR NYC Rail Freight Bridge - "DB" Bridge

Figure 6: NYCDEP Aeriation Pipeline Alignment



5.0 Operational Information

Detailed data from the USACE's Institute for Water Resources, Navigation Data Center (NDC) Waterborne Commerce Statistics were evaluated over a ten-year period to identify commodities transported as well as trips and drafts of vessels within Newtown Creek. Statistics were available covering the period of 2007 through 2017 (IWR, 2007 through 2017) at the initiation of the analysis. In addition, a berth-by-berth analysis was conducted through interviews with each commercial user currently operating in the Creek. The berth-by-berth analysis revealed each user's current and future reasonably anticipated future use at their facility.

5.1 Summary Data for Commodity Flow, Trips and Drafts

Waterborne Commerce Statistics revealed several interesting characteristics of the waterborne commerce conducted on Newtown Creek over the period of 2007 to 2017. Despite limited throughway navigation, the users along Newtown Creek managed to transport close to 14 million tons of a variety of commodities over the most recent ten years on record (2007-2017). Over 75% of the commodities are classified as iron and steel scrap (5,888 thousand tons) and fuel oils (4,412 thousand tons). The remaining commodities, such as cement and concrete, clay, alcohols, sand and gravel, waste and scrap, and materials not elsewhere classified (NEC), made up a combined total of over 3,200 thousand tons (Figure 7). The annual tonnage of scrap metal and petroleum products (Figure 8) and the total trips and draft barge size per year (Figure 9) were also evaluated.



Note: Measurements are calculated in tons



Figure 8. Scrap Metal & Petroleum Products as a Segment of All Commodities Newtown Creek (2007-2017)

Note: Measurements are calculated in thousand tons



Following the evaluation of the waterborne commerce data for this period over 11 years, three major observations can be made.

- 1. The bulk of this commerce consisted of scrap metal and petroleum products accounting for more than 80 percent of the total volume. The remaining volume consisted of mostly alcohols, sand, gravel, cement, and clay (Figure 7).
- 2. The volume of commerce (measured in tons) varied over the years, with the average for scrap metal and petroleum products having an average of about 790 thousand tons combined per year. The average total of commodities in tons is roughly 975 thousand tons per year (Figure 8).
- 3. Approximately 86 percent of this commerce is transported in vessels whose loaded draft is 12 feet or less; however, there are requests by users (outlined in Section 6.2) for barges of greater depth, particularly for the facilities located in Reach J which has an authorized channel depth of 20 feet. Specifically, approximately 14% of the commerce transported needed greater than 12 feet drafts, ranging up to 22 feet (Figure 9).

5.2 Berth-by-Berth Analysis

The purpose of the berth-by-berth analysis is to describe the current state of commercial navigation on Newtown Creek and the reasonably anticipated future use by each commercial user. Commercial users identified in each reach (Tables 1 and 4 and Figures 10-13) were contacted between September 2019 and May 2020 and interviews were conducted via phone or email to obtain current and anticipated future use of the creek. Members of the Newtown Creek CAG identified several additional active commercial users as well as potential future users on July 15, 2020 which were also contacted between August and October 2020 and were added to this analysis and included in Table 4.

5.2.1. Interview Questions for Commercial Users

Each user was asked the questions set forth below. Several users responded to the survey via email. The responses from each user are presented in Appendix B and summarized in this section.

- 1. How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
- 2. Are there any physical constraints that limit how you are operating?
- 3. What is your future operation plans regarding transportation in the channel?
- 4. How would you operate if the channel was shallower with no maintenance?
 - a. Would traffic be affected?
 - b. Is ground transportation an option?

- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance?
- 6. How would you operate if the channel were deeper?
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2 to 5 years)? In the longer term (greater than 5 years)?
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future).

Follow-up occurred in March and April 2021 with several of the users (including Allocco Recycling, United Metro Energy, Kinder Morgan, Empire Metal Trading, TNT Scrap and Bayside Fuel) that are located or utilize reaches where the constructed depth is less than the federal authorized depth or within a reach that was never constructed (e.g., Reach K). They were informed that operation and maintenance dredging would only be conducted to a maximum of the constructed depth within each reach. Implications for their future use and operations were discussed and summarized within Section 5.2.2.

5.2.2. Commercial User Interview Data

Commercial User interview data is summarized below including the commercial users' address, commodities and contact information (Table 4) and locations (Figures 11 through 15).

Company Name	Street Address	Reach	Purpose	Commodities
Zenith Energy	25 Paidge Ave, Brooklyn, NY 11222	В	Stores and transports gasoline and ethanol	Gasoline and ethanol
SRM Concrete, LLC (parent of SRM- NYCON, LLC) Future Potential User	47-17 27 th St., Long Island City, NY 11101	L1	Trucks raw materials to make concrete	Sand and stone
Sims Metal	3027 Greenpoint Ave, Long Island City, NY 11101	С	Barge out scrap metal	Scrap metal
NYCDEP	327 Greenpoint Ave, Brooklyn, NY 11222	С	Wastewater/ sewage treatment plant	Wastewater, sludge, biosolids

 Table 4: Commercial Users, Locations and Commodities

Company Name	Street Address	Reach	Purpose	Commodities
Allocco Recycling	540 Kingsland Ave, Brooklyn, NY 11222	С	Recycling services	Scrap metal
United Metro Energy	500 Kingsland Ave, Brooklyn, NY 11222	С	Supply fuel to NYC, Westchester County and Long Island	Heating oil, diesel, gasoline and biofuel
Kinder Morgan	125 Apollo St, Brooklyn, NY 11222	D	Customers transport motor fuels for gas stations	Petroleum and ethanol
Green Asphalt	37-98 Railroad Ave, Long Island City NY 11101	D	Importing and exporting aggregates	Sand and stone
37-50 RR, LLC. (Future User)	37-50 Railroad Ave, Long Island City NY 11101	D	Importing and exporting aggregates	Sand and stone
Maspeth Recycling (Future User)	58-08 48 th St. Maspeth, NY 11378	E	Bulk terminal for stevedoring construction materials/ equipment	Construction materials and equipment
Empire Metal Trading (formerly Charles King)	1301 Grand St, Brooklyn, NY, 11211	J	Shipping scrap metal	Metal
Empire Transit Mix (Future User)	430 Maspeth Ave, Brooklyn, NY 11211	к	Concrete materials	Concrete
TNT Scrap	340 Maspeth Ave, Brooklyn, NY 11211	к	Barge out scrap metal	Scrap Metal
Bayside Fuel Oil Depot	1100 Grand St, Brooklyn, NY 11211	К	Shipping in heating oil and diesel fuel	Heating Oil and Diesel Fuel
Vane Brothers		All	Tug Company	NA
NY State Marine Highway		All	Tug Company	NA
CMT Towing (Covmans)			Tug Company	
Towboat & Harbor Carriers Association of NY NJ		A-E		
Centerline Logistics		A-E		
NYCDOT		L	Confirmation of operational bridges in Dutch Kills	

Company Name	Street Address	Reach	Purpose	Commodities
Long Island Railroad Freight Bridges		L	Confirmation of operational bridges in Dutch Kills	
MTA-LIRR		L	Design of new bridge to replace the "DB Bridge"	

Newtown Creek Commercial Facility Locations and Commodities

All active/current and potential future users of Newtown Creek and its tributaries (Figure 10) were interviewed by the USACE New York District between September 26, 2019 through October 26, 2020, with specific follow-up questions in March and April 2021 via phone and email correspondence. A summary of the commercial facility locations, commodities and a summary of the interviews are presented below. Full responses to interview questions are presented in Appendix B.

New York City- NYCDEP coordinated with New York City Department of Law, New York City Department of Planning and New York City Economic Development Corporation (NYCEDC) to determine New York City's collective position on the current and reasonably anticipated future use of Newtown Creek and its tributaries. Overall, NYC has no objection to the deauthorization or modification of the tributaries of Newtown Creek. NYC also has no objection to the reduction of the federal channel depth in Newtown Creek to a depth of 20 feet for their operations. However, NYC representatives also stated that they would not support a reduction in the federally authorized channel depth of 23 feet if a current active user required that depth for their current or planned reasonably anticipated future use (Telephonic Communication, 2020n). NYC deems this waterbody a "significant maritime industrial area" and as such plans for the future uses would be supported by maritime navigation and commerce, which relieve local roadway congestion and facilitate the movement of goods and services (Email Communication, 2021f). NYC also provided their position and input associated with the current and future use at SRM-NYCON, LLC and Allocco Recycling Corp. (see Appendix B).

Zenith Energy Management stores crude oil, fuel, asphalt refined products, petrochemicals and vegetable oils at 24 terminals in North America, Europe and Latin America. The Brooklyn facility is located closest to the mouth of Newtown Creek (seaward). It solely sits in Reach B, at Creek Mile 0.8 (Figures 10 and 11). This terminal handles gasoline and ethanol at this location. Their barges are roughly 350 feet in length, 55 feet wide, with a 10-foot draft. Gasoline and ethanol are transported via pipeline; however, vessels are used in case of contingency with drafts currently at 10 feet. Future anticipated use could be vessels with a 16-foot draft. Due to their proximity to the East River, they have the most flexibility needed to bring in larger barges (Telephonic Communication, 2019a).



Figure 10: Commercial Users along Newtown Creek

SRM Concrete (parent of SRM-NYCON, LLC): Potential Future User (TBD)

The SRM Concrete, LCC (the parent of SRM-NYCON, LLC) facility is located on 47-17 27th Street in Long Island City at the terminus of Dutch Kills tributary (Figure 10). Currently, this facility is a concrete producer using raw materials (sand, stone, cement) which are transported to the site via truck. Coordination has just been initiated with SRM Concrete and the potential future use is unknown at this time (Email Communication, 2024). The prior tenant indicated that current bathymetry and air draft of the bridges (Borden Avenue and Hunters Point Avenue Bridges) prevent the use of Dutch Kills (Telephonic Communication, 2020k).

Subsequent outreach to NYCDOT indicated that the Borden Avenue and Hunters Point Avenue Bridges are currently operational (Email Communication, 2021a). However, the LIRR Freight Bridges are not operational and do not allow current or future use of the navigation channel (Email Communication, 2021d). The non-operability of the bridges is not a sufficient reason or cannot be the sole reason to characterize the proposed or prospective future use of the channel unlikely or unreasonable. The Coast Guard can compel the LIRR to fix or remove the bridges if they find they pose an unreasonable obstacle to navigation (See 33 U.S.C. §494, <u>https://www.law.cornell.edu/uscode/text/33/494</u>).



Figure 11: Users in Reaches B, C, D and L

Sims Metal Management is the world's leading publicly listed metal recycler, with operations encompassing the buying, processing and selling of ferrous and nonferrous recycled metals. The facility is located in Reach C at Creek Mile 1.1 in Newtown Creek (Figures 10 and 11). The company uses the creek strictly to barge material out of the region, as needed. They typically tend to have three barges out at any time which are typically processed every 24 hours. The loads on the vessels range from 500 to 800 tons. Barges are approximately 100 feet in length, 35 feet wide and have a 17-foot draft. They do not have any physical constraints that limit their operations and do not have plans to change their operations in the future. The water depth is deep enough for the size vessels they are currently utilizing (Telephonic Communication, 2019a and 2020e).

NYCDEP Newtown Creek Wastewater Treatment Plant: NYCDEP owns and operates marine sludge vessels to fulfill their core mission to transport sludge between 14 facilities throughout the five boroughs. The Newtown Creek Wastewater Treatment Plant is the largest facility in the system located at Creek Mile 1.05 within Reach C at 329 Greenpoint Avenue (Figures 10 and 11). A sludge loading dock, constructed in

2014 at Whale Creek (Figure 12), accommodates variable and seasonal production levels of sludge scheduling 6 to 10 round trips in Newtown Creek per day.

NYCDEP designed and built three motorized vessels [NC-50 Class Vessels] to navigate Newtown Creek unassisted and load a daily volume of a million gallons sludge at the Whale Creek dock. The sludge vessels range from 290 to 380-feet in length, have a maximum load draft of 14-feet and an air draft of 45-feet to pass under the Pulaski Bridge without requiring an opening. A minimum of two feet below the keel [16-feet] is needed to safely navigate in Newtown Creek. Ideally,18-feet of water depth would provide greater safety to protect against unusual low tides from lunar cycles and wind.

