

## CHAPTER 8

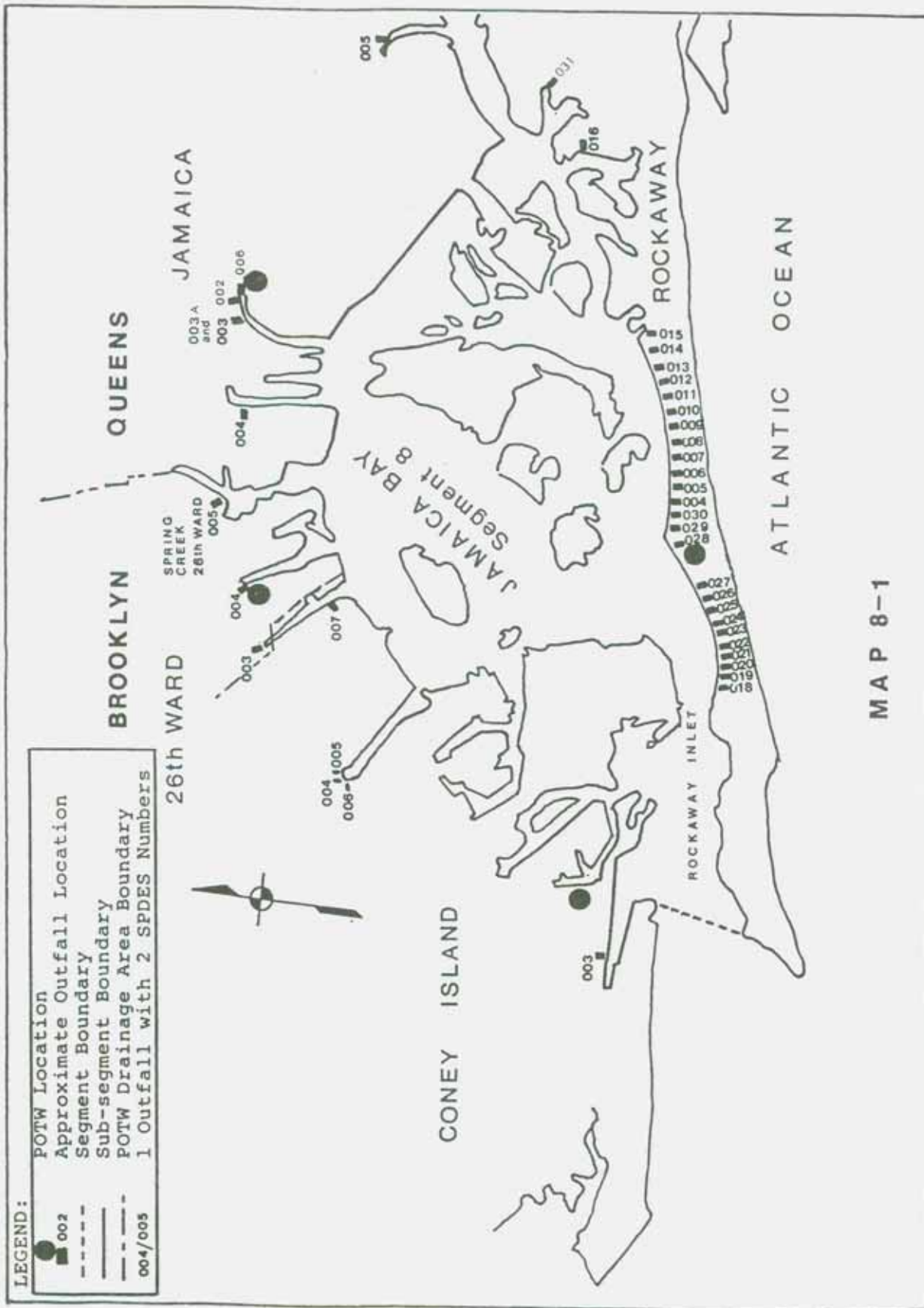
### JAMAICA BAY & ROCKAWAY INLET

This section of the District's waters is composed of the bays and inlets in Brooklyn and portions of Queens. It encompasses all or part of four drainage basins within the City of New York: Coney Island, 26th Ward, Rockaway, and Jamaica. It is classified by the Commission as "A", indicating a goal for this section of water a quality that will allow primary contact recreation. Recent data analysis by the Commission indicates that it only partially supports the uses for this designation.<sup>1</sup> There are approximately 40 outfalls into this area, which are shown on Map 8-1 and listed on Table 8-1.

