

Dorchester
Yacht Club



Dorchester Bay Basin Clean Up Columbia-Savin Hill Civic Association Discussion

January 8, 2023 • 7 pm

Dorchester Boys & Girls Club
1135 Dorchester Ave.

Dorchester Bay Basin

We're here to support community's right to clean beach and water quality.

Cleanup would also help boaters enter and exit the basin more easily.

It is a win-win for everyone.



Dorchester Bay Basin is clogged and polluted

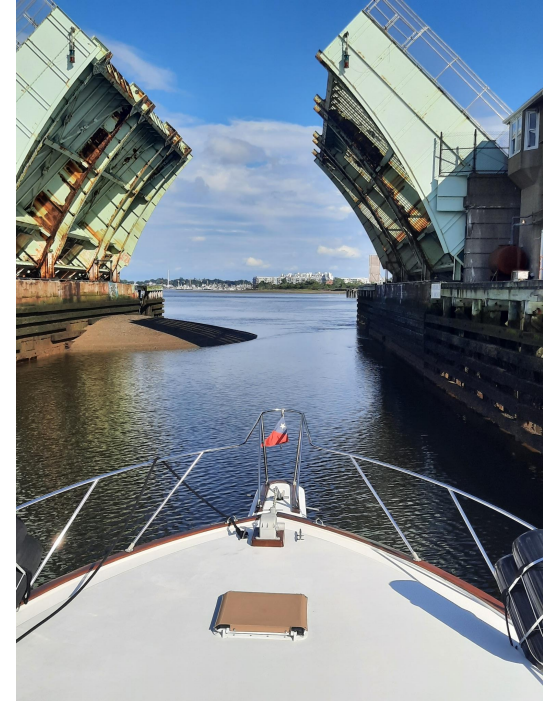
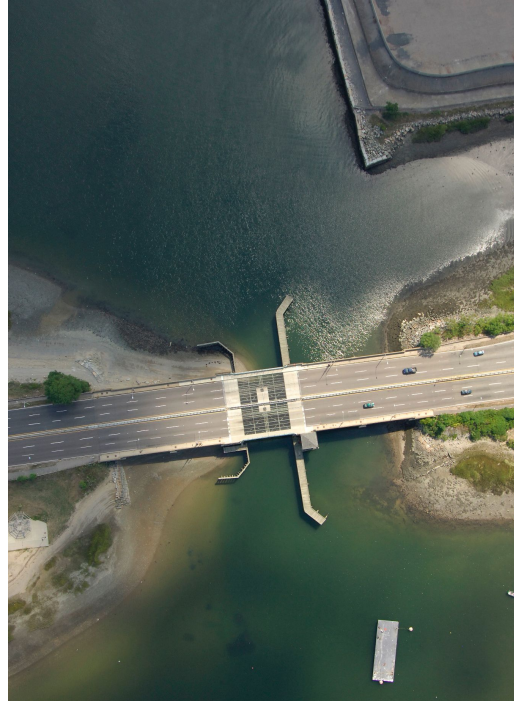
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Free-flowing tides naturally clean any body of water.

Recent sediment accumulation under the Beades Bridge has prevented the free flow of water. DOT has not removed the accumulation for more than a decade.

The blockage has compounded years of water pollution and sediment accumulation from roadways, Boston Gas, and the the Neponset River Superfund site.