Figure 12: M/V Port Richmond & Water Quality Vessels Docked at Whale Creek Dock



Additionally, the DEP operates a fleet of eight smaller vessels for water quality programs and occasionally transit Newtown Creek to the end at English Kills, East Branch and Maspeth Creek. Containment of floatables from combined sewer overflow [CSO] are trapped in booms at these branches of Newtown Creek. DEP vessels maintain and clean out the boom sites as needed. The size of these vessels range from 26 to 60-feet in length. The water drafts [5-feet or less] and the air drafts [22-feet or less] are not consequential for the navigational analysis. The smaller vessels are moored at a marina in Whale Creek near the sludge dock. There are no foreseeable plans to modify NYCDEP's current operations (Telephonic Communication, 2020n).

Allocco Recycling Corp. provides aggregate, scrap metal and construction debris recycling services. This location accepts concrete, dirt, steel and other metals for resale and recycling. Allocco Recycling is in Reach C along Newtown Creek at Creek Mile 1.25 (Figures 10 and 11). The company has a fleet of six tugs and 20 barges that are currently operating in the marine highway of the northeast. Allocco loads hopper barges daily that range from 195-200 feet long, 35 feet wide and draft between 12 and 13 feet (Allocco, 2021). Allocco can turn their barges around at their facility using the entrance to Whale Creek. There are currently no physical constraints affecting operations.

Allocco relayed concerns about the potential remedial action if they were unable to operate their business as efficiently as they currently do. Stoppage in creek travel would result in a major financial impact (Email Communication, 2020a).

Allocco submitted a Response to the Request for Expression of Interest (RFEI) to DockNYC (January 29, 2021) for a use and occupancy permit at North Henry Street and the No Name Inlet in conjunction with their current operations at 540 Kingsland Avenue. If approved, Allocco plans to install monopile berthing dolphins and soldier pile bulkhead that would provide additional mooring for barges along the bulkhead to improve berthing and efficiency of operations (Allocco, 2021). Allocco indicated that if the permit was granted, they would maintain current operations and an authorized channel depth of 20feet would be satisfactory (Telephonic Communication, 2021h). However, If the permit is not issued, Allocco stated they would adjust their operations to transport sand, salt and bluestone using larger vessels drafting up to 21 feet to their dock in the future (Telephonic Communication, 2021h). Therefore, the authorized channel depth of 23-feet to their facility would remain at this time.¹

United Metro Energy Corporation supplies heating oil, diesel, gasoline and biofuels to New York City, Westchester County and Long Island. The facility is located at Creek Mile 1.4 within Reach C adjacent to Allocco Recycling and the NYCDEP Newtown Creek Wastewater Treatment Plan (Figures 10 and 11). United Metro utilizes 25,000barrel double hull barges requiring approximately 15-foot drafts to provide fuel products to their facility. These vessels must be used due to the existing depths of the channel. The company plans to continue operations similarly, but their operations could be conducted in a more economically efficient manner if they were able to use larger barges and make fewer trips. However, such barges require 17 feet of channel depth at mean lower low water. (Note: maximum of a 21-foot draft could be used with an authorized depth of 23 feet). If the Creek were to become shallower, barge traffic of the vessels currently in use would be severely depth limited such that United Metro would not be able to continue to operate them in an economically efficient manner. Ground transportation is not an economically efficient alternative in the opinion of United Metro's management. Given United Metro's anticipated/hopeful use of larger vessels, where the authorized depth would not be reduced from 23-feet (Email Communication, 2020b and Telephonic Communication, 2020c). A follow-up interview revealed United Metro uses the Turning Basin in Reach E/G (Figure 13) to turn around their vessels upon exiting the channel (Telephonic Communication, 2020f).

United Metro Energy was notified on March 12, 2021 that the Turning Basin (Reaches E and G) was only constructed to 20-ft rather than the authorized channel depth of 23-ft.

¹ New York City disputes Allocco's title to part of the property from which it now operates and further avers that Allocco's plans to use vessels requiring a 23-foot channel is mere pretext designed to gain some advantage in the property dispute, as well as obtain a use and occupancy permit at North Henry Street. Specifically, NYC stated that, "Allocco claims that if they are removed from the property, they are on illegally they may consider other uses which would require a deeper navigational depth. The City does not believe it is appropriate for Allocco to attempt to leverage an illegal current use, which would not require a 23-foot navigational depth, by saying that if the illegal use is taken away, they have a "concept" of a future use that "may" require a deeper depth." See Appendix B for full text.

A 20-ft constructed Turning Basin would be adequate depth for these empty barges (Telephonic Communication, 2021a). United Metro later confirmed that a 20-ft authorized channel would be adequate to their dock at their facility and an 18-ft authorized channel would meet their needs for empty vessels to transit in the Turning Basin (Email Communication, 2021e).

Green Asphalt is located at 37-98 Railroad Avenue in Long Island City at Creek Mile 1.6 (Figures 10 and 11). The facility is currently bringing in sand by barge from Perth Amboy, New Jersey and stone from quarries just south of Albany. Both sand and stone are sold to concrete plants in Queens and Brooklyn. The old asphalt is taken in from road projects to Green Asphalt where they process it and reuse it in New York's first 100% recycled asphalt plant. The facility currently uses 1,600 ton barges and plans to use inland hopper barges that are 3,300 tons, 260 feet long, 52.5 feet wide with 12 feet of draft requiring 14 feet of water depth. The facility is currently using flexi-float spud barges to off-load their materials and have applied for permits to NYSDEC to repair the bulkhead. Once the bulkhead is repaired, there will no longer be physical constraints to the operation and no other improvements to the site are planned. The facility does not have plans to use larger vessels if the channels were deepened in the future and would continue to require 14 feet of water depth for their operation (Telephonic Communication, 2020). Bulkhead completed as of 2022 and the Turning Basin will be used in the future (Telephonic Communication, 2022).

37-50 RR, LLC: Future User

A future potential user, 37-50 RR LLC, is located at 37-50 Railroad Avenue in Long Island City at Creek Mile 1.7 (Figures 10 and 11). The owners are currently applying for permits to operate a facility to import and export aggregates including sand and stone. The owner plans to utilize hopper barges between 165 to 225 feet in length with 12 to 15- foot vessel draft requiring a channel depth of 17 foot. Their existing bulkhead must be repaired, and a spud barge will be installed to use the channel effectively. The depth of the channel in the area closest to their bulkhead would also need to be dredged for channel access. If the channel were shallower than 17-foot depth, the facility would default to using trucks (Telephonic Communication, August 2020i).

Kinder Morgan is the largest energy infrastructure company in North America and transports natural gas, gasoline, and crude oil. This 10-acre facility is located directly along the midpoint of the creek in Reach D at Creek Mile 1.75 (Figures 10 and 11). This terminal does not utilize their own vessels, but has customers transporting petroleum products on barges and tugs to their facility. All their customers' vessels draft 16 feet or less, and the sizes of the barges vary between customers. Some common barges that are used are those operated by Kirby Corporation (283 feet by 50 feet by 9 feet [loaded]) and Reinauer (104 feet by 31 feet by 10 feet [loaded]) Transportation. Their customers face physical constraints when traversing through the creek, such as concerns over unopened bridges at Pulaski Avenue and Greenpoint Avenue, especially in the winter and summer weather conditions. Kinder Morgan does not have future plans to invest in or change the manner in which they receive barges and tugs transported along the channel. If the creek was shallower with no maintenance, their customers would not be able to bring their products into their facilities, and they would

not be able to load trucks that ultimately are loaded up and sent to gas stations across the five boroughs. Ground transportation would be an option for them, but it is not considered to be cost effective. If the channel was deeper, they would not change their operations or number of customers operating through the creek. One concern that Kinder Morgan mentioned is that any channel depth less than 20 feet would continue to be a challenge to their operation. When considering safety clearance (2 feet) and low tides, the authorized channel depth of 23 feet would not change (Telephonic Communication, 2019d). A follow-up interview revealed that each vessel and tug utilize the Turning Basin (Figure 13) prior to approach at their berth or upon exit of Newtown Creek at the pilot's discretion (Telephonic Communication, 2020h).

Kinder Morgan was notified that the Turning Basin (Reaches E and G) was only constructed to 20-feet rather than the authorized channel depth of 23-ft and that the upstream reaches for the Turning Basin could only be maintained to the maximum constructed depth of 20-feet. As stated above, terminal management indicated a 21-ft vessel draft was planned for future use and the authorized/constructed depth of 23-feet within Reach D was needed. However, management has since indicated that a 20-ft top of cap (bottom sediment) at MLLW would be acceptable for their future operations following coordination with Anchor QEA. Therefore, a reduced authorized channel depth to 18-feet (with 2 feet over dredge) would be considered acceptable adjacent Kinder Morgan's facility and through Reaches E and G in the Turning Basin (Telephonic Communication, 2021d).

Maspeth Recycling: Future User

Maspeth Recycling is located at Creek Mile 2.8 on Newtown Creek upstream of the turning basin (Figures 10 and 13). The proposed terminal is in the planning and design phase. The company has plans to receive barges to transport materials (sand and stone) that are directly shipped from material sources (*e.g.*, upper Hudson River, Salem County NJ, etc.). The owner-operator intends to develop a berth and associated infrastructure to function as a bulk terminal for stevedoring construction materials / equipment. In addition, the owner is interested in the site being considered as a potential dredged material processing facility for the proposed remediation activities (Telephonic Communication, 2020j). The vessel draft that the facility could use in the future based on their commodities and (sand and stone) and planned marine operation would need no more than an authorized channel depth of 16-ft beyond the turning basin through Reach H into English Kills (Email Communication, 2022a).

Empire Transit Mix: Potential User

Empire Transit Mix is a 3.25-acre concrete plant located at 430 Maspeth Avenue at the junction of the south bank of Newtown Creek and west bank of the mouth English Kills (Figures 10 and 14). Aggregate and cement were historically delivered to the facility by barge. Tugboats and barges with length of 130-150 feet, width 22-45 feet and water draft of 8-12 feet (14 feet fully loaded) were used in the past (NYCDOT 2005). The facility has not utilized Newtown Creek since 2005. However, according to the owner "In the future there could be an opportunity for us to start using Newtown Creek for

transportation of barges with aggregates" (Telephonic Communication, 2020m). The vessels in the future would be aggregate barges holding approximately 1200 cubic yards requiring 12 to 15 feet of water (Email Communication, 2020c).



Figure 13: Turning Basin, Reaches E and G



Figure 14: Users within Reaches H, I, J and K

Empire Metal Trading (formerly Charles J. King) is a scrap metal recycling company that buys ferrous and non-ferrous materials (steel, brass, copper, aluminum) and is located within Reach J near the confluence with English Kills at Creek Mile 3.1 from the East River (Figures 10 and 14). Empire Metal uses the creek for shipping scrap metal via barge transportation to facilities in Claremont Channel and Port Newark. The barges are owned by their customers (*e.g.,* Sims Metal) who purchases the scrap metal. The gross total loaded weight of each hopper barge is approximately 3.5 million pounds. The barges currently provided by Sims Metal are approximately 130 feet in length and 35 feet wide and under normal conditions draft 8 to 10 feet. Empire is not affected by any physical constraints, as all the bridges in their path have a high enough clearance. They do not currently have plans to change operations in the future and will continue to use the channel year-round (Telephonic Communication, 2020a). The company completed renovations and repairs (including new sheeting, timber and a fender system) which replaced their bulkhead in May 2020 (Email Communication, 2020e).

It would be problematic if the channel was shallower without future channel maintenance. If the channel were to be deepened to the authorized depth, they would utilize larger barges up to 18-feet with 2-feet of safety clearance (Telephonic Communication, 2020a). These larger vessels could be provided by Sims Metal or Empire Metal Trading could obtain additional customers in the future (Telephonic Communication, 2020d, 2020e). Ground transportation is not an option for the company and its customers due to the high number of trucks that would be needed, resulting in significant costs and environmental impacts. Given that Empire Metal Trading would prefer to utilize larger barges, they would not support a decrease in the federal authorized channel depth of 20 feet (Telephonic Communication, 2020a).

