

PO Box 159 · Sea Cliff · NY 11579 | 516.801.6792 | cshh.org@gmail.com

October 17, 2021

Chairman Andrew Kaufman and Members of the Glen Cove Planning Board 9 Glen Street Glen Cove, NY 11542

Re: RXR's Amended PUD Plan for Blocks D, E, F

Dear Chairman Kaufman and Members of the Planning Board:

The Coalition to Save Hempstead Harbor (CSHH) is a nonprofit environmental organization founded in 1986. CSHH has long been involved in calling for the cleanup of toxic waste sites along Glen Cove Creek, including the Mattiace Petrochemical and Li Tungsten sites. CSHH Board Member and Glen Cove resident, Corin Dunne, was Co-chair of the Task Force, a citizen's group officially formed to monitor and advise on the Glen Cove Creek cleanup which also eventually included Captain's Cove; the group met monthly starting in 1993 until the Final Record of Decision was published in 2005. The point is CSHH has been a leading and motivating force for cleaning up hazardous waste sites and other conditions along Glen Cove Creek and for continuous monitoring of the water quality in Hempstead Harbor through a program CSHH initiated in 1992.

We are alarmed at the size of RXR's potential buildout by moving the workforce housing offsite as proposed in the PUD Amendment, and we are loathe to see Hempstead Harbor and surrounding resources exploited again after all the gains that have been made over the last 35 years. For the record, CSHH is not antidevelopment. However, we do advocate for responsible development—development that does not exceed the environmental limits of the region.

We fear that the requested amendment to the PUD would set a precedent for a further increase of the buildout of the Garvies Point development project and push the area to a tipping point where water-quality improvements could be reversed and other environmental stressors could be exacerbated. We therefore request that the Planning Board consider a moratorium on further development around Glen Cove Creek.

Please see our attached comments addressing specific aspects of the Garvies Point PUD Amendment.

Sincerely,

Kay Brombeg

Kay Bromberg and Carol DiPaolo

Vice President Programs Director

Carol Di Parlo

CSHH COMMENTS RE: RXR'S AMENDED PUD PLAN FOR BLOCKS D, E, F

PROJECT BUILDOUT

According to RXR's Amended PUD plan and other development proposals, the number of units proposed or in progress along Glen Cove Creek include:

TOTAL	2,030 units
North Reality & 40 GPR—2 10-story towers	<u>400</u>
1 GPR	105
Konica property	336
RXR Garvies Point Amended PUD plan	1,189

The total number of residential units—1,110—approved for the Garvies Point PUD is what the public perceives to be the cap on density for this area. The amendments sought by RXR, the potential buildout of two properties RXR is considering, plus North Realty's proposal nearly doubles that formerly agreed-on cap in residential units. Instead of adding another 2,000-3,000 people along the north side of Glen Cove Creek, the amended plan could change the population density for that area to 4,000-5,000 people. Not all of the buildings included in the PUD Master Plan have been built, and not all of the completed buildings are fully occupied. Therefore, it is impossible to fully understand the impact of the density originally proposed for the PUD, let alone further development and buildout of adjacent or nearby properties.

It is time to put further development on pause before it is too late to undo the damage. The cumulative impact of such a massive buildout needs to be considered as a whole, not in piecemeal parcels. Climate change, more severe and more frequent 100-year storms, stormwater runoff, depletion of the aquifer, traffic gridlock—these are just a few of the factors that need to be seriously considered before more development is approved.

WATER-SUPPLY DEMAND AND SEWAGE CAPACITY

According to the Technical Memorandum (12/24/20) submitted by VHB Engineering on behalf of RXR Glen Isle Holdings, although the amended PUD plan for Blocks D, E, and F shows an increase in the water supply usage and an increase in sewage disposal needs, the cumulative "running tally" of water demand and the cumulative sewage flow for the entire existing and pending Garvies Point Project components "remain well below the caps specified in the Findings Statement" (p. 12). However, these gallons-perday estimates are based on pre-construction calculations per housing unit.

We request information detailing actual water usage and sewage flow based on the currently occupied units. This comparison will provide insight as to whether the estimates match up to the actuals and whether adjustments should be made. This assessment needs to be made before approval of the PUD Amendment and not after the fact during the site plan review.