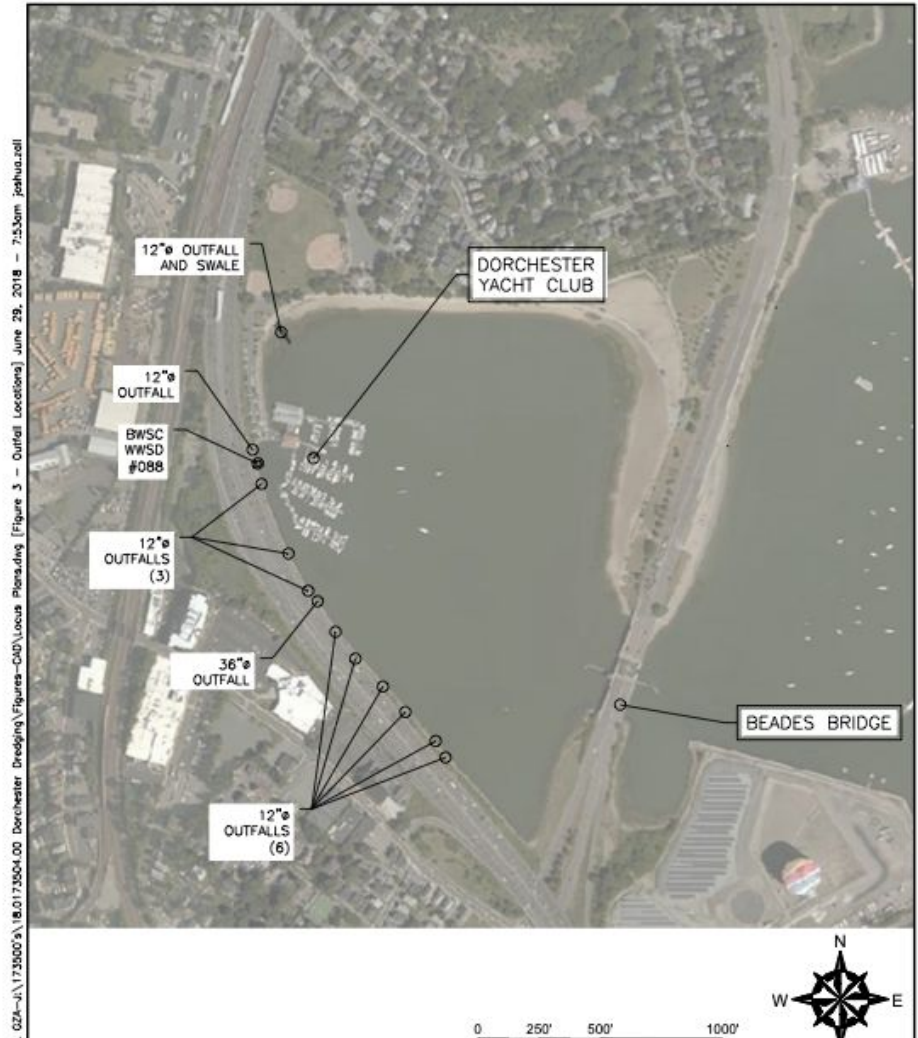


Outflows from I-93 drain into basin with no treatment

27 culverts drain highway polluted stormwater into the basin

Culverts do not feature standard cleaning technologies

Large Morrissey Blvd drainage, too



One example: July 4th Amazon oil spill

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On July 4, 2023, an Amazon truck crashed on I-93, spilling oil onto the road, which drained into the basin.

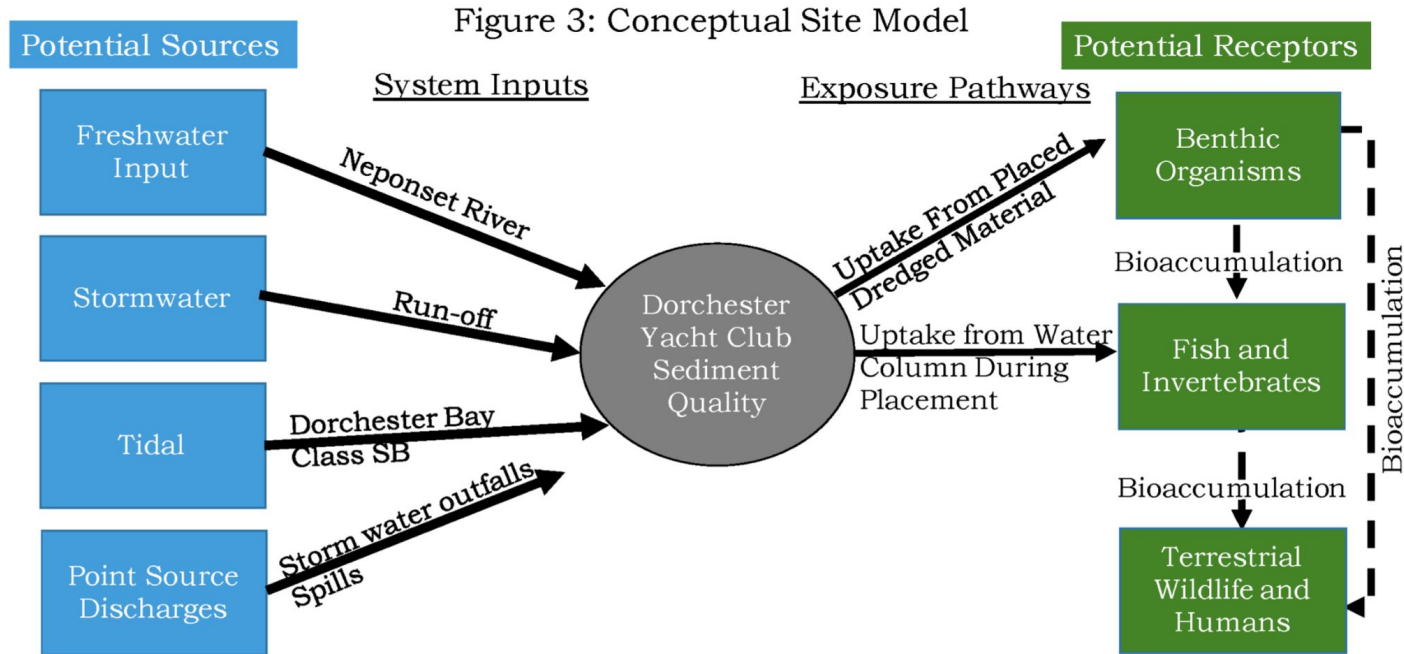
Amazon claims it is contained: nine drums and 2.5 tons of oily solids have been removed as of 11/8/2023.