This area is a significant natural resource of the metropolitan region. Jamaica Bay, a tidal marsh, is the location of a portion of the Gateway National Recreation Area, which is part of the National Park System. The Jamaica unit of this project is comprised of over 4,000 acres of land and marshland.<sup>2</sup> Jamaica Bay also contains approximately 1500 acres of potentially harvestable shellfish.<sup>3</sup> Existence of this shellfish resource, as well as its valuable recreational area, justifies increased attention to the water quality in this area.

#### Paerdegat Basin, Sheepshead Bay

Within the drainage basin for the Coney Island POTW (permit NY0026182), there are five outfalls that discharge into waterbodies that are contiguous with Jamaica Bay. Outfall 003 discharges into Sheepshead Bay while three outfalls (004, 005, and 006) discharge to Paerdegat Basin and the remaining outfall discharges to Fresh Creek Basin. All of these outfalls are fairly large and 004, 005, and 006 were inspected as part of the Task 2.5.2. Outfall 003 measures approximately 138" in diameter. Outfalls 004 and 005 are multiple outfalls next to each other on Flatlands Avenue. Outfall 004 is a double outfall, each pipe of which measures 12' x 9'; outfall 005 has five discharge pipes measuring 12' x 9' each. Nearby, outfall 006 at Ralph Avenue



MAP 8-1

TABLE 8-1

COMBINED SEWER OUTFALLS  
 JAMAICA BAY/ROCKAWAY INLET  
 WATERWAY SEGMENT 8

Treatment Plant Drainage Basin: Coney Island, NY0026182<sup>1</sup>

Outfall Number		Location of Outfall	Size	Comments/ Notes
SPDES	Local			
003	CSO	Ocean Avenue Sheepshead Bay	138" dia.	
004	R-1, R-5	Flatlands Avenue Paerdegat Basin	Dbl. 12' x 9'	2
005	R-2,3, 4	Flatlands Avenue " "	5 Bl. 12' x 9'	2
006	R-6	Ralph Avenue " "	Dbl. 20' x 9'	2
007	CSO	Avenue M Fresh Creek Basin Pump Station	72" dia.	

<sup>1</sup> SPDES number assignment, street address, and size are taken from the Coney Island permit, Part I, page 9 of 31.

<sup>2</sup> Inspected as part of Task 2.5.2.

TABLE 8-1 (continued)

Treatment Plant Drainage Basin: 26th Ward, NY0026212<sup>3</sup>

Outfall SPDES	Number Local	Location of Outfall		Size	Comments/ Notes
003	R-2, 2A	Williams Avenue	Fresh Creek Basin	4 Bl. 15'3"x9'	2
004	R-1	Hendrix Street	" **	4 Bl. 11' x 7'6"	2
005	R-3	Spring Creek Auxiliary Water Pollution Control Plant	Spring Creek	72 Bl. 7'6"x2'5" <sup>4</sup>	**

<sup>3</sup> SPDES number assignment, street address, and size are taken from the 26th Ward permit, Part I, page 9 of 31.

<sup>4</sup> Information from "Supplemental Memo." Outfall Table 5. June 1985.

\* Other City documents ("NYC Outfall Table", revised 10/6/88 and the "Supplemental Memo", Table 5) indicate that this outfall discharges to Hendrix Street Canal.

\*\* R-2 in the Jamaica Bay drainage basin discharges to the Spring Creek Auxiliary WPCP during wet weather.



TABLE 8-1 (Continued)

Treatment Plant Drainage Basin: Jamaica, NY0026115<sup>5</sup>

Outfall SPDES	Number Local	Location of Outfall		Size	Comments/ Notes
002	R-4 R-5	130th Place	Bergen Basin	*	
003	R-3	123rd Street	" "	Dbl. 8' x 9'	2
003A	R-14	123rd Street	" "	Dbl. 13'6" x 9'	
004	R-11, R-11A	Cross Bay Blvd.	Shell Bank Basin	42" dia.	2
005	R-6,7 8,9	225th Street	Thurston Basin	4 Bl. 16' x 8'	2
006	R-1	JFK Airport	Bergen Basin	3 Bl. 19' x 9'	2

<sup>5</sup> SPDES number assignment, street address, and size are taken from the Jamaica permit, Part I, page 9 of 32.

\* Size information is not available from existing City documents or inquiries to City officials.