Further, we request information on the status of wells in Glen Cove, the reliance on buying water from the Locust Valley Water District to meet water supply needs, and the cumulative water demands of other current and future development projects in Glen Cove. The Glen Cove Water District may be able to technically pump a certain number of gallons per day, but how does the district monitor for overpumping from the aquifer, which could result in salt water intrusion and permanent damage to the aquifer?

STORMWATER MANAGEMENT

The effects of climate change resulting in more extreme weather events have become obvious on Long Island and pose a more serious challenge than the conditions that were the context for the initial Environmental Impact Statement for the Garvies Point Development project in 2011. On behalf of the GC Planning Board, Nelson & Pope listed the federal and state policies by which RXR must comply for stormwater retention and discharge into wetlands. RXR consultant, PP&S, agreed with Nelson & Pope's statement that stormwater management designs may have to be more "restrictive than that used in the current PUD, resulting in the possible reduction in the unit yields presented...and may require the retainage of stormwater in excess of 2 inches." (PS&S letter to the Planning Board updated June 15, 2021, p. 3, https://glencoveny.gov/wp-content/uploads/2021/08/PSS-2021_05_11_NP_response-updated-6-15-20-with-attachments-FINAL.pdf.)

There were several failures of the original stormwater management plan during construction of Phase I. With the increasing frequency and severity of such events, a two-inch retention capacity is inadequate. This past season alone, three storm events resulted in over 5 inches of rain, with two other events resulting in 2 or more inches of rain:

In light of the above, a 2-inch retention capacity is clearly not adequate; this should be increased to at least a 5-inch stormwater retention requirement, which is still shy of the Nassau County requirement 8 inches.

INCREASED BACTERIA LEVELS IN GLEN COVE CREEK

Following completion of the new bulkhead on the north side of Glen Cove Creek, constant flows from new outfalls were observed along with unusual discharges, which were reported to officials in Glen Cove. These observations were made during weekly monitoring surveys that CSHH has conducted as part of the water-quality monitoring program that CSHH first established in 1992 and has carried out without interruption since that time. As part of that program, water samples are collected for bacteria and nitrogen analysis. Observations are recorded for water clarity, color, and turbidity as well.

Although construction activities could certainly cause changes in the appearance of the water in Glen Cove Creek and even in bacteria levels through sediment resuspension, a disturbing trend in bacteria levels has been noted:

- In looking back at this season's data and comparing it with data from 2020 and 2019, bacteria levels are increasing in Glen Cove Creek.
- Additionally, for new outfalls on the north side of the creek that have continuous flow (station CSHH #12A), there have been instances of high bacteria levels.
- Bacteria levels at the head of Glen Cove Creek (station CSHH #13) have also increased.
- Most disturbing is the comparison of bacteria levels this season at stations in Glen Cove Creek (CSHH #8-13) with those of CSHH #14A (the Powerhouse Drain outfall in Glenwood Landing); data results show a greater percentage of exceedances in Glen Cove Creek (stations CSHH #9, 10, 11, and 13) than at the Powerhouse Drain outfall. This is significant, because the Powerhouse Drain has been considered the largest contributor of bacteria to Hempstead Harbor (Scudder's Pond had been the largest contributor to bacteria prior to the massive restoration work at the pond). See Hempstead Harbor Water Quality Improvement Plan, Hempstead Harbor Protection Committee, 1998. These data results are premature to the extent that the monitoring program has not yet ended for this season (the summer season weekly testing ends on October 27, 2021) and data must still go through a QA/QC process. (See attached spreadsheets for bacteria results at stations in Glen Cove Creek and the Powerhouse Drain.)

Note that the NYS Department of Health thresholds for beach closures are used in comparing bacteria, first to give a frame of reference and, second, because the outfall areas in Glen Cove Creek ultimately flow to Hempstead Harbor and nearby beaches (in particular, Morgan Park Beach and Sea Cliff Beach).

The monitoring data indicate that water quality is changing in Glen Cove Creek, and not for the better. We need to understand the current causes before conditions are exacerbated as the buildout of the Garvies Point development project continues and all buildings reach full occupancy.