Empire Metal Trading was notified that Reach J was only constructed to 16-ft rather than the authorized channel depth of 20-ft and that the reach could only be maintained to the maximum constructed depth of 16-ft. The Terminal Manager acknowledged that this could result in potentially limiting his operations to utilize 14-ft vessels. This would impact operations in the future resulting in a shift to outbound trucks which would increase traffic. A vessel draft of 18-ft is still desired for future operation; however, it was understood that the channel could only be maintained to the maximum 16-ft constructed channel (Telephonic Communication 2021b).

TNT Scrap Metal purchases all scrap metals from individuals, construction sites, business, industry and government in Brooklyn, New York. The facility is in Reach J in the English Kills 3.25 miles from the confluence with Newtown Creek (Figures 10 and 14). They are using the creek strictly for barge access to transport scrap metal. Hopper barges that are 195 feet in length, 35 feet wide and require 12 feet of draft are utilized, which is limited by the available depth in the creek around that area. TNT does not have plans to modify their operations along the channel. If the creek was shallower, they would be restricted to smaller barges to ship out their materials. Their current operations are at the limit with a slight margin of safety associated with under-keel clearance and current bathymetry. TNT Scrap cannot use ground transportation because of the excess amount of trucks and resources that would be needed which, would be economically inefficient and environmentally unsustainable (Telephonic Communication, 2019b).

TNT Scrap was notified that Reach J was only constructed to 16-ft rather than the authorized channel depth of 20-ft and that the reach could only be maintained to the maximum constructed depth of 16-ft. The owner indicated that 16-ft depth was adequate for future use and would continue to plan to use 12-ft vessels requiring a 14-ft authorized channel (Telephonic Communication, 2021e).

Bayside Fuel Oil Depot is a distributor of heating oil to the five Boroughs of the City of New York and Long Island. The terminal is the last location at the furthest point along the Creek within the English Kills in Reach K at Creek Mile 3.6 for marine traffic transporting heating oil and diesel (Figures 10 and 14). The owner requested custom barges that are designed and built to operate within the relatively shallow depths of Newtown Creek and that can maneuver through the tight turns needed to transit the channel as it reaches the innermost point of the Creek. Their barges do not draft more than 11 feet and are used only for full loads. Bayside operates with three (3) vessels. The first vessel is a seven-thousand-barrel barge with a length of 192 feet, 42 feet beam and typically drafts 10 feet. This is the largest vessel they could commission given the water depth. Their second barge is a ten-thousand-barrel vessel and is limited given that it barely fits the dimensions of the creek with a length of 214 feet, 40 feet beam and

drafts 11 feet. This vessel is only "used in emergencies" because of the limitations it has and any slight error in operation can lead to severe damages and potential spills of contaminants into the creek. Bayside also has a spare barge sitting in storage that has the same dimensions as their second vessel but has a draft of 12 feet and cannot be used in a fully loaded condition.

Bayside's operations are also limited to transit only during high tides (given a 5-feet tidal range). There is also concern over the aeration pipe installed by NYCDEP at the bottom of the creek. Even when coming in on high tide, they are limited to 12 feet of maximum draft. The draw bridges along the Creek are also often inoperable, especially the Greenpoint Avenue and Metropolitan Avenue bridges. Based on Bayside operations, the authorized depth should not be modified (Telephonic Communication, 2019c).

Bayside Fuel was notified that several reaches in Newtown Creek were constructed at a shallower depth than authorized. In particular, the English Kills was authorized at 20-ft but only constructed to 16-ft. In addition, Reach K was authorized at 12-ft, but was never constructed. The USACE would only maintain English Kills in the future to a maximum of its constructed depth (16-ft) and would be unlikely maintained beyond Metropolitan Bridge, given that that reach was never constructed. Bayside acknowledged that a 12-ft channel beyond TNT was adequate and their facility will continue to require 12-ft channel for their operations, no matter who would maintain it (USACE or Bayside) (Telephonic Communication, 2021c).

6.0 Reasonably Anticipated Future Use

Table 5 presents a summary of the reasonably anticipated future use for each of the commercial users based on the berth-by-berth analysis interviews summarized in Section 6.2. The interviews identified the users' desired depth based on their future operations while acknowledging potential maintenance activities based on the constructed depth of the channel.

Based on the future need of the channel by Bayside Fuel Oil Depot, the federal navigation channel should not be deauthorized through English Kills to Bayside's facility location. At this time, reaches from the confluence with the East River through Reach C to Creek Mile 1.33 at Allocco's dock should not be modified from the existing authorized/constructed depth of 23-feet. However, this current authorized depth may change in the future based upon future coordination between Allocco and NYC.

Reach C can be modified to a reduced depth of 20-feet (to United Metro) and upstream to depth of 18-feet through Reaches D, E and G. During interviews, Kinder Morgan stated that 18-feet would be acceptable for their uses and United Metro can use the Turning Basin at that depth with their empty barges. The authorized channel in Reach E may be modified from 23 feet to 16 feet to be consistent with the constructed depth of 16-feet within Reach H and the English Kills (Reach J).

Dutch Kills (Reach L) does not have any current active users within the tributary. However, SRM Cement LLC (parent of SRM-NYCON, LLC), a cement producer at the terminus of Dutch Kills may utilize the channel in the future to transport raw materials (sand, stone and cement), assuming operability of the bridges. The authorized channel depth of 20 feet could be modified to 12 feet. However, both of the LIRR Freight Bridges are inoperable and would prevent all current and future use of Dutch Kills. Further coordination and funding is necessary for the LIRR to demolish the northern LIRR bridge and fix the southern LIRR bridge in order for SRM Cement (SRM-NYCON, LLC) to utilize Dutch Kills. The Coast Guard could compel the LIRR to repair the bridges if they are found to be an unreasonable obstacle to navigation (33 U.S.C. §494). Based on this issue, Dutch Kills should not be modified at this time.

Based on the lack of users in specific areas of Newtown Creek, there are two reaches (Reach I and a portion of Reach K upstream of Bayside Fuel Oil Depot) for which their status as a federally authorized channel could be ended without loss of economic productivity.

Reach	Users along Newtown Creek	Range of Depths in Channel Entering from Seaward (feet) ²				Authorized	Current User	Desired Future Use
		Left Outside Quarter	Middle Half	Right Outside Quarter	Constructed Depth	Depth (feet)	Depth (Vessel Draft- feet	(Vessel Draft- feet)
В	Zenith Energy	15.1-18.0	18.9-22.8	16.1-18.0	23	23	10	16
L/L1 ¹	SRM Concrete (SRM- NYCON, LLC [future- TBD])	6.3-13.1	7.6-17.7	7.2-14.2	20	20	-	TBD ³
С	NYCDEP	17.0-22.3	17.3-25.1	15.6-23.8	23	23	16	16 ⁴
	Sims Metal	17.0-25.8	17.3-27.8	15.6-27.5			17	17
	Allocco Recycling	17.0-25.8	17.3-26.8	15.6-24.9			15	21 ^{5,6}
	United Metro Energy	15.8-25.8	17.3-26.8	15.2-24.9			15	18
D	Green Asphalt	14.0-15.6	15.9-20.3	12.0-16.7	23	23	12	12

Table 5: Current (August 2021), Authorized and Commercial User Current andDesired Future Depths

Reach	Users along Newtown Creek	Range of Depths in Channel Entering from Seaward (feet) ²				Authorized	Current User	Desired Future Use
		Left Outside Quarter	Middle Half	Right Outside Quarter	Constructed Depth	Depth (feet)	Depth (Vessel Draft- feet	(Vessel Draft- feet)
	37-50 RR, LLC (future)	14.0-16.7	15.9-21.3	12.0-16.7			-	15
	Kinder Morgan	14.0-21.0	15.9-23.5	12.0-16.7			16	16 ⁷
E	Maspeth Recycling (future)	7.7-21.0	13.7-24.8	13.1.21.0	20	23	-	14
	Empire Transit Mix (Future)	10.9-16.8	11.2-19.5	2.9-11.1			-	
J	Empire Metal Trading	10.9-16.8	11.2-19.5	2.9-16.2	16	20	10	18 ^{5,8}
	TNT Scrap	8.2-17.0	11.2-20.2	2.9-16.2			12	12
К	Bayside Fuel	8.4-15.2	13.2-17.6	8.2-14.8	0	12	11	11

¹ Partial Conditions Survey in Reach L: Depths reported only covers 10% of Dutch Kills (0.05 miles of the 0.56-mile channel).

² Range of Depths in Channel Entering from Seaward (feet): Reflects the range within the reach from the beginning boundary to the dock of the user's facility (USACE, 2021).

³ Based on the inoperability of the LIRR bridges near the confluence of Newtown Creek and Dutch Kills, SRM Concrete (SRM-NYCON, LLC) would not be able to access their facility via the channel. However, 33 U.S.C. §494 supports the proposition that the non-operability of the bridge(s) is not a sufficient reason for the proposed future use to be considered unlikely or unreasonable. In addition, MTA-LIRR are planning for the replacement of the DB Bridge and removal of the Cabin M Bridge.

⁴NYCDEP, in coordination with other NYC agencies, has stated that NYC requires a minimum depth of 20-ft for their operations and also support user's future anticipated use in Reaches A-D.

⁵ Vessel Draft reflects assumption that there is an available 2 feet safety under-keel clearance to authorized depth (user may have suggested hope of larger draft vessel in the future.)

⁶ Desired future use is dependent upon NYC approval of the use and occupancy permit at North Henry street. If approved, vessel draft could be changed to 18-feet. However, NYC has indicated that it believes that Allocco is operating on NYC property illegally and disputes Allocco's title. Future coordination and resolution of the land disputes are needed to determine the future use on Allocco's property. ⁷ Kinder Morgan indicated they would accept an authorized channel of 18-feet MLLW. This translates into an 18-ft authorized channel and 16-ft vessel with 2-ft safety under-keel clearance.

⁸ User was notified that the channel would be maintained to the maximum constructed depth and understands that a 16-ft channel could result in the use of a 14-ft vessel in the future depending on conditions at that time.

7.0 Preliminary Findings

Depths in each reach to accommodate reasonably anticipated future use of the commercial users considering the constructed depth (maximum depth that would be maintained in the future) are presented in Table 6 and summarized below.

- Reach L/L1: A single future potential user in Dutch Kills (SRM Cement LLC [parent of SRM-NYCON, LLC]), located within the Turning Basin, could use the channel if the LIRR Freight Bridges were removed or replaced. See 33 U.S.C. §494, which empowers the Coast Guard to compel repair or removal of the bridges in question and thus indicates that the non-operability of the bridge(s) is not, by itself, a sufficient reason for classifying this future use as unlikely or unreasonable. Further coordination is needed to establish adequate air drafts at the LIRR Freight Bridges and the channel depth should not be modified at this time.
- Reaches A-B: Authorized channel depth would not change from 23-feet due to Allocco's future potential use² and should not be modified at this time.
- Reach C: Users would require three different navigation depths within the Reach:
 - C_A- Allocco would require an authorized channel depth of 23-feet to Creek Mile 1.33 (40.735666, -73.942162).³ Therefore, the authorized depth should not be modified at this time.
 - C_B- United Metro would require an authorized channel depth of 20-feet from Creek Mile 1.33 to Creek Mile 1.49 (40.733652, -73.940548)
 - C_C- Due to Kinder Morgan's needs upstream, an authorized channel of 18feet is acceptable from Creek Mile 1.49 to Greenpoint Avenue Bridge (40.73326, -73.94038).
 - Reach D: Users (specifically Kinder Morgan) indicated that an 18-feet authorized channel was sufficient from Greenpoint Avenue Bridge to the Kosciusko Bridge River (40.727729, -73.92142).
 - Reach E: Users require two different navigation depths within the Reach:

² The need for a 23-foot authorized federal channel in Reaches A and B is dependent upon resolution of a property dispute between NYC and Allocco.

 $^{^{3}}$ Need for a 23-foot authorized depth in Reach C_A is dependent upon resolution of a property dispute between NYC and Allocco.