TABLE 8-1 (continued)

Treatment Plant Drainage Basin: Rockaway, NY0026221<sup>6</sup>

Outfall Number SPDES	Local	Location of Outfall		Size	Comments/ Notes
004	D-11	Seaside Avenue	Jamaica Bay	12" dia.	2
005	D-10	Beach 102nd Street	" "	12" dia.	2
006	D-9	Beach 101st Street	" "	8" dia.	2
007	D-8	Beach 100th Street	" "	10" dia.	2
008	D-7	Beach 99th Street	" "	12" dia.	2
009	D-6	Beach 98th Street	" "	12" dia.	2
010	D-5	Beach 97th Street	" "	12" dia.	2
011	D-4	Beach 96th Street	" "	12" dia.	2
012	D-3	Beach 94th Street	" "	10" dia.	2
013	CSO	Beach 93rd Street	" "	*	
014	D-2	Beach 91st Street	" "	12" dia.	2
015	TG-1	Beach 88th Street	" "	60" dia.	
016	CSO	Bayswater Avenue	Norton Basin	60" dia.	
018	D-25	Beach 140th Street	Jamaica Bay	20" dia.	
019	D-24	Beach 139th Street	" "	48" dia.	2
020	D-23	Beach 136th Street	" "	60" dia.	2
021	D-22	Beach 135th Street	" "	20" dia.	2
022	D-21	Beach 132nd Street	" "	54" dia.	2
023	D-20	Beach 128th Street	" "	18" dia.	2

<sup>6</sup> SPDES number assignment, street address, and size are taken from the Rockaway permit, Part I, page 9 of 31.

\* Size not available from existing City documents or inquiries to City staff.

TABLE 8-1 (continued)

Treatment Plant Drainage Basin: Rockaway, NY0026221 (continued)

Outfall SPDES	Number Local	Location of Outfall		Size	Comments/ Notes
024	CSO	Beach 124th Street	Jamaica Bay	*	
025	D-18	Beach 122nd Street	" "	18" dia.	2
026	D-17	Beach 117th Street	" "	18" dia.	
027	CSO	Beach 116th Street	" "	*	
028	D-14	Beach 108th Street	" "	4' x 6'	2
029	R-1, R-2	Beach 106th Street	" "	72" dia.	2
030	D-12	Beach 104th Street	" "	12" dia.	2
031	P/S	Redfern Avenue (Nameoke P/S)	Mott Basin	*	

\* Size information was not available from existing City documents or inquiries to City officials.

and Paerdegat Basin is a double discharge point measuring 20' x 9'.<sup>4</sup> The outfall for the Avenue M pump station (007) discharges into Fresh Creek Basin through a 72" diameter discharge pipe.

As part of the City of New York's CSO abatement program that targets Paerdegat Basin, the discharge from the three Paerdegat Basin outfalls will be diverted and stored in a 30 million gallon facility. The planning for this facility is 90% complete looking toward beginning construction in 1991. The project will cost an estimated \$150,000,000.<sup>5</sup>

#### Spring Creek, Hendrix Creek, Fresh Creek

The adjacent drainage basin, 26th Ward (permit NY0026212), also contains large outfalls into tributaries of Jamaica Bay. Two of these were inspected for the Task 2.5.2. Fresh Creek receives the discharge from outfall 003. This outfall enters the Creek at Williams Avenue and has four 15'3" x 9' pipes. Outfall 004 discharges into Hendrix Creek from Hendrix Street. It is also a four-barreled outfall with pipes measuring 11' x 7'6". The outfall discharging into Spring Creek is 005, which is the outfall for regulator R-3. Wastes from this overflow receive some basic treatment at the Spring Creek Auxiliary Water Pollution Control Plant. This plant provides sedimentation and chlorination<sup>6</sup> before releasing the wastewater into Spring Creek through seventy-two 7'6" x 2'5" tide gates.<sup>7</sup> Spring Creek flows into Old Mill Creek, which enters Jamaica Bay. Regulator R-2, in the Jamaica Bay drainage basin, discharges into the Spring Creek Auxiliary Water Pollution Control Plant during wet weather.