NEW YORK STATE'S CLIMATE LEADERSHIP AND COMMUNITY PROTECTION ACT (CLCPA)

This legislation sets carbon reduction targets which cannot be met unless the state moves quickly to a green energy economy. This means phasing out fossil fuels, e.g., natural gas, as a source of energy and heating with the following schedule:

- 70% renewable energy by 2030
- 100% zero-emission electricity by 2040
- 85% reduction in greenhouse gas emissions by 2050

According to CLCPA, the following provisions must be considered by all state agencies:

"29 § 7. Climate change actions by state agencies.

1. All state agencies shall assess and implement strategies to reduce their greenhouse gas emissions.

2. In considering and issuing permits, licenses, and other administrative approvals and decisions, including but not limited to the execution of grants, loans, and contracts, all state agencies, offices, authorities, and divisions shall consider whether such decisions are inconsistent with or

will interfere with the attainment of the statewide greenhouse gas emissions limits established in article 75 of the environmental conservation law. Where such decisions are deemed to be inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits, each agency, office, authority, or division shall provide a detailed statement of justification as to why such limits/criteria may not be met, and identify alternatives or greenhouse gas mitigation measures to be required where such project is located."

The amended PUD's continued reliance on natural gas for heating locks in a fossil fuel commitment for decades and is short-sighted as NYS implements its climate policy. Contingency plans need to be put in place to meet new climate compliance regulations and/or face potential rejections of new gas hookups. Instead, according to the Revised Technical Memorandum submitted by VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) on behalf of RXR Glen Isle Holdings, page 29 states:

"In addition, at the time that initial outreach with utility providers was made for the PUD Master Plan on which the Findings Statement was based, the Applicant provided National Grid/LIPA with a conservative estimate for future build-out of the full MW 3 Zone to make local utilities aware of this overall zone buildout potential. No issues were raised by LIPA or National Grid [at] the time of this initial outreach (around 2008/2009). The Applicant will continue outreach to National Grid and PS&G in connection with the relocation of the workforce housing units to determine if any improvements are necessary to provide service to either the 1 GPR or Konica Properties."

RXR's outreach to National Grid was in 2008 or 2009. Everything has changed since then. VHB does not acknowledge needing to comply with CLCPA or the potential rejection of its natural gas plan in a SEQRA process.

WORKFORCE HOUSING

The PUD Amendment proposes that the 56 condominium units of workforce housing originally designated for Block F be moved to 1 Garvies Point Road and/or the Konica property. 55 rental units of workforce housing have already been approved for construction at Block G by Georgica Green. It is not clear where the additional 8 units of rental workforce housing will be placed.

There are several concerns, among them:

1. The proposed PUD Amendment acknowledges that a SEQRA process and new Environmental Impact Statement must be conducted for the extension of the buildout to 1 Garvies Point Rd. and the Konica property. (VHB Technical Memorandum REVISED, March 9, 2021, p. 4+5.) There is the possibility that the admirable commitment to build workforce housing may make a sham of the SEQRA process. RXR is banking on presumptions of SEQRA approval by the Glen Cove City Council and holding the workforce housing as hostage.

2. If, on the other hand, faults are found with the density of the cumulative buildout (e.g., traffic or stress on resources) or CLCPA noncompliance, and the application is denied, what happens to the workforce housing? What if there is no future buildout? Since the 1 GPR property still needs to be remediated, what if SEQRA approval is denied or greatly delayed?

TRAFFIC

According to the PUD Amendment Supplemental Analysis, March 2021, the following intersections were studied for traffic impact:

- Glen Cove Avenue/Brewster Street at Pratt Boulevard (NYS Route 107)
- Charles Street (Signalized)
- Brewster Street at Mill Hill Road/Herb Hill Road (Signalized)
- Glen Cove Avenue at Charles Street (Signalized)
- Charles Street at Herb Hill Road (Signalized)
- Garvies Point Road/Dickson Street at Herb Hill Road (Unsignalized Roundabout)
- The Place at Charles Street (Unsignalized)
- Hill Street/Coles Court at Mill Hill Road/The Place (Unsignalized)

These intersections do not reflect the traffic impact beyond Glen Cove and on neighboring communities, including Glen Head, Glenwood Landing, Sea Cliff, Roslyn Harbor, Roslyn Village, and Greenvale. A glaring omission is the intersection of Glen Cove Rd. and Northern Blvd. As reported in Newsday, 3/23/21 (https://www.newsday.com/long-island/transportation/long-island-traffic-intersections-1.50191269), the Glen Cove Rd and Northern Blvd./North Hempstead Tpke. intersection is ranked number 5 in a list of the worst traffic delays in the state. See below:

NEW YORK INTERSECTIONS WITH GREATEST DELAYS

These are the New York intersections with the worst traffic delays, according to INRIX's study. The firm analyzed more than 18,000 intersections in New York over one week in October 2020. These intersections had the greatest estimated daily hours of delay. The list also shows estimated average daily traffic volume.