- E_A Given the constructed depth of the reach was 20-feet, and Kinder Morgan and United Metro found an 18-foot navigation channel acceptable in the Turning Basin, the authorized channel in Reach E must be 18-feet, similar to Reach D, to the upstream reach of the Turning Basin up to Creek Mile 2.7 (40.723295, -73.926383).
- \circ E_B The segment of Reach E upstream of the Turning Basin at Creek Mile 2.7 (40.723295, -73.926383) and the start of Reach H, Creek Mile 2.86 (40.720373, -73.924439) must be similar to the authorized channel depths of Reaches H and J to accommodate the needs of users in Reach J.
- Reaches E1 and G: Portions of Reaches E1 and G must be maintained to ensure an adequate turning basin at 18-feet authorized channel depth. Portions of these reaches may be deauthorized adjacent to Reach F (Maspeth Creek) east of a line formed by points 40.724204, -73.924649; 40.723419, -73.925904; and 40.722344, -73.925369.
 - E1 A polygon north and east of a line formed by points 40.724204, 73.924649; 40.724054, -73.924889; 40.724604, -73.926491; and 40.726202,
 73.927289 authorized to 18-feet to ensure an adequate turning basin.
 - G_A A triangular portion of Reach G formed by points 40.724604, 73.926491; 40.724054, -73.924889; and 40.723419, -73.925904 authorized to 18-feet to ensure an adequate turning basin.
 - \odot G_B A portion of Reach G south of reach G_A formed by points 40.724204, -73.924649; 40.723916, -73.924483; 40.722344, -73.925369; and 40.723419, -73.925904 deauthorized.

Email Communication 2022b and c. 450 feet turning radius to accommodate a 400-ft unit (barge and tug) with 18-ft depth.

Figure 15: Current Bathymetry, Use and Future Proposed Alignment/Modification of the Turning Basin





- Reach F: There are no users within Maspeth Creek and an authorized channel is no longer needed.
- Reach H: This Reach was only constructed to 16-feet and would not be maintained at a greater depth. It should be noted that Empire Metal, in Reach J, desired 18-feet draft vessels with a depth of 20-feet authorized channel in the future. However, it is highly unlikely that that the USACE would obtain approval and construction funds to construct the increment from 16-feet to 20-feet in Reaches H and J. Therefore, reasonably anticipated future use of Reach H would likely require a 16-feet authorized channel.
- Reach J: The constructed depth of Reach J was 16-feet compared to the authorized depth of 20-feet. Users in Reach J require 3 different navigation depths within the Reach:
 - J_A Empire Metal has requested a 20-foot authorized channel within Reaches H and J. However, as previously stated the USACE would unlikely obtain approval and construction funds to maintain this depth in the future and reasonably anticipated future use would be the maintained 16-foot channel through Creek Mile 3.17 (40.717538, -73.927440).
 - J_B The segment from Empire Metal to TNT Scrap (Creek Mile 3.27; 40.716610, -73.929277) requires a 14-foot authorized channel.
 - J_C The segment from TNT Scrap to Metropolitan Avenue Bridge (Creek Mile 3.55; 40.714293, -73.931197) only requires a channel of 12 feet for the last upstream user.
- Reach K: User (Bayside Oil Depot) requires 12 feet up to Creek Mile 3.65 (40.713156, -73.931358; Reach K_A). Although the USACE never constructed Reach K, Bayside indicated they would maintain up to their facility if necessary. There are no Users beyond Creek Mile 3.65 (40.713156, -73.931358) to Creek Mile 3.96 (40.709383, -73.930734; Reach K_B).
- Reach I: There are no current commercial users in this reach.
- Reach E1: There are no current commercial users in this reach.

Based on the above preliminary findings, Table 6 presents the authorized channel depths that would accommodate future use of active and future commercial users within each reach, while considering the potential for future operation and maintenance based on the constructed depths. In addition, these future depths are illustrated in Figure 16.

Reach	Reach Description	Constructed Depth	Authoriz (Fe	ed Depth eet)	Notes ²
		_	Current	Future ¹	
A1	Parallel to Reach A and extends approximately 1335 feet.	23	23	23 ³	No change at this time
A	From the junction with the East River, to the Pulaski Bridge.	23	23	23 ³	No change at this time
В	From Pulaski Bridge to approximately 400 feet seaward from the junction with Whale Creek.	23	23	23 ³	No change at this time
С	From approximately 400 feet seaward of the junction with Whale Creek to Greenpoint Avenue Bridge	23	23		
C _A	From approximately 400 feet seaward of the junction with Whale Creek to approximately 700 feet upstream of No Name Inlet.	23	23	233	No change at this time
C _B	From approximately 700 feet upstream of No Name Inlet to approximately 150 feet seaward of Greenpoint Avenue Bridge.	23	23	20	Modification to 20- feet authorized channel
Cc	From approximately 150 feet seaward of Greenpoint Avenue Bridge to the Bridge.	23	23	18	Modification to 18- feet authorized channel
L/L1	Dutch Kills: Survey coverage exists from the junction with the Main Channel at the beginning of Reach C, to a point approximately 350 feet landward of the beginning of the reach.	20	20	TBD	No modification at this time pending discussions with SRM Concrete
D	From Greenpoint Avenue Bridge to Kosciuszko Bridge.	23	23	18	Modification to 18- feet authorized channel
E _A	(Main Channel adjacent to Turning Basin): From the Kosciuszko Bridge to the end of Turning Basin at the upstream end of Reach G _A	20	23	18	Modification to 18- feet authorized channel
E _B	(Main Channel adjacent to Turning Basin): From the end of Turning Basin to approximately 150 feet seaward of Maspeth Avenue	20	23	16	Modification to 16- feet authorized channel
E1	Northern portion of Turning Basin along an approximately 620-foot length of the Main Channel and north of reaches G _A and G _B .	20	23	18/0	Modification to 18- feet authorized channel

Table 6: Authorized Depth by Reach
Reach	Reach Description	Constructed Depth	Authoriz (Fe	ed Depth eet)	Notes ²	
			Current	Future ¹		
GA	Triangular Area within Turning Basin along an approximately 450-foot length between Reach E_A , Reach E1, and Reach G_B	20	23	18/0	Modification to 18- feet authorized channel	
G _B	Approximately 430-foot-wide area between Turning Basin and the mouth of Maspeth Creek (Reach F), south of Reaches E1 and G _B .	20	23	0	Deauthorization	
F	Maspeth Creek	20	20	0	Deauthorization	
Н	From approximately 150 feet seaward of Maspeth Avenue, to the junction with English Kills	16	20	16	Modification to 16- feet authorized channel	
I	Survey coverage exists from the junction with the Main Channel to the Grand Street Bridge.	16	20	0	Deauthorization	
J	(English Kills): From junction with Main Channel to the Metropolitan Avenue Bridge.	16	20			
J _A	From junction with Main Channel to approximately 800 feet upstream (to Empire Metal Trading).	16	20	16	Modification to 16- feet authorized channel	
J _B	J _B Segment from approximately 800 to 1,500 feet upstream of Main Channel (from Empire Metal Trading to TNT Scrap).		20	14	Modification to 14 feet authorized channel	
Jc	Segment from approximately 1,500 feet from Main Channel to Metropolitan Avenue Bridge	16	20	12	Modification to 12- feet authorized channel	
K	From Metropolitan Avenue Bridge to approximately 500 feet upstream (Bayside Fuel Terminal)	0	12	12	No change	
Кв	From approximately 500 feet upstream of Metropolitan Avenue Bridge to a point located approximately 1,750 feet upstream	0	12	0	Deauthorization	

Note: "Zero (0)" indicates that either the reach was not constructed ("constructed depth) and/or that no objections have been raised to deauthorize this reach ("Authorized Depth, Future"). Bolded Reaches and Reach Descriptions are highlighted indicating that the reach can be modified or deauthorized.

¹ The future authorized depth could be the maximum depth constructed and potentially maintained (pending appropriations) which has been acknowledged by the users within associated reaches.

² "Notes": Provide potential deauthorization or modification of the authorized federal channel and possible authorized depth for reasonably anticipated future use for each reach.

³ Authorized Depth may be modified to 20-feet in the future pending further coordination with Allocco Recycling, determination of approval of the DockNYC RFEI granting a use and occupancy permit and subsequent resolution of property dispute with NYC (See Appendix B).



Figure 16: Future Authorized Depths That Would Accommodate Future Use

Figure Credit: Anchor QEA

8.0 References

Allocco, 2021. DockNYC Request for Expressions of Interest (RFEI) Response, January 29, 2021.

Anchor QEA. 2020. Newtown Creek Early Action Operable Unit 3 Focused Feasibility Study

Email Communication, 2024. Email Communication between Gibbons Law on behalf of SRM Concrete, LLC (parent of SRM-NYCON, LLC) and Lisa Baron, USACE, January 1, 2024.

Email Communication. 2020a. Email Communication between Allocco Recycling, Lisa Baron and Malik Bethea, USACE, February 27, 2020

Email Communication. 2020b. Email Communication between United Metro Energy, Lisa Baron and Malik Bethea, USACE, February 27, 2020

Email Communication 2020c. Email communication of survey responses between Empire Transit Mix to Lisa Baron, USACE, October 26, 2020.

Email Communication 2020d. Email communication of survey responses between NYCDEP to Lisa Baron, USACE, November 23, 2020.

Email Communication 2020e. Email communication between Empire Metal Trading and Lisa Baron, USACE, November 24, 2020.

Email Communication 2021a. Communication between NYCDOT and Lisa Baron, USACE, April 4, 2021.

Email Communication 2021b. Communication between Kinder Morgan and Lisa Baron, USACE, April 5, 2021.

Email Communication 2021d. Communication between LIRR and Lisa Baron, USACE, April 7, 2021.

Email Communication 2021e. Communication between United Metro and Lisa Baron, USACE, May 5, 2021.

Email Communication 2021f. Communication between NYCDEP and Lisa Baron, USACE, September 7, 2021.

Email Communication 2022a. Communication between Maspeth Recycling and Lisa Baron, USACE, May 18, 2022.

Email Communication 2022b. Communication between Towboat & Harbor Carriers Association of NY NJ, Vane Brothers, US. Coast Guard, Centerline Logistics and Lisa Baron, 6/24/22 and 7/7/22.

Email Communication 2022.c. Communication between Centerline Logistics and Towboat & Harbor Carriers Association of NY NJ, Vane Brothers, US. Coast Guard and Lisa Baron, 6/30/22.

Email Communication 2022.d. Communication between LIRR and Lisa Baron, 11/17/22.

NYCDEP, 2014. Newtown Creek and Whale Creek Canal Maintenance Dredging Post-Dredging Completion Report. DEC Permit No. 2-6101-00025/000888-00090 Newtown Creek WWTP Contract NC-50

New York State Department of Transportation (NYSDOT) and US Department of Transportation Federal Highway Administration (USDOT, FHA), 2005. Kosciuszko Bridge Project, Newtown Creek Navigation Analysis, September 22, 2005.

Telephonic Communication. 2019a. Communication between Sims Metal Management and Malik Bethea, USACE, September 26, 2019

Telephonic Communication. 2019b. Communication between TNT Scrap and Malik Bethea, USACE, October 1, 2019

Telephonic Communication. 2019c. Communication between Bayside Fuel and Malik Bethea, USACE, October 3, 2019

Telephonic Communication. 2019d. Communication between Kinder Morgan, Lisa Baron and Malik Bethea, USACE, November 12, 2019

Telephonic Communication. 2019e. Communication between NYCDEP, Lisa Baron and Malik Bethea, USACE, November 14, 2019

Telephonic Communication. 2020a. Communication between Empire Metal Trading and Malik Bethea, USACE, January 28, 2020

Telephonic Communication. 2020b. Communication between Zenith Energy, Lisa Baron and Malik Bethea, USACE, February 25, 2020

Telephonic Communication. 2020c. Communication between United Metro Energy, Lisa Baron, Malik Bethea and Thomas Hodson, USACE, March 27, 2020

Telephonic Communication. 2020d. Communication between Empire Metal Trading and Lisa Baron, USACE, March 27, 2020

Telephonic Communication. 2020e. Communication between Sims Metal Management and Lisa Baron, USACE, April 29, 2020.

Telephonic Communication 2020f. Communication between United Metro Energy and Lisa Baron, USACE, May 19, 2020.

Telephonic Communication 2020g. Communication between Vane Brothers and Lisa Baron, USACE, May 19, 2020.

Telephonic Communication 2020h. Communication between Kinder Morgan and Lisa Baron, USACE, May 19, 2020.

Telephonic Communication 2020i. Communication between 37-50 RR, LLC and Lisa Baron, USACE, August 28, 2020.

Telephonic Communication 2020j. Communication between Matrix New World Engineering and Maspeth Recycling and Lisa Baron, USACE, September 11, 2020.

Telephonic Communication 2020k. Communication between USC-NYCON, LLC and Lisa Baron, USACE, October 1, 2020.