This is the one event we noticed. DYC called MA DEP to force cleanup.

Waiting on additional testing results.



Neponset Superfund site, Boston Gas also among long-term contributors to pollution



Given pollution, basin sediment contains high levels of mercury and other toxins



Table 4. Summary of Bulk Sediment Chemistry Results

Dorchester Yacht Club: NAE-2008-00278			MBDS		Bio-Composite 1				Bio-Composite 2				BB - 101			
	Parameter	ERL	ERM	Value	Q	DYC Composite 1		DYC - 105	DYC - 106	DYC - 107	Result	Q	Result	Q	Result	Q
						Result	Q									
Metals mg/kg																
Arsenic	8.2	70	12.3		12.8		12.8		13.6		9.84		9		4.41	
Cadmium	1.2	9.6	0.14		1.85		1.14		1.54		0.96		0.69		0.13	
Chromium	81	370	64.3		144		127		141		57		54		19.4	
Copper	34	270	17.3		127		109		121		51.4		32.4		19.7	
Lead	46.7	218	39.6		176		145		155		103		57.3		70.8	
Mercury	0.150	0.710	0.157		0.858		0.799		0.902		0.535		0.211		0.023	
Nickel	20.9	51.6	24.6		26.4		26.3		25.2		16.4		19.7		15.6	
Zinc	150	410	70.3		212		191		207		126		84.3		80	
PAHs ug/kg																
Acenaphthene	16	500	6.37		12		6	J	16		22		35		78.5	
Anthracene	85.3	1,100	17.3		166		28		59		92		114		169	
Fluorene	19	540	8.31		17		10		22		39		49		69.2	
<i>Total LPAH</i>	552	3,160	171		387		160		351		491		721		1161	
Benzo(a)anthracene	261	1,600	90.3		195		119		234		307		502	J	401	
Chrysene	384	2,800	79.7		213		132		257		310		423	J	359	
Dibenz(a,h)anthracene	63.4	260	14.7		23		26		46		58		91	J	64	
Fluoranthene	600	5,100	150		430		251		472		607		877		891	
Pyrene	665	2,600	150		401		245		465		595		889		922	
<i>Total HPAH</i>	1,700	9,600	918		2184		1359		2535		3053		4631		4034	
Pesticides ug/kg																
4,4'-DDD	2	20	1.07		3.85		2.14		5.39		2.12		5.68		0.97	
4,4'-DDE	2.2	27	0.684		5.47		3.45	J	7.79	J	2.06	J	6.10	J	0.667	J
4,4'-DDT	1	7	0.317		3.81		2.36		5.42		1.89		1.63	J	1.34	J
<i>Total DDX</i>	1.58	46.1	2.07		13.1		7.95		18.6		6.07		13.4		2.97	
Dieldrin	0.02	8	0.047	U	6.63		4.59	J	10.5	J	2.48	J	3.25		1.23	J
<i>Total Chlordane</i>	0.5	6	0.357	U	5.23		4.70		20.7		1.47		1.08		1.04	
PCBs ug/kg																
<i>Total PCBs</i>	22.7	180	9.66		197		131		175		77.3		175		21.0	

Notes:

Yellow indicates an exceedance of the ERL

Our plan / what we want to accomplish

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- **Short-term: Remove sand from under the bridge so that water can flow freely**
 - Will help with highway drainage by making use of nature's own decontamination methods
- **Long-term: Plan to dredge remainder of the basin and keep it clean**
 - For cleanup, need either legislative action or to hold those who contaminated the bay accountable
 - For long-term cleanliness, need to meet existing standards for storm water drainage from I-93 using standard improvements and new technologies

Let's work together to clean up the basin

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- **Take photos of what you see** and send them to:
community@dorchesteryachtclub.com
- **Write about personal experiences** or actions unavailable, such as safe swimming,
and send to community@dorchesteryachtclub.com
- **Sign up for periodic email updates** by emailing:
community@dorchesteryachtclub.com
- **Show up at upcoming Morrissey Commission** to make public comments
- Help us seek funding from state rep and senator – will keep mailing list informed

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Questions?

contact us at
community@dorchesteryachtclub.com

Appendix



Example core samples



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GENERAL NOTES

1. BASE MAP FROM GOOGLE EARTH.
2. RELEASE LOCATIONS WITHIN 1 MILE RADIUS OF DYC SITE OBTAINED FROM USCG NRC ONLINE DATABASE. SEE ATTACHED TABLE FOR DESCRIPTION OF LOCATIONS.

Attachment C - USCG NRC Results

Number	Calendar Year	SEQNOS	Location	Description
1	1990	24776	70 Victory Road, Dorchester, MA	Truck fuel tank leak after hitting concrete barrier
2	1991	72707	497 Columbia Road, Dorchester, MA	Gas connection hose
3	1993	160989	2 Hartland Street, Dorchester, MA	Tank owner removed tank but left residual oil on property
4	1996	323689	55 Morrissey Boulevard, Dorchester, MA	Transformer/Leaking oil
5	2002	613926	Dorchester Avenue, Dorchester, MA	Report from an anonymous caller who stated that paint was dumped into a storm drain in front of the Barshee Bar
6	2002	624233	92 Dix Street, Dorchester, MA	Material spilled out of home heating oil storage tank
7	2004	710922	1676 Dorchester Avenue, Dorchester, MA	Water pipe broke causing a release of number two fuel oil onto the pavement from a storage tank in an auto body shop
8	2006	804883	2 Faulkner Circle, Dorchester, MA	Caller stated he saw the responsible person placing a car engine in a dumpster and covered it with trash. Caller stated the engine was releasing when it was on the ground.
9	2007	853946	Pleasant Street/Thornley Street, Dorchester, MA	Caller stated that last night he discovered a gas station that had a puddle of an unknown white material that might be running into a storm drain.
10	2010	962258	Dorchester Bay	Caller is reporting a vehicle ran off road into Savin Hill waterway.
11	2010	933890	100 Playstead Road, Dorchester, MA	Caller states that there is a storage overflow line that is flowing into the Boston Harbor without the raw sewage being treated. Caller also states this has been going on for years.
12	2010	987449	Savin Hill Yacht Club	Vessel Fire
13	2011	981459	1390 Dorchester Avenue	Caller reported there was a container that was picked up by a forklift and the container flipped over discharging an oily water mixture into a storm drain.
14	2012	1014749	Dorchester Avenue, Dorchester, MA	Approximately 1,000 gallons of gasoline spill from a delivery truck
15	2012	1014633	1246 Dorchester Avenue, Dorchester, MA	Fuel truck spilled 200 gallons of gasoline onto the road and into a storm drain
16	2014	1081764	Elm Street, Dorchester, MA	Construction equipment dropped load of materials down an embankment to the street
17	2015	1119622	100 Playstead Road, Dorchester, MA	Sheen from sinking vessel
18	2016	1158298	Savin Hill Yacht Club	Vessel sank at marina due to unknown causes.
19	2017	1198312	220 Victory Road, Dorchester, MA	Fire at the facility, unknown cause, no materials were released

DORCHESTER YACHT CLUB DREDGE PROJECT 100 PLAYSTEAD ROAD DORCHESTER, MASSACHUSETTS		PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com	PREPARED FOR: DORCHESTER YACHT CLUB
PROJECT NO. 18.0173504.00	DATE OCTOBER 2018	DRAWN BY: JAZ	CHECKED BY: DMS
ATTACHMENT C: US COAST GUARD NATIONAL RESPONSE CENTER RESULTS		FIGURE 1	SHEETS: 1 OF 1