- **1.** Atlantic Ave. & 4th Ave., Kings: 76,331 vehicles, 1,086 hours of delay
- 2. Long Beach Blvd. & E. Park Ave., Nassau: 95,596 vehicles, 1,046 hours
- **3.** Pennsylvania Ave. & Atlantic Ave., Kings: 67,066 vehicles, 979 hours
- **4.** Tillary St. & Flatbush Ave. Extension, Kings: 74,298 vehicles, 938 hours
- 5. N. Hempstead Tpke. & Glen Cove Rd., Nassau: 60,872 vehicles, 926 hours

The following additional intersections must also be included to get an analysis of the real traffic impact that will affect neighboring communities, as well as Glen Cove itself:

- Glen Cove Ave. at Glenwood Rd. (Glen Head)
- Glen Cove Ave. and Back Rd. at Glen Cove Rd. (Greenvale)
- Scudders Lane at Glenwood Rd. (Glenwood Landing)
- Bryant Ave. at Glenwood Rd. (Roslyn Harbor)
- Bryant Ave. at Northern Blvd. (Roslyn)

These intersections already suffer from extraordinary traffic backups and delays during peak morning and evening hours. It must also be noted that although the RXR's traffic impact study includes the buildout of the Konica property, it does not include the buildout of 1 Garvies Point Rd. of 105 units or North Realty's proposal of 400 units at 40 Garvies Point Rd.



Bacteria Data for Glen Cove Creek 2019-2021

Compared with

Bacteria Data for the Powerhouse Drain Outfall, 2019-2021

Station Locations

CSHH #8, outfall at STP

CSHH #8A, area within boom for STP bypass flow

CSHH #9, outfall just west of STP outfall

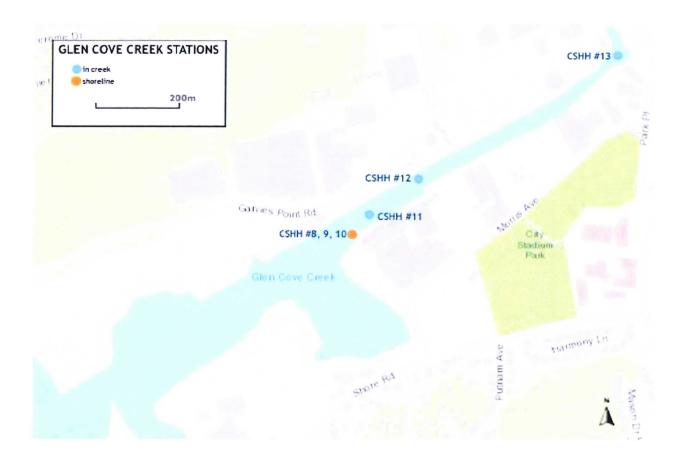
CSHH #10, large outfall at end of bulkhead below Cove Restaurant

CSHH #11, 50 ft east of CSHH #8 (STP outfall)

CSHH #12, middle of creek, 100 ft east of #8

CSHH #12A, outfall with continuous flow, north bulkhead near Anglers Club building