Telephonic Communication 2020I. Communication between Green Asphalt and Lisa Baron, USACE, October 1, 2020.

Telephonic Communication 2020m. Communication between Empire Transit Mix and Lisa Baron, USACE, October 13, 2020.

Telephonic Communication 2020n. Communication between NYCDEP, NYC Planning, NYC Economic Development Corporation, NYC Law Office and Lisa Baron and Tom Hodson, USACE, October 22, 2020.

Telephonic Communication 2021a. Communication between United Metro Energy and Lisa Baron, USACE, March 12, 2021.

Telephonic Communication 2021b. Communication between United Metal Trading and Lisa Baron and Tom Hodson, USACE, March 18, 2021.

Telephonic Communication 2021c. Communication between Bayside Fuel Depot and Lisa Baron, USACE, March 18, 2021.

Telephonic Communication 2021d. Communication between Kinder Morgan and Lisa Baron, USACE, March 19, 2021.

Telephonic Communication 2021e. Communication between TNT Scrap and Lisa Baron, USACE, March 24, 2021.

Telephonic Communication 2021f. Communication between Allocco and Lisa Baron, USACE, March 31, 2021.

Telephonic Communication 2021g. Communication between United Metro Energy and Lisa Baron, USACE, March 31, 2021.

Telephonic Communication 2021h. Communication between Allocco and Lisa Baron, USACE, May 13, 2021.

U.S. Army Corps of Engineers. New York District, Operations Division. August 12, 2021 Conditions Survey.

U.S. Army Corps of Engineers. Institute for Water Resources, Navigation Data Center. Waterborne Commerce Statistics. 2007-2017. http://www.iwr.usace.army.mil/ndc/index.htm

U.S. Army Corps of Engineers. 2006. EM 1110-2-1613, Engineering and Design – Hydraulic Design of Deep Draft Navigation Projects, 31 May 2006.

U.S. Army Corps of Engineers, 1986. New York District Project Maps River and Harbor, 30 September 1986.

U.S. Army Corps of Engineers, Institute for Water Resources Navigation Data Center; Revised 2017; The Ports of New York, NY, and NJ, and Ports on Long Island, NY - Port Series No. 05, <u>http://www.iwr.usace.army.mil/ndc/ports/pdf/ps/ps05.pdf</u>

U.S. Environmental Protection Agency (USEPA). 2020. Case Summary: Settlement Reached at Newtown Creek Superfund Site. <u>https://www.epa.gov/enforcement/case-summary-settlement-reached-newtown-creek-superfund-site</u>

Appendix A

Navigation Channel Condition Survey

June 16, 2023

REPORT OF	PAGE	1 OF	3 PAGES					
			DATE	16 June 202	3			
TO: The Record	FROM: U.S. Army 26 Federal New York,	Corps of En Plaza, ATT NY 10278-	gineers N: CENAN-OP- 0090	ST				
RIVER/HARBOR NAME AND STATE: Newtown Creek, New York					MI CHANNEL E	NIMUM DEPTHS	S IN M SEAWARD	
	DATE	AUTH		DJECT		MIDDLE		
NAME OF CHANNEL	OF SURVEY	WIDTH (feet)	LENGTH (nmiles)	DEPTH (feet)	QUARTER (feet)	HALF (feet)	QUARTER (feet)	
Reach A: From the junction with the East River, to the Pulaski Bridge.	File# 5305/N3/N4 Pg 2 & 3 of 10 15,16,22 & 23 May 2023	130 - 1000	0.55	23	6.2	13.2	12.8	
Reach A1 (Triangular Area): Parallel to Reach A and extends for approximately 1420 feet.	File# 5305/N3/N4 Pg 2 of 10 15,16,22 & 23 May 2023	Irregular	Irregular	23		7.9		
Reach B: From Pulaski Bridge to approximately 400 feet seaward of the junction with Whale Creek.	File# 5305/N3/N4 Pg 3 of 10 15,16,22 & 23 May 2023	130	0.26	23	14.4	18.9	14.9	
Reach C: From the beginning of the junction with Whale Creek to Greenpoint Avenue Bridge.	File# 5305/N3/N4 Pg 3 & 4 of 10 15,16,22 & 23 May 2023	130	0.44	23	11.0	16.1	10.4	
Reach D: From Greenpoint Avenue Bridge to Kosciuszko Bridge.	File# 5305/N3/N4 Pg 4, 5 & 6 of 10 15,16,22 & 23 May 2023	130	0.66	23	10.7 15.6		10.1	
Reach E (Main Channel adjacent to Turning Basin): From the Kosciuszko Bridge to the approximate location of Maspeth Avenue.	File# 5305/N3/N4 Pg 6 & 7 of 10 15,16,22 & 23 May 2023	130-300	0.50	23	4.3	12.3	9.3	
Reach E1 (Branch Channel adjacent to Turning Basin): From the northernmost corner of Mussel Island turning basin at the junction with the Main Channel, to the east corner of the Mussel Island turning basin at the entrance of Maspeth Creek.	File# 5305/N3/N4 Pg 6 of 10 15,16,22 & 23 May 2023	115-565	0.14	23	7.0	6.0	5.0	
Reach G (Mussel Island Turning Basin): Area between Branch Channel (Reach E1) and Main Channel	File# 5305/N3/N4 Pg 6 of 10 15,16,22 & 23 May 2023	Irregular	4.77 acres	23	1.0			

Reach H (To Entrance to English Kills): From the approximate location of Maspeth Avenue to the junction with English Kills	File# 5305/N3/N4 Pg 7 of 10 15,16,22 & 23 May 2023	150-280	0.14	20	0.2	13.0	2.3
Reach I (Partial): Survey coverage exists from the junction with the Main Channel to the Grand Street Bridge.	File# 5305/N3/N4 Pg 7 of 10 15,16,22 & 23 May 2023	125-150	0.29	20	6.2	10.4	3.3
Reach J (English Kills): From junction with Main Channel to the Metropolitan Avenue Bridge.	File# 5305/N3/N4 Pg 7 & 8 of 10 15,16,22 & 23 May 2023	80-240	0.47	20	6.6	10.1	1.7
Reach K (Partial): Survey coverage exists from Metropolitan Avenue Bridge landward approximately 1,450 feet.	File# 5305/N3/N4 Pg 8 of 10 15,16,22 & 23 May 2023	80-215	0.35	12	5.4	3.5	3.5
Reach L (Dutch Kills) (Partial): Survey coverage exists from the junction with the main channel at the beginning of Reach C and extends approximately 515 feet landward of the beginning of this reach.	File# 5305/N3/N4 Pg 3 & 4 of 10 15,16,22 & 23 May 2023	40-315	0.50	20	8.6	8.5	7.2

REMARKS:

- All reported depths are relative to Mean Lower Low Water datum.
- Channel reach lengths are in nautical miles.
- All distances and dimensions are approximate.

NEWTOWN CREEK:

- **Reach A:** Shoaling exists across the entire width of the channel throughout the majority of this reach starting approximately 720 feet landward from the beginning of the reach. The controlling depth of -6.2 feet MLLW exists in the Left Outside Quarter approximately 330 feet landward of landward corner of reach A1 Triangle Area.
- **Reach A1 Triangular Area:** Shoaling exists on the eastern half of this channel. The controlling depth of -7.9 feet MLLW exists near the most landward corner of the reach.
- **Reach B:** Shoaling exists across the entire width of the channel throughout the majority of this reach. The controlling depth of 14.4 feet MLLW exists in the Left Outside Quarter approximately 535 feet seaward of the end of this reach
- **Reach C:** Shoaling exists across the entire width of the channel throughout the majority of this reach. The controlling depth of 10.4 feet MLLW exists in the Right Outside Quarter approximately 115 feet seaward of the end of this reach.
- **Reach D:** Shoaling exists across the entire width of the channel throughout the majority of this reach. The controlling depth of 10.1 feet MLLW exists in the Right Outside Quarter approximately 530 feet landward of the beginning of this reach.
- **Reach E:** Shoaling exists across the entire width of the channel throughout the majority of this reach. The controlling depth of 4.3 feet MLLW exists in the Left Outside Quarter approximately 260 feet landward of the end of Reach G.
- **Reach E1:** Shoaling exists throughout this entire reach. The controlling depth of -5.0 feet MLLW exists in the Right Outside Quarter near the most landward corner of this reach.
- **Reach G:** Shoaling exists throughout this entire reach. The controlling depth of -1.0 exists approximately 590 feet MLLW southwest from the most seaward corner of this reach.
- **Reach H:** Shoaling exists throughout the majority of this reach. The controlling depth of -0.2 feet MLLW exists in the Left Outside Quarter approximately 465 feet seaward of the end of this reach.
- Reach I (Partial): Shoaling exists across the entire width of the channel throughout the majority of this reach where there was survey coverage. The controlling depth of -3.3 feet MLLW exists in the Right Outside Quarter approximately 435 feet landward of the beginning of this each.
- **Reach J:** Shoaling exists across the entire width of the channel throughout the majority of this reach. The controlling depth of 1.7 feet MLLW exists in the Right Outside Quarter approximately 185 feet landward of the first bend of this reach.
- **Reach K (Partial):** Shoaling exists throughout the majority of this reach where there was survey coverage. The controlling depth of -3.5 feet MLLW exists in the Right Outside Quarter and Middle Half in the last bend of the second bend of this reach.
- Reach L (Partial): Shoaling exists across the entire width of the channel throughout the majority of this reach where there was survey coverage. The controlling depth of -7.2 feet MLLW exists in the Right Outside Quarter approximately 40 feet landward of the end of this reach.



	LOCAL	CONTRO
BENCHMARK: BM	REVIEW	

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				US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT
				PR JDS.RR.
				DATES OF SURVEY: 15.16.22.23 MAY 2023 REQ. ND./FILE ND.:5305/N3/N4
				SCALE: DNE INCH = 600 FEET FIELD BODKS: DNA10
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				DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT NEW YORK. NEW YORK 10278 OPERATIONS DIVISION SURVEYS AND MAPPING BRANCH CENAN-OP-SS
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(LOCAL	CONTROL	DATA
	BENCHMARK: BM REVI	EW		
	ELEVATION: 24.01'	(NAVD	1988)	

Appendix B

Newtown Creek Commercial User Interviews

November 2019 – September 2021

Newtown Creek Commercial User Interview and Responses

Zenith Energy

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. Gasoline and Ethanol tanker vessels up to 350 feet, 55 feet wide, with 10 feet draft at our dock.
- 2. Are there any physical constraints that limit how you are operating? Future and current operations dependent on an open, navigable channel.
- 3. What is your future operation plans in regards to transportation in the channel? Future and current operations dependent on an open, navigable channel.
- 4. How would you operate if the channel was shallower with no maintenance? Would traffic be affected? Possibly Is ground transportation an option? NO
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance?) All depends if we can continue to receive tanker vessels. Future and current operations dependent on an open, navigable channel.
- 6. How would you operate if the channel were deeper?

Probably the same but could possibly receive deeper draft vessels (15-16ft max).

- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)? Not that I'm not aware of.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. Channel needs to continue be open to vessel traffic. All future and current operations dependent on an open, navigable channel.

<u>SRM Concrete, LLC- Parent Company of new tenant SRM-NYCON, LLC (Awaiting</u> <u>Responses as of January 2, 2024)</u> Text below represents position of previous tenant and is no longer considered.

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
 As a concrete producer, we are one of the few manufacturing companies in New York City. This site contains two concrete batching plants and because of its proximity to Manhattan is critically important to our company. The facility currently is bringing raw materials (sand (aka fine aggregate); stone (aka coarse aggregate); and cement) via trucks to manufacture concrete and are not currently using Newtown Creek for transportation of these raw materials. However, as federal interstate I-278 (Brooklyn Queens Expressway – BQE) a critical important truck route is about to undergo major repair/reconstruction (See link at: <u>https://www.bqe-i278.com/en</u>), there is an urgent need to be able to utilize the creek to transport their raw materials in the very near future. Waterborne transport is certainly a much more economical and cost-effective mode of transport compared to trucks and rail. If barges would be used, the operation would utilize 10-12 ft. draft vessels with 40 feet wide and 150 feet length.
- 2. Are there any physical constraints that limit how you are operating? The current bathymetry and possibly air draft of the bridges (Borden Avenue and Hunters Point Avenue Bridges) prevent use of Dutch Kills. The tugs transporting the barges of raw materials would need 16 feet of air draft. In addition, there is additional concern that the NYC Department of Transportation will be strictly enforcing three-decade old truck weight limits that will severely constrain logistics for the supply of these raw materials. NYCDOT Deputy Commissioner just sent an invitation to convene a high-level summit of government officials and industry leaders to discuss this issue which is supposed to take place sometime in October, 2020. As the fines for these overweight violations are \$7,000 per occurrence, these restrictions and strict enforcement would make operations prohibitively expensive and cause an immediate shift to barge transportation at this facility.
- 3. What are your future operation plans in regards to transportation in the channel?