CSHH #13, head of creek, 60 ft from old Mill Pond weir



	CSH	H #8		СЅНН	#9	CSH	ł #10	CSHH #11		CSHH #12		CSHH #13		Tide	Rain 24hr/48hr	
2019	FC	ENT	FC	ENT	Vlixed/Direc	FC	ENT	FC	ENT	FC	ENT	FC	ENT		(48hr is	cumulative)
30-Oct	57	52	53	44	mixed	182	130	360	210	155	70	600	380	incoming	0.21	0.21
23-Oct	420	>600	>600	>600	mixed	N/A	N/A	>600	>600	>600	>600	>600	>600	outgoing	0.71	0.71
16-Oct	50	53	52	45	mixed	37	34	300	41	51	35	48	22	incoming	0.00	0.02
11-Oct	27	19	31	20	mixed	42	31	110	52	37	13	25	54	incoming	0.00	0.60
25-Sep	41	9	110	12	mixed	31	9	70	6	59	5	230	47	outgoing	0.00	0.00
18-Sep	4 1	9	37	39	direct	70	10	170	8	240	14	110	39	incoming	0.00	0.00
11-Sep	120	14	52	11	mixed	62	19	200	13	160	16	80	37	high tide	trace	trace
4-Sep	60	38	600	480	direct	15	190	49	23	110	10	90	49	low slack	0.00	0.21
28-Aug	52	19	73	13	mixed	20	8	118	16	118	20	155	90	high slack	0.00	0.00
22-Aug	154	100	>6000	>6000	direct	5200	1200	3800	1600	4600	480	2700	560	outgoing	0.24	0.24
14-Aug	460	2	280	20	mixed	430	22	1700	12	920	10	N/A	N/A	incoming	0.13	0.13
7-Aug	140	13	210	600	direct	500	280	600	>600	510	19	430	80	outgoing	0.00	0.00
31-Jul	280	17	310	36	mixed	460	54	N/A	N/A	N/A	N/A	N/A	N/A	high tide	0.00	0.00
24-Jul	600	180	580	600	direct	590	590	570	600	580	570	560	440	outoing/low	0.66	3.41
17-Jul	120	1	52	8	mixed	200	31	600	25	580	90	110	47	incoming	0.00	0.00
10-Jul	110	24	49	58	unknown	46	80	590	530	100	16	29	9	outgoing	0.00	0.07
3-Jul	100	9	110	11	mixed	140	4	150	12	140	22	120	39	incoming	0.00	0.00
26-Jun	160	39	480	390	direct	600	410	570	380	280	80	510	59	outgoing	0.33	0.33
19-Jun	15 5	81	1400	>600	direct	1900	1140	2100	380	420	222	590	170	incoming	0.51	0.53
12-Jun	46	31	590	600	mixed	550	580	390	130	59	18	380	60	outgoing	0.00	1.00
5-Jun	10 0	51	580	600	direct	190	130	290	70	210	90	420	580	incoming	trace	trace
29-May	54	8	570	230	mixed	120	7	170	15	35	12	250	100	outgoing	0.08	0.08
22-May	10 0	4	380	270	direct	490	10	580	18	460	11	330	22	incoming	0.00	0.07
15-May	52	2	170	58	unknown	210	180	190	<1	150	<1	N/A	N/A	outgoing	0.39	1.04
exceed-	0%	8%	13%	46%		9%	43%	17%	39%	13%	17%	10%	29%			

	Сѕнн #	14A o	utfall for compariso	Notes
	FC	ENT	Mixed/Direct	
30-Oct	4200	1500	direct	
23-Oct	220	190	mixed	1/100 dilution for #9, 10, 11, 12, 13
16-Oct	420	170	direct	about 30m from usual station #13
11-Oct	290	140	mixed	water from 14 just coming over slab
25-Sep	90	28	mixed	
18-Sep	520	80	direct	about 60ft west of usual station #13
11-Sep	190	46	direct	
4-Sep	800	1300	direct	#10 fully submerged, visible, white flow
28-Aug	1200	220	direct	brown color at head of Glen Cove Creek
22-Aug	4200	900	mixed	#9 less yellow, #10 visible below surface, white discharge
14-Aug	580	150	direct	
7-Aug	21	51	mixed	#10 visible but below surface , white flow, 60m from usual station #13, #9 directly from discharge
31-Jul	130	130	direct	high tide, #8, 9, 10 not visible
24-Jul	59 0	620	mixed	
17-Jul	420	370	direct	
10-Jul	46	80	mixed	
3-Jul	2	7	direct	
26-Jun	310	90	mixed	
19-Jun	580	370	direct	sample from #9 outfall yellow, #10 fully submerged but visible
12-Jun	53	90	mixed	sample from #9 is very yellow/murky
5-Jun	360	150	direct	#9 flow discolored, #10 under water but visible, #13 taken about 200ft west of usual statiion
29-May	70	19	mixed	white flow coming from #9, pipe underwater
22-May	590	490	direct	#9 heavier flow than usual
15-May	410	2	mixed	
ance	13%	58%		

	CSF	HH #8	CSH	IH #9	CSH	H #10	CSHI	CSHH #11		H #12	CSHH #13		CSHH	#12A	CSHH	#13A
2020	FC	ENT	FC	ENT	FC	ENT	FC	ENT	FC	ENT	FC	ENT	FC	ENT	FC	ENT
28-Oct	12	36	570	620	590	580	620	590	580	470	550	490	580	550	650	570
			Brown fl	ow discol	loring wat	er, tide is	high - pip	es not vis	sible			#	12A and #	‡13A alwa	ys a direc	t sample
22-Oct	25	17	270	100	31	33	200	60	70	37	N/A	N/A	550	140	N/A	N/A
		#9 direct s	sample, tr	icking flo	w					#13 :	access blo	cked				
14-Oct	70	18	180	41	120	28	450	39	580	46	590	190	N/A	N/A	600	580
		#9 p	ipe not vi	isible								#12A	pipe unde	rwater		
7-Oct	310	70	590	360	210	60	400	57	550	80	310	170	52	15	430	70
		#9 direct s	sample, tr	icking flo	w									#13A sa	ample dis	colored
1-Oct	530	18	630	48	930	100	860	120	11200	280	250	190	N/A	N/A		
		#9 p	ipe not vi	isible		duck	s? How hi	gh would	a direct s	ample of	duck fece	s be?	#12A pip	e underw	ater	
23-Sep	21	7	100	35	35	41	180	32	70	3	300	55	N/A	N/A		
	#9 v	isible w tı	rickle, not	direct sa	#10 whit	e flow	#8 browi	n color to	flow w hi	gh turbid	ity					
16-Sep	21	11	29	3	27	24	140	3	150	5	160	41	N/A	N/A		
		#9 p	ipe not vi	sible								#12A	pipe unde	rwater		
9-Sep	29	19	590	13	360	20	300	7	290	57	N/A	N/A	46	28		
	#	49 direct s	ample, tr	icking flov	w #1	0 white fl	ow .			#13 :	access blo	cked				
3-Sep	360	12	630	16	420	25	10200	43	4600	39	>6000	46	1500	160		
	#9	pipe abov	e water,	trickling f	low #1	0 not visi	ble									
26-Aug	25	9	33	43	47	70*	100	45	59	2	240	25	360	80*		
	#9	pipe abov	e water,	trickling f	low #1	0 not visi	ble									
19-Aug	580	580	590	590	570	600	600	550	550	520	590	560				
77704			#9 direct	sample, t	tricking flo	ow upon a	arrival , br o	own wate	r gushing	out shor	#13 adjac	ent docl	t full of bir	d poop		
12-Aug	140	42	600	600	580	580	560	570	550	470	570	580				
			#9 brown	n discharg	ge, pipe su	ıbmerged	below w	ater but v	isible							
7-Aug	145	41	200	34	290	49	1800	220	2500	240	2100	290				
29-Jul	did not s	ample at	#8-11 in e	arly seaso	on due to	concerns	of STP an	nd COVID	590	2	360	120				
22-Jul		an	d Covid-1	.9.					170	80	290	60				
15-Jul									590	<1	N/A	N/A	#13 ran d	out of tim	e	
8-Jul									590	58	N/A	N/A	#13 acce	ss blocke	d	
1-Jul									590	1	N/A	N/A	#13 acce	ss blocke	d	
25-Jun									600	150	520	80				
17-Jun									140	10	42	27				
10-Jun									290	140	200	600				
3-Jun									580	60	600	530				
%																
exceed-																
ance	0%	8%	0%	31%	0%	23%	15%	38%	14%	32%	12%	59%	17%	50%	0	67%