The company is a long-term tenant (and sub-tenant) on NYC owned property on the water in Brooklyn under a long-term lease intending to receive and ship aggregates via barges and trucks to its other facilities in New York, including this one in Long Island City. If the company is prevented or restricted from using trucks, if able to use Dutch Kills, the Company would bring in vessels that would have a 10-foot draft and require 12 foot of depth at mean low water.

- 4. How would you operate if the channel was shallower with no maintenance? Would traffic be affected? In future, if able to use barges, on average, each barge would replace approximately 40 trucks. Is ground transportation an option? YES – currently using trucks.
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance?) Facility would maintain use of trucks, which very well may become prohibitively expensive.
- 6. How would you operate if the channel were deeper? Would utilize barges that require 12 feet of water for 10 feet draft vessels.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? The company has a long-term lease at this facility and this dock is capable of receiving barges right now. The dock is capable of accepting barges if the waterway has depth of 12 feet. at mean low water. In the longer term (5+ years)? The company has a long-term lease at this facility and this dock is capable of receiving barges right now. The dock is capable of accepting barges if the waterway has depth of 12 feet at mean low water.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. If, in the worst-case scenario, the reconstruction of the BQE and increased truck weight limits are strictly enforced by NYC, operating this facility would become prohibitively expensive. If that happened and the channel was not navigable, we are not sure we would be able to use this facility. As we are parties to multi-year construction contracts to produce and deliver concrete to many major public and private sector construction projects, and could not pass along these costs, we might very well have to shut down this facility putting dozens of long time union employees out of work.

Sims Metal

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
 Barge material out as needed. Have 3 barges there typically at any time. All barges draft 17ft. Tend to turn around 3 barges every 24hrs. Loads range from 500-800 tons. Barges do not go lower than 4ft above the deck.
- 2. Are there any physical constraints that limit how you are operating? No constraints. Since barges are small and creek is deep enough, they're not sensitive to any physical constraints.
- 3. What are your future operation plans in regards to transportation in the channel?

No future operation changes, current operations will continue down the line.

- 4. How would you operate if the channel was shallower with no maintenance? Depends on how shallow, we need a 17ft draft. Would not require any additional modifications to the facilities. High and low tides do not affect their operations. Would traffic be affected? Not affected. Is ground transportation an option? Not at all because trucks cannot carry as much as a barge and trucks would be way too costly. There would be dozens of trucks needed.
- How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance?
 We will continue to operate as we do now.
- 6. How would you operate if the channel were deeper? Would not affect their operations. No plans on getting bigger barges.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)? No infrastructure changes needed regardless of deeper channel. Wouldn't impact them.
- What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. No concerns. Pretty dynamic, can make use with whatever conditions they have.

Follow-up with Eric Knorr (April 29, 2020): Sims was asked why they are only leasing the 10 to 12-ft draft vessels to Empire Metal and TNT Metal. Sims indicated that they lease the smaller vessels in order to maximize the use of their entire CURRENT fleet to meet their clients' needs. Sims may purchase more vessels in the future and provide those larger vessels to these 2 companies if they wanted and they had them.

NYCDEP Newtown Creek Wastewater Treatment Plant

1. How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.

The marine sludge vessels, owned and operated by the NYC Department of Environmental Protection, utilize Newtown Creek to perform its core mission: transportation of sludge. NYC DEP operates and maintains 14 sewage treatment facilities throughout the five boroughs. The sludge vessels load and discharge sludge between the 14 facilities for final processing of sludge as all the facilities are not equipped with dewatering facilities. The largest Wastewater Facility in the system is Newtown Creek and is located at 329 Greenpoint Avenue. A sludge loading dock was built in 2014 at Whale Creek located within the property of the Wastewater Facility. Variable and seasonal production levels of sludge require scheduling 6-10 round trips in Newtown Creek to meet all sludge service requirements. The duration for each load is three hours and a typical transit time between Whale Creek and the mouth of Newtown Creek is 30 minutes. The loaded vessels transport sludge to another wastewater facility for final [dewatering] processing the same day. Prior to 2014, sludge vessels loaded sludge at a dock located on the East River approximately one mile from the Wastewater Facility. The property where this dock was located was rezoned and developed for residential and recreational use. The change of the sludge loading location required vessels to navigate Newtown Creek to the dock at Whale Creek. DEP invested \$ 105 m. to design and build three motorized vessels [NC-50 Class Vessels] to navigate Newtown Creek unassisted and load sludge at the Whale Creek dock. The older sludge vessels in the fleet were not designed to navigate around the restrictions of Newtown Creek. Specific design requirements were needed to remove the daily volume of sludge [one million gallons] from the Wastewater Facility and safely maneuver in the Newtown Creek. A maximum load draft of 14 feet and an air draft of 45 feet were two key design characteristics that the vessels were built around to pass under the Pulaski Bridge without requiring an opening. Bow and stern thrusters along with twin controllable pitch propellers allow for optimal directional control and maneuverability in the restricted waterway. The sludge vessels only operate in Newtown Creek up to the Whale Creek inlet.

Additionally, the DEP operates a fleet of eight smaller vessels for water quality programs and occasionally transit Newtown Creek to the end at English Kills, East Branch and Maspeth Creek. Containment of floatables from combined sewer overflow [CSO] are trapped in booms at these branches of Newtown Creek. DEP vessels maintain and clean out the boom sites as needed. The size of these vessels range from 26 to 60 feet. The water drafts [5 feet or less] and the air drafts [22' feet or less] are not consequential for the navigational analysis. The smaller fleet of vessels are moored at a marina in Whale Creek near the sludge dock. See tables below for information on vessel characteristics for the fleet.

Gross Tonnage	2828 tons
Overall Length	290'
Regular Length	275'
Depth Molded	18'-06"
Beam	70'-6"
Draft fwd. lt.	4'-6"
Draft aft lt.	10'-6"
Draft fwd. full	13'-0"
Draft aft full	14'-0"
Horse Power	3650
Capacity	140,000 cu. ft.
Air Draft	45'-0"
Speed	10 kts.
Propellers	2 CPP
Year Built	2014
ABS Class	Bulk Liquid Carrier

M/V Hunts Point – M/V Port Richmond – M/V Rockaway

	Marine Vessel Fleet									
L	Name	Useful Life	Year Built	Age (yrs)	Length (ft)	Volume	Status	Comments		
	Sludge Vessels: Transport liquid sludge from water pollution control plants without dewatering capability to those with dewatering facilities, or to plants whose receiving body of water can accommodate effluent with certain levels of nutrients. Volume is									
	normal MAX. operating load c	apacity which is 80% of total car	rgo space							
Γ								Built for ocean offloading. Retrofitted to meet current operations with a reduced capacity of		
1	North River	40+ years	1974	46	325	82,000 cu. Ft.	Operating	approx. 80,000 cubic feet.		
2	Red Hook	30+ years	2008	12	352	130,000 cu. Ft.	Operating	Designed for coastal routes - deep draft restricts use at NC Plant		
3	Hunts Point	30+ years	2014	6	290	130,000 cu. Ft.	Operating	designed for inland river use- low air draft access to NC plant Whale Creek dock		
4	Port Richmond	30+ years	2014	6	290	130,000 cu. Ft.	Operating	designed for inland river use- low air draft access to NC plant Whale Creek dock		
5	Rockaway	30+ years	2014	6	290	130,000 cu. Ft.	Operating	designed for inland river use- low air draft access to NC plant Whale Creek dock		
6	Udall's Cove	30+ years	1987	33	380	440,000 cu ft.	Operating	back-up storage/ emergency use		
ſ										
	Skimmer Vessels: Remove flo	atables and debris from waterw	vays following ra	ain events th	nat result in co	mbined sewer ove	erflows;			
7	lbis	15+ years	1992	28	45'	15 yrds	Operating	Primarely used for CSO floatables containment facilities		
8	Jamaica Bay	20+ years	2006	14	59'10"	15 yrds	Operating	Primarely used for CSO floatables containment facilities		
9	Shear Water	20+ years	2009	11	59'10"	15 yrds	Operating	Primarely used for CSO floatables containment facilities		
10	Oyster Catcher	20+ years	1999	21	25'9"	N/A	Operating	skimmer vessel/CSO boom support vessel		
	Harbor Survey Vessels: Perfor	rm on-site testing and surveys o	f water quality;	monitor coa	ast line for ille	gal discharges from	n outfalls;			
11 [HSV Osprey	20+ years	1992	27	55	N/A	Operating	55 Feet, a "laboratory at sea"		
12	Sandpiper	20+ years	2014	6	29	N/A	Operating	CSO Survey Vessel		
13	Sea Robin	20+ years	2019	1	30	N/A	Operating	Sentinal Monitoring		
14	Tide Runner	20+ years	2019	1	30	N/A	Operating	Support Vessel		

- 2. Are there any physical constraints that limit how you are operating? There are currently no limiting constraints on how we operate in Newtown Creek.
- 3. What are your future operation plans in regards to transportation in the channel? There are no foreseeable changes to current operations. We will continue to remove sludge from the Wastewater Facility at Whale Creek at the current rates
- 4. How would you operate if the channel was shallower with no maintenance?
 1. Would traffic be affected? Yes. DEP sludge vessels have a full load draft of 14'-0". A minimum of two feet below the keel [16'] is needed to safely navigate in Newtown Creek. Ideally 18' of water depth would provide greater safety to protect against unusual low tides from lunar cycles and wind. Local shoaling from storms is also a concern to keep the water depth at current levels or deeper.
 2. Is ground transportation an option? Not an option
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? The last bathymetric survey DEP has on file is from June 2014. We could review and comment after reviewing a current survey.
- 6. How would you operate if the channel were deeper? A deeper channel would provide a better level of comfort, but we would operate the same with regards to speed and maneuvering.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the shortterm (2 to 5 years)? In the longer term (greater than 5 years)? No changes are needed
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future). We would be concerned if the current depths are not maintained. We would also be concerned if the channel was narrowed in any way.

Follow-up Email from NYC (NYCDEP) following concurrence with NYC Department of Law, outside Counsel and NYCEDC on September 7, 2021:

"New York City-NYCDEP coordinated with New York City Department of Law, New York City Department of Planning and New York City Economic Development Corporation (NYCEDC) to determine New York City's collective position on the current and reasonably anticipated future use of Newtown Creek and its tributaries. Overall, NYC has no objection to the deauthorization or modification of the tributaries of Newtown Creek. NYC also has no objection to the reduction of the federal channel depth in Newtown Creek to a depth of 20 feet for their own operations. However, NYC representatives also stated that they would not support a reduction in the federally authorized channel depth of 23 feet if a current active user required that depth for their current or planned reasonably anticipated future use. We understand that the Corps' test is the current and reasonably anticipated future uses, but as we've advised NYC deems this waterbody a "significant maritime industrial area" and as such plans for the future uses would be supported by maritime navigation and commerce, which relieve local roadway congestion and facilitate the movement of goods and services.

In regards to the two specific locations that have been identified recently, in addition to our prior response to the questionnaire as well as the email we sent regarding the City's overall position, we have the following to add:

With respect to the Allocco location, they do not have a current use which requires a 23 foot navigational depth. In fact, part of their existing use is on property owned by the City that Allocco is on illegally. Allocco claims that if they are removed from the property they are on illegally they may consider other uses which would require a deeper navigational depth. The City does not believe it is appropriate for Allocco to attempt to leverage an illegal current use, which would not require a 23 foot navigational depth, by saying that if the illegal use is taken away they have a "concept" of a future use that "may" require a deeper depth. Allocco has not provided any specific plans for that conceptual use, no plans for dredging the existing berth next to their facility which currently is considerably more shallow, no contracts for the materials to be processed, no purchases or leases for the required vessels and no financial information to demonstrate that this concept is commercially viable. In fact the lack of any certainty in their plans is shown by their going back and forth between concepts for using the site for bluestone versus salt shipments, which require different vessels and are completely different market sectors.