Bacteria in Glen Cove Creek 2020

Tide	Rain 24hr/48hr		1000-000	r comparison, not in GCC	
1117	(48hr is cumulative)		FC	ENT	1.16.66
high/outgoing	0.23"/0.27"	28-Oct	570	600	mixed (~4ft above slab)
	raining				
low/outgoing	0.03"/0.06"	22-Oct		1300	
				on 10/21/20	
high/outgoing	0.17"/1.74"	14-Oct	390	380	mixed (~1" above slab)
low - slack	0"/0.03"	7-Oct	470	130	direct
high/incoming	0"/1.18"	1-Oct	580	590	
			sampled o	n 9/30/20	
low/outgoing	0"/0"	23-Sep	26	3	mixed (~2ft above slab)
high/outgoing	0"/0"	16-Sep	290	59	direct
low tide	0"/0"	9-Sep	350	150	direct
low/incoming	0.06"/0.09"	3-Sep	620	330	direct
low/outgoing	0.02"/0.02"	26-Aug	170	70	mixed (~3ft above slab)
low/incoming	0.16"/0.89"	19-Aug	570	330	direct
mod. high/outgoing	0.01"/0.01"	12-Aug	210	60	mixed
incoming	0.22"/0.22"	7-Aug	1800	410	
			sampled o	n 8/5/20	
outgoing	Trace/Trace	29-Jul	49	38	mixed
incoming	0.05"/0.05"	22-Jul	58 0	610	direct
outgoing	0.04"/0.04"	15-Jul	260	190	mixed (~4-5" above slab)
low tide	0"/0.11"	8-Jul	430	320	direct
outgoing	0.16"/0.19"	1-Jul	N/A	N/A	
low tide	0"/0"	25-Jun	260	120	direct
high - slack	0"/0"	17-Jun	280	180	mixed (water just coming over slab)
outgoing	0"/0"	10-Jun	570	470	direct
outgoing	0.11"/0.11"	3-Jun	540	410	mixed
	•				

% exceedance 5% 76%

2021	CSHH #8 A rerouted S			1	C	SHH #9	CSH	H #10	CSHI	H #11	CSHF	l #12	CSH	H #13	IH #12	Tide		
2021	FC	ENT	FC	ENT	FC	ENT	Mixed/Direct	FC	ENT	FC	ENT	FC	ENT	FC	ENT	FC	ENT	
12.00	1240	70	240	21	outfall co	vered l	by new bulkhead	0.40	70	4200	100	2420	270	2400	1700	NIZA	NI/A	outacina.
13-Oct	1240	70	340	21	outrairce	vereu	Jy new buikneau	840	70	1280	100	2120	370	2400	1760	N/A	N/A	outgoing
6-Oct	870	26	540	25	590	22	0.5 m depth, pipe covered	970	26	1220	200	1870	860	2110	1540	N/A	N/A	high tide
29-Sep	220	11	N/A	N/A	430	120	mixed, from flow	350	22	970	770	1110	800	1420	880	58	25	outgoing
22-Sep	49	3	N/A	N/A	530	25	mixed, from flow	670	77	3600	420	2750	450	2600	1320	65	14	incoming
1 5-Sep	530	22	N/A	N/A	800	210	mixed, from flow	740	46	1410	520	1590	440	2370	2000	360	34	outgoing
8-Sep	270	4	N/A	N/A	1120	500	direct	>600	190	>600	520	>600	220	>600	950	58	20	incoming
3-Sep	620	130	N/A	N/A	>600	>600	mixed	>600	910	>600	>600	>600	1870	2600	2160	590	320	outgoing
25-Aug	400	36	N/A	N/A	1100	####	direct	1250	140	1220	370	1370	360	1840	1550	260	70	incoming
18-Aug	330	140	N/A	N/A	1040	400	mixed	480	260	2240	1350	1970	1400	2350	1930	39	35	outgoing
11-Aug	470	130	N/A	N/A	710	770	direct	1330	830	1570	790	1710	1010	1870	1200	290	210	incoming
4-Aug	650	27	N/A	N/A	710	190	mixed	750	110	N/A	N/A	990	1000	1210	1310	N/A	N/A	outgoing
28-Jul	580	110	N/A	N/A	990	####	direct	1100	840	N/A	N/A	1150	920	1010	990	810	820	low tide
21-Jul	370	59	N/A	N/A	640	210	mixed	710	320	1010	74 0	860	850	900	890	N/A	N/A	outgoing
14-Jul	240	59	N/A	N/A	630	####	direct	670	310	N/A	N/A	740	1520	N/A	N/A	54	61	incoming
7-Jul	58	36	N/A	N/A	600	90	mixed	580	90	650	80	680	380	280	340	N/A	N/A	high
3 0-Jun	24	8	N/A	N/A	590	700	direct	130	28	200	21	300	18	330	100	600	840	outgoing
23-Jun	330	58	N/A	N/A	480	100	mixed	600	270	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	outgoing
16-Jun	35	13	N/A	N/A	600	620	direct	590	590	580	46 0	460	45	240	140	220	160	low tide
9-Jun	100	44	N/A	N/A	530	200	mixed	580	390	600	580	590	360	570	230	N/A	N/A	incoming
2-Jun	34	9	N/A	N/A	570	520	direct	470	510	590	570	290	70	190	180	590	23	outgoing
26-May	22	10	N/A	N/A	70	13	mixed	100	15	390	140	280	28	340	44	N/A	N/A	incoming
19-May	28	33	N/A	N/A	17	30	direct (trickling)	28	21	27	3	37	8	N/A	N/A	9	38	outgoing
% exceed-a	5%	18%	0%	0%		71%	600" for EC which	23%	59%	56%	78%	52%	76%	63%	89%	0%	36%	