With respect to NYCON's site, there can be no reasonably anticipated future use requiring the retention of the navigational depth of 12 feet in Dutch Kills. The Corps has confirmed with the LIRR that the two bridges in that area are inoperable and they have no plans to fix or remove them. As such, NYCON cannot access its facility via Dutch Kills."

Allocco Recycling

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. We load hopper barges daily at our facility. Barges are 250Lx52Wx14D (indicated 12-15 ft draft with follow-up call)
- 2. Are there any physical constraints that limit how you are operating? Not currently.
- 3. What are your future operation plans in regards to transportation in the channel? No changes, we plan to continue to use the creek daily
- 4. How would you operate if the channel was shallower with no maintenance? Would traffic be affected? N/A Is ground transportation an option? N/A
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? We would continue to operate normally

- 6. How would you operate if the channel were deeper? This would be a benefit we would be able to bring bigger vessels to our dock.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)?
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? In21formation about the potential remedial action would be provided by USEPA. We are concerned that we would not be able to operate our business as efficiently as we do currently. A stoppage in creek travel would result in a major financial impact.

Follow-up (26 March 2020): Mike Allocco – confirmed they will not utilize the turning basin in Reach E/G. They turn around right at their facility utilizing the entrance to Whale Creek. If Whale Creek silted in and the channel remained authorized at 130ft wide, Allocco would need to find an alternative location to turn around given his current barge length is 250ft long. The owner indicated they would utilize the East River and not the Turning Basin in Newtown Creek.

Follow-up (31 March 2021): Mike Allocco- Confirmed above information as well as their desire to utilize 21-ft draft vessels in the future.

Follow-up (13 May 2021): Mike Allocco- Confirmed the following information:

- Use of the tug and barge dimensions presented in the response to the DockNYC Request for Expression of Interest (Allocco, 2021)
- Current transport of sand to the facility via truck
- Allocco submitted a Response to the Request for Expression of Interest (RFEI) to DockNYC (January 29, 2021) for a use and occupancy permit at North Henry Street and the No Name Inlet in conjunction with their current operations at 540 Kingsland Avenue.
- If approved, Allocco plans to install monopile berthing dolphins and soldier pile bulkhead that would provide additional mooring for barges along the bulkhead to improve berthing and efficiency of operations.
- Allocco indicated that if the permit was granted, they would maintain current operations and an authorized channel depth of 20-feet would be satisfactory.
- If the permit is not issued, Allocco would adjust their operations to transport sand, salt and bluestone using larger vessels drafting up to 21 feet to their dock in the future. Therefore, the authorized channel depth of 23-feet to their facility would remain at this time.

United Metro Energy

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. Proving products by barges.
- 2. Are there any physical constraints that limit how you are operating? Yes, cannot bring in larger vessels because of the draft needed and the current bathymetry of the creek
- 3. What are your future operation plans in regards to transportation in the channel? To continue as is, or use larger vessels.
- 4. How would you operate if the channel was shallower with no maintenance? Would not recommend.

Would traffic be affected? Yes Is ground transportation an option? No

- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? The same as they currently operate.
- 6. How would you operate if the channel were deeper? Would bring in bigger barges.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the shortterm (2-5 years)? In the longer term (5+ years)? No infrastructure changes within the upcoming years.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA.

Follow-up #1 (May 19, 2020): John McConville (President) indicated that they utilize the Turning Basin.

Follow-up #2 (March 12, 2021): John McConville

- There are several reaches in Newtown Creek that were constructed at a shallower depth than authorized. In particular, the Turning Basin that is authorized at 23-ft was only constructed at 20-ft. You had indicated that Empire utilizes the Turning Basin.
- The only way the Turning Basin would be maintained at the authorized depth is if the USACE received additional Congressional direction and had a cost shared sponsor.
- You previously indicated United Metro would like to bring in 21-ft vessels in the future if the channel was maintained to its constructed depth.
- Knowing that the Turning Basin would not be maintained to a depth greater than constructed (20-ft), would this be reasonable for your future use and would you operate differently in the future? No. United Metro could still utilize 21-ft vessels at their facility since these vessels will be empty when using the Turning Basin. A 20-ft Turning Basin would be adequate depth for these empty barges.

Follow-up #3 (March 31, 2021): John McConville, Nicole Lam, Aaron Gershonowitz

- Repeated background information for new contacts/call participants.
- Relayed discussions with Kinder Morgan on their acceptance of 20-feet top of cap resulting in an 18-foot navigational channel upstream of United Metro through the Turning Basin.
- Would an authorized channel depth of 18-feet through the Turning Basin provide adequate draft for your empty vessels (16-feet draft) in the future?
- Email response (May 5, 2021) was provided by Aaron Gershonowitz stating: "we are fine with a 20-ft authorized channel up to our dock and that our empty vessels in the future would be ok with an 18-ft authorized channel in the turning basin."

Kinder Morgan

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. Their customers are transporting petroleum products on barges and tugs. Draft is 16ft, size of barges vary between customers. (Kirby, Reinauer barges)
- 2. Are there any physical constraints that limit how you are operating? Bridges on Newtown Creek do not open in the winter and summer based on weather conditions.
- 3. What are your future operation plans in regards to transportation in the channel? No future plans or changes.
- 4. How would you operate if the channel was shallower with no maintenance? Their customers wouldn't be able to bring their products into their facilities, and they wouldn't be able to load trucks that are sent to fuel gas stations in the five boroughs.

Would traffic be affected? Is ground transportation an option? It is an option, but it is not a cost-effective option.

- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? Kinder Morgan is fine, it's more of a question for the barge companies and how they would operate their vessels in shallower water.
- 6. How would you operate if the channel were deeper? No changes if the channel were deeper.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)? No infrastructure changes.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. Anything lower than 20ft would be a challenge. Want to maintain a 2-ft yield. Varying based on low tides, and high tides, want to stay on the side of caution. Wouldn't be opposed to an 18-ft depth, but not putting their name on it.

Follow-up (May 19, 2020): Terminal Operator (Gus Rappold) for Kinder Morgan and Vane Brothers Tug Company indicated that they utilize the Turning Basin to turn around to exit the channel.

Follow-up (March 19, 2021): Paul Muller (Terminal Manager) and Brian McCormick:

- There are several reaches in Newtown Creek that were constructed at a shallower depth than authorized. In particular, the Turning Basin (Reaches E and G) is authorized at 23-ft but was only constructed to 20-ft. You had indicated that Kinder Morgan utilizes the Turning Basin.
- You previously indicated Kinder Morgan would like to bring in 21-ft vessels in the future if the channel was maintained to its constructed depth.
- Knowing that the Turning Basin would not be maintained to a depth greater than constructed (20-ft), would this be reasonable for your future use and would you operate differently in the future?
- Management has coordinated with Anchor QEA and has since indicated that a 20-ft top of cap (bottom sediment) at MLLW was acceptable for their future operations.
- This depth of cap would be acceptable adjacent their facility in Reach D, as well as Reaches E and G for the Turning Basin.
- USACE indicated that accepting a depth of 20-ft to top of cap at MLLW would result in acceptance of a new reduced authorized channel depth of 18-feet (with 2 feet over dredge). In addition, a vessel draft of 16-feet would be acceptable in the future with an 18-foot authorized channel.

Email from Kinder Morgan (Brian McCormick) (5 April 2021):

Per our terminal superintendent, barges/tugs at our Brooklyn facility use the turning basin for both entry & exit. It is really the pilot's discretion that determines whether turning is done pre- or post-transfer, though it makes more sense for the latter given the shallower barge draft post-product offload and the current shallow condition of the turning basin.

I would like to expound on the reason for our shift in position regarding the authorized channel depth. Our previous desire to see reaches A-G at their authorized channel depths of 23' was based off our ability to cater to barges at such drafts throughout our other facilities in the NYH. In an ideal situation where Newtown Creek was not a Superfund site awaiting substantial remediation, 23' authorized channel depths would be utilized by our customers to their fullest extent commercially. Given the fact that no such ideal situation exists, a reduced authorized channel depth to 18-feet (with 2 feet over dredge) would be considered acceptable for our commercial purposes with the understanding that future regular maintenance dredging by both USACE and private waterfront landowners for the purpose of navigation would be made possible by such a compromise.

Green Asphalt

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. Green Asphalt is currently bringing in sand by barge from Perth Amboy and stone from quarries just south of Albany. Both the sand and stone are sold to concrete plants in Queens and Brooklyn. The old asphalt is taken in from road projects to Green Asphalt where they process it and reuse it in New York's first 100% recycled asphalt plant. Any excess processed millings are sent upstate via the same barges and used in asphalt manufacturing in the Albany area. The types of inland hopper barges are 3,300 ton, 260-feet long, 52.5 feet wide and 12 foot draft requiring 14 foot depth of water.
- 2. Are there any physical constraints that limit how you are operating? The facility is repairing their bulkhead and currently using temporary flexi-float spud barges for off-loading the sand and stone. Once the bulkhead is repaired, they will not have any physical constraints for their operation. In addition, no dredging is required to access their berth.
- 3. What are your future operation plans in regards to transportation in the channel? They plan to utilize the 3,300 ton barges rather than the 1,600 ton barges used now with the flexi-floats.
- 4. How would you operate if the channel was shallower with no maintenance?
 - a. Would traffic be affected? Yes- If shallower than 14-feet of water.
 - b. Is ground transportation an option? No. This would defeat the purpose of the company's mission of "Green" Asphalt taking trucks off the road.
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? The company would continue to operate given there are adequate depths within the channel for operation.
- How would you operate if the channel were deeper?
 3,300 ton barges with 12 foot draft are still planned even if the channel was deepened.
- Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the shortterm (2 to 5 years)? In the longer term (greater than 5 years)?
 No. Once the bulkhead repairs are completed, there are no other infrastructure improvements planned.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future). None as long as the channel does not decrease more than 14 feet in depth.

<u>37-50 RR, LLC</u>

1. How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
We are not currently using the Newtown Creek channel, but would like to in the future. We are looking to use hopper barges between 165-225' length with 12-15' depths and a 17' draft would be required.

- 2. Are there any physical constraints that limit how you are operating? The depth of the channel in the area closest to our bulkhead would need to be dredged to make the use of the channel more accessible.
- 3. What are your future operation plans in regards to transportation in the channel? We are looking to use hopper barges between 165-225' length with 12-15' depths and a 17'.
- 4. How would you operate if the channel was shallower with no maintenance? We would default to using trucks.
 - a. Would traffic be affected? Yes
 - b. Is ground transportation an option? Yes
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? We wouldn't be able to operate without the use of a spud barge to reach the part of the channel with greater depths to accommodate the draft required for the barge.
- 6. How would you operate if the channel were deeper? We would take trucks off the road and use the waterway as a means to operate our business.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2 to 5 years)? In the longer term (greater than 5 years)? We would need to repair our existing bulkhead and install a spud barge in order to use the channel effectively. It is more likely we would make these investments in the long-term range rather than the short-term.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future). None



Maspeth Recycling

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
 N/A - The owner-operator is not presently using the navigation channel for commercial purposes.
- Are there any physical constraints that limit how you are operating?
 N/A The owner-operator is not presently using the navigation channel for commercial purposes.
- 3. What are your future operation plans in regards to transportation in the channel? The owner-operator intends to develop a berth and associated infrastructure to function as a bulk terminal for stevedoring construction materials / equipment. In addition, the owner is interested in the site being considered as a potential dredged material processing facility for the proposed remediation activities.
- 4. How would you operate if the channel was shallower with no maintenance? Failure to maintain the channel to a depth of 12 feet (MLLW) would render the proposed terminal infeasible.

a. Would traffic be affected?

Yes. Controlling depths of less than 12 feet would require lightering of barges and/or tide-stage limitations on navigation. Either of these restricted operations would render the facility fiscally infeasible.

- b. Is ground transportation an option? The facility presently operates solely on ground transportation and is a source of up to XX trucks per hour to the locally congested roadways. The owneroperator is pursuing the bulk terminal in an effort to increase the efficiency of the operation and to reduce local traffic congestion, air quality impairments and impacts to transportation infrastructure.
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? Abandonment of channel maintenance would introduce uncertainty related to the future viability of the proposed terminal and would decrease the attractiveness of investing in the facility's efficiency and associated environmental benefits.
- 6. How would you operate if the channel were deeper? The proposed terminal's efficiency and cost-effectiveness will benefit from a deeper channel and the resulting ability to utilize larger pay load barges. The facility plans to utilize vessels with a draft of 15 feet depth.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2 to 5 years)? In the longer term (greater than 5 years)? The proposed terminal is in the planning and design phase. The terminal will be designed for the deepest channel that can be reasonably anticipated. The Owner intends to construct the new terminal in the short-term.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future). Reduction in the commercial viability of the channel as a result of remediation activities would reduce or eliminate the feasibility of developing a bulk terminal and accruing the substantial efficiency and environmental benefits associated with it. Without the potential for a water-dependent use, the commercial potential of the property will be reduced and the Owner will suffer property value damages.

Empire Transit Mix

 How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size. At this time we are not using the cannel. The vessels in the future would be

aggregate barges approximately 1200 cubic yards. Draft we would require 12 to 15 ft.

2. Are there any physical constraints that limit how you are operating? We have fleet of trucks and we only have so many over-weight permits. Which they stopped giving out years ago. Barges would be lets truck to handle inbounded deliveries.

- 3. What are your future operation plans in regards to transportation in the channel? Delivery of aggregates by barges.
- 4. How would you operate if the channel was shallower with no maintenance?
 - c. Would traffic be affected?
 - d. Is ground transportation an option? it's getting harder each year with ground transportation. Truck routes are now reduce to one lane. Due to bike and buses lanes. These new lanes have cause more traffic. When trucks make delivers to commerce on the truck route now you have 3/4 of that one lane blocked. The future is not looking better for transportation.
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? That would be big concern for the future use of the canal.
- 6. How would you operate if the channel were deeper? This would allow us more flexibility for barging.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2 to 5 years)? In the longer term (greater than 5 years)? We would have to investigate if any of these

Modifications would affect any future plans for our operation. We would look at the investment, will this help our company in the future to make sure we're profitable.

8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? (Note: Information about the potential remedial action was not provided to any user by the USACE and if asked would state information would be provided by USEPA in the future). Always have concerns when one or more agency are involved with a project. WHO's best interest are they looking at? What changes are being made that will affect all commerce and only consider a select few.

Empire Metal Trading

- How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.
 For shipping, use barges. Does not own barges, whoever they're selling to own the barges. Shipping scrap metal. Gross total weight probably 3.5-4 million each. Barge is about 85ft by 130ft. Hopper Scow. Everything is put below the deck. Usually put 8-10 ft. into the water.
- 2. Are there any physical constraints that limit how you are operating? No physical constraints. The bridges do not have any impact and their barges can clear all bridges.
- 3. What are your future operation plans in regards to transportation in the channel? Continuing, function of throughput. Has year-round operations.
- 4. How would you operate if the channel was shallower with no maintenance? It would be a bother.

Would traffic be affected? Is ground transportation an option? No ground transportation would ever be considered, especially environmentally and a pollution nightmare.

- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? Same as today, operations are not affected.
- 6. How would you operate if the channel were deeper? Same as today, wouldn't make a difference.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)? They're replacing entire bulkhead due to age. Shouldn't been finished Dec 2019, should be done by end of Spring.
- 8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. If the depth gets deeper, there shouldn't be any operational changes. However, he's concerned about the likelihood of a successful cleanup in a timely fashion. He indicated that the primary pollutant in the creek is coal tar.

Follow-up with Wayne King – 27 March 2020

- 1. If Sims Metal is providing the scows and they are using 17ft draft vessels, why are you using scows that draft 8-10 ft? Sims Metal provides the scows to transport scrap metal to Claremont Channel and Port Newark. Sims has 19 different scows/year that they are using in their rotation. Empire using old garbage scows from Staten Island with a design draft of 8-10 ft. The drafts could be deeper if they chose to load heavier material.
- 2. Wayne has worked at this location for over 30 years and has not seen a larger vessel at the facility. He also stated that TNT cannot load to capacity scows owned by Thorton. Indicated there is not sufficient draft at facility (predicted either in channel or at berth).
- 3. Scows placed at facility are uniform, they know what they will be getting in each docking.
- 4. The customer (Sims) is making the choice and selection of using the smaller barges. They are sending bigger barges to other places.
- 5. Wayne indicated if they had deeper depths and other customer could use deeper draft vessels. They could put 1 month of material in 1 barge-economics would be fantastic. They do not bring in larger vessels due to lack of channel depth.
- 6. Empire doesn't sell directly since they do not want to deal with letter of documents, warfing, stevedoring, work force, claims, etc.
- 7. Receive scrap metal via truck and exit via barge.
- 8. Sims owns most of barges with >80 barges; #1 competitor only owns 6 barges.

- 9. Size of loading equipment is 62ft on center; 5-6 ft from fender system (35ft wide).
- 10. NAN post call: need to call Sims to understand why sending smaller scows to Empire.

Follow-up (March 18, 2021): Wayne King

- There are several reaches in Newtown Creek that were constructed at a shallower depth than authorized. In particular, the mainstem Reaches E and G (Turning Basin) is authorized at 23-ft but was only constructed at 20-ft and Reach J - English Kills was authorized at 20-ft but only constructed to 16-ft.
- The USACE would only maintain English Kills in the future to a maximum of its constructed depth (16-ft). The only way English Kills could be maintained at the authorized depth is if the USACE conducted a study, received additional Congressional direction and had a cost shared sponsor.
- You previously indicated that Empire Metal Trading would like to bring in 18-ft vessels in the future if the channel was maintained to its authorized depth.
- Knowing that the English Kills would not be maintained to a depth greater than constructed (16-ft), would this be reasonable for your future use and would you operate differently in the future? This is very disappointing. If Empire Metal Trading is limited in the future to a maintained 16-ft channel, this would limit use to 14-ft vessels. This would impact us in the future resulting in the need to use outbound trucks increasing traffic. A vessel draft of 18-ft is still desired for future operation; however, Wayne understood that the channel could only be maintained to the maximum 16-ft constructed channel.

TNT Scrap

- 1. How are you currently using the Newtown Creek navigation: Hopper barges and fill with scrap metal and transport to Port Newark (1-2 week). 195x35x12FT long limitations to make the turn
- 2. Are there any physical constraints that limit how you are operating? No physical constraints.
- 3. What are your future operation plans in regards to transportation in the channel? Have no plans in modifying their operations along the channel.
- 4. How would you operate if the channel was shallower with no maintenance? If the creek was shallower they wouldn't be able to ship out their materials. Basically at a limit with a slight margin of safety.

Would traffic be affected? Is ground transportation an option? Not using ground because of the amount of trucks that would be needed. 400+ trucks would be needed per week. Cost wise its way too much.

- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? There's an aeration pipe in the creek. That helps the creek now for water quality. Conditions would stay the same, operations would stay the same.
- How would you operate if the channel were deeper?
 [Will not affect their operations.] TIM- would bring in larger vessels up to 18ft.

- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the short-term (2-5 years)? In the longer term (5+ years)? If deeper, the project would have to take away part of his property because it's going to come back up on the property side. Moving the aeration pipe is going to be a "bitch". Modifications would lead to long term investments due to "today's market".
- What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. N/A.

Follow-up (March 23, 2021): Tim Fulton

- There are several reaches in Newtown Creek that were constructed at a shallower depth than authorized. In particular, the mainstem Reaches E and G (Turning Basin) is authorized at 23-ft but was only constructed at 20-ft and Reach J - English Kills was authorized at 20-ft but only constructed to 16-ft.
- The USACE would only maintain English Kills in the future to a maximum of its constructed depth (16-ft).
- You previously indicated that TNT Scrap would like to bring in 18-ft vessels in the future if the channel was maintained to its authorized depth.
- Knowing that the English Kills would not be maintained to a depth greater than constructed (16-ft), would this be reasonable for your future use and would you operate differently in the future? Operations would not change in the future and would continue to use 12-ft draft vessels.

Bayside Fuel Oil Depot

1. How are you currently using the Newtown Creek navigation channel? Obtain current vessel types, drafts, size.

Shipping in heating oil and diesel. Owner had barges designed and built to be able to operate in the canal. Do not draft more than 11ft (drafts are a little smaller but used 11 as a cushion). 11ft draft for fully loaded drafts.

- Regular boat is 7k barrel barge: 10ft draft, 192ft long. 42ft beam. Couldn't build bigger because it would draft more.
- (James Joseph boat) is limited because it barely fits the dimensions of the creek. 214ft long, 11ft draft, 40ft beam, 10k barrel boat. Only used in emergencies because if something goes wrong it can cause damages.
- o Another 10k barrel boat with similar dimensions. 12ft draft.
- 2. Are there any physical constraints that limit how you are operating? Only ship in on high tide. Worried about the aeration pipe at the bottom as well. When coming in on high tide, have a minimum 12ft clearance. Draw bridges also don't always work. Have 1 barge that they use on a regular basis. Broken bridges affect the size of the boat they can build since the bridges cannot go up. Need to have the Metropolitan Ave bridge open (constant problem: heat restrictions, if it's

above 64 degrees they have to cool it down). Can only get under Greenpoint and Kosciuszko Bridges. Metropolitan Bridge needs to open or they cannot get through. Dealing with high wind and tides (big barges move around and shift). During the winter ice limits operations. Other people are taking use of the canal for recreational use (park pleasure boats). Worried about maneuvering through ice and having to deal with ice cracking the smaller boats. In winter Bayside needs to hire a service to break the canal's ice on his expense. People parking pleasure boats all around can affect maneuvering big barges through the canal. Not thrilled about the dredging.

- 3. What are your future operation plans in regards to transportation in the channel? No plans on changing their operations in the channel.
- 4. How would you operate if the channel was shallower with no maintenance? They would be out of business. Boats are built specifically to maximize what they're working with, anything smaller and all the boats are useless. Would traffic be affected? Is ground transportation an option? Not an option unless they're going to install pipeline for them.
- 5. How would you operate if conditions stayed the same as they are now with current bathymetry and no maintenance? The aeration pipe helps move things around. DEP pipeline. Bulkheads fall off the ships and can puncture boats if they hit them.
- 6. How would you operate if the channel were deeper? They would be able to use the two bigger boats because they draft a little bit more. Probably wouldn't be able to get bigger barges than that because of the width restrictions from the bridges. Instead of having 1 boat, they'll have three boats.
- 7. Are there facility/infrastructure changes, operational modifications or other investments you would need to make in order to operate in a deeper channel? If so, how likely is it that you will be able to make these investments in the shortterm (2-5 years)? In the longer term (5+ years)?

No investments due to the environment they're in. Outsiders want gas and oil out, so fuel is not really wanted during this day and age. Trying to survive as long as they can.

8. What concerns do you have regarding future modifications to the authorized channel resulting from a potential remedial action? Information about the potential remedial action would be provided by USEPA. Finds it interesting that they're dredging to the same depth. Little iffy on how its staying at 12ft. Means all of the bulkheads along the canal will not need to be reinstalled. If they go lower he's out of business. If they go deeper he's thrilled. Doesn't have clearance for anything less than 12ft. His business is seasonal. (Dec-March). Any disruptions are lost opportunity to recover. Any restrictions from construction that limits his transportation through the canal, he has 0 tolerance. More flexibility from April-October. Anything happening in those months, he's getting people to stop any types of closures along the creek. Only has 4 months to make a living. Cannot make money back if he's restricted from December – March. Concerned if the creek is closed 8am-4pm, would transportation operation because high tide would only fall around that time. If he's

limited, will not be able to keep up with demand, terminal will run dry, cannot make back lost opportunities.

Follow-up (March 18, 2021): Vinny Alagreti

- There are several reaches in Newtown Creek that were constructed at a shallower depth than authorized. In particular, the English Kills was authorized at 20-ft but only constructed to 16-ft. In addition, Reach K was authorized at 12-ft, but was never constructed.
- The USACE would only maintain English Kills in the future to a maximum of its constructed depth (16-ft) and would unlikely maintain the channel beyond Metropolitan Bridge given that reach was never constructed.
- Bayside acknowledged that a 12-ft channel beyond TNT was adequate and their facility will continue to require 12-ft channel for their operations, no matter who would maintain it (USACE or Bayside).