Highlighted in green b/c percent exceedance includes ">600" for FC, which occurs when bacteria results are high, but may or may not exceed the FC threshold of

	Rain 2	4hr/48h	outfall	for co	mparison	Notes
		cumula			ixed/Dire	· ·
13-Oct	0	0.02	60	41		new bulkhead over outfalls #8, #9; sample for #8 taken ~30ft from usual site; #8A inside boom, STP
						diverted flow
	Trace	0.16	620	130	direct	#9 covered by new blkhd., #10 not visible, samples at 0.5 m depth; #8A sample at diverted STP outflow
29-Sep	0.19	0.19	230	25	mixed	#9 submerged but visible, flow visible with light debris; #10 not visible, sample at 0.5 m depth
22-Sep		Trace	340	100		#9 75% submerged, no discolored flow; #10 not visible; bunker near STP outflow (for a few weeks now)
15-Sep	0	0.09	140	27	mixed	#9 mostly submerged, sample mixed, whitish brown; #10 not visible, sample at 0.5 m depth; green
8-Sep	0	0	N/A	N/A	NI/A	water in GCC (usually brown), lots of bunker near STP outfall
						#9 direct sample collected just before tide came up; #10 pipe not visible, sample at half-meter depth
3-Sep	0	6.57	740	290		#9 and 10 pipes submmerged, not visible; brown flow
25-Aug	0	0.82	840	360	direct	#9 direct sample, had higher volume to flow than usual, #10 had white flow
18-Aug	0	0	22	17	mixed	all GCC pipes submerged
11-Aug	0.12	0.12	670	640	direct	#9 direct sample
4-Aug	0	0	37	100	mixed	#9 mixed sample, water reddish at head of GCC (#13)
28-Jul	0.31	0.31	760	760	direct	#9 direct sample, discolored, new bulkhead up to STP outfall pipe
21 -Jul	0	0.03	190	150	direct	
14-Jul	0.01	0.04	460	250	direct	#9 direct sample; #10 white flow w/ tree debris flowing at surface
7-Jul	0.39	0.41	420	510	Direct	#9 and #10 sampled at 0.5 m depth
30-Jun	0	0	170	130	Mixed	#9 direct sample from flow
23-Jun	0.32	0.32	470	330	Direct	#8 sampled with long pole (since dock removed), #9 and 10 not visible
16-Jun	0	0.18	130	90	ixed/Dire	#9 clear water, first direct sample from #9 since filter in place, #10 pipe submerged, visible white flow
9-Jun	0.22	0.22	590	600	Direct	#9, #10 pipes submerged, not visible, samples taken at 5 m depth; 1st #9 sample post-filter-installation
2-Jun	0	0	58	58	(2ft abov	#9 discolored; #10 fully submerged, visible, white flow
26-May	0	0	100	160		lots of organic debris at head of GCC; #9 and #10 pipes not visible
19-May	0	0	13	25	(1ft abov	#10 submerged, white flow
% exceed-a	nce		0%	52%		

1000 CFU/100ml.