Fresh Creek, Hendrix Creek, and Spring Creek are all waterbodies included in the City's 26th Ward Tributary Group for purposes of CSO abatement. The City proposes to spend \$100,000,000 to ameliorate CSO discharges to these waterbodies in an effort to improve their water quality. Construction is scheduled to start on this project in 1993.<sup>8</sup>



## Bergen Basin

The Jamaica POTW (permit NY0026115) has six CSOs within this area affiliated with it. Of these six outfalls, four are large outfalls with multiple pipes. Outfall 003 is a double-barreled 8' x 9' outfall. The outfall for R-14 was listed as an additional outfall for 003 in both the Task 2.5.2 and the "Supplemental Memo"; however, in the newly issued permit this large, double-barreled outfall was assigned the number 003A.<sup>9</sup> Outfall 005 is a four barrel 16' x 8' discharge point that outfalls into Thurston Basin on the eastern most side of John F. Kennedy Airport. The other large outfall, 006, discharges from Kennedy Airport to the head of Bergen Basin and is a three barrel outfall, each barrel of which measures 19' x 9'. The remaining Jamaica outfall is the 42" diameter outfall numbered 004 at Cross Bay Boulevard and Shell Bank Basin. Outfalls 003, 004, and 005 were inspected by television and found to be "acceptable." The approximate location for 002 is shown on Map 8-1; the size of this outfall is not available from City documents and could not be ascertained.

Waterbodies including Bergen Basin and Thurston Basin in this area have been included in the City's Jamaica Tributary Group. As with other such projects in the area of Jamaica Bay and other tributaries in the City, these relatively smaller waterbodies are the focus of efforts to eliminate CSOs, which have a direct and significant impact on water quality. The project in the Jamaica drainage basin is expected to cost \$200,000,000 and construction is scheduled to begin in 1994.

## Jamaica Bay

The Rockaway POTW drainage basin (permit NY0026221) has, by far, the greatest number of outfalls to Jamaica Bay with 27. Nineteen of these have been inspected as part of the Task 2.5.2 either visually or by television. Although most of these outfalls are less than 24" in diameter, several outfalls in this drainage basin do deserve comment.

Seven large outfalls exist among the mostly small discharge points in the Rockaway drainage basin. The largest of these outfalls are next to each other at Beach 106th Street and Beach 108th Street. Outfall 029 is a 72" diameter outfall, while the dimensions of outfall 028 are 4' x 6'. The inspection report for 028 notes "tide gates missing."<sup>11</sup> The three 60" diameter outfalls include 016, at Bayswater Avenue, as well as 015 at Beach 88th Street and 020 at Beach 136th Street.<sup>12</sup> Task 2.5.2 notes a slight displacement of outfall segments at 020.<sup>13</sup> Outfall 016, the easternmost outfall in this drainage basin, discharges into Norton Basin at Bayswater Avenue. This outfall and 031, which is the outfall for the Nameoke pump station, are the only ones of the 27 outfalls in the Rockaway drainage basin that do not overflow directly into Jamaica Bay. The 54" diameter discharge for 022 enters Jamaica Bay at Beach 132nd Street. The smallest of these larger outfalls is 019 at Beach 139th Street and it measures 48" in diameter. No size information is available for outfalls 013, 024, 027, and 031. Due to a lack of specific outfall location information, only an approximate site for 031 is shown on Map 8-1.

#### CONCLUSION

Jamaica Bay and its inlets and tributaries is perhaps the most desirable waterbody on which to begin to coordinate elimination of CSOs. Not only is Jamaica Bay a great recreational resource that cannot be fully realized because of the pollutant levels, but in addition, the entire Bay is confined within the jurisdiction of the City of New York, making coordination somewhat easier than if numerous municipalities were involved. The City has already begun this effort with its CSO abatement strategy in Paerdegat Basin and its participation in the Jamaica Bay Task Force. Although these projects focusing on Jamaica Bay will no doubt improve its water quality, the Commission would urge that other initiatives also be reviewed so that a comprehensive CSO abatement plan can be tailored to Jamaica Bay to make it available fully for its designated use.

## FOOTNOTES

- <sup>1</sup> Interstate Sanitation Commission. "Status of the Interstate Sanitation District Waters." An update for the State of New York's 305(b) Report. April 1988.
- <sup>2</sup> U.S. Department of the Interior. National Park Service. General Management Plan, Gateway National Recreation Area. August 1979. p 24.
- <sup>3</sup> New York State Department of Environmental Conservation. Use Attainability Analysis of the New York Harbor Complex. August 1985. p. 20.
- <sup>4</sup> New York City Department of Environmental Protection. Regulator Improvement Program, Task 2.5.2 - Outfall Inspection. Prepared by Hazen & Sawyer. April 1985. Table 3.
- <sup>5</sup> This information has been supplied by City officials in conversations and other communications with Commission staff.
- <sup>6</sup> New York City Environmental Protection Administration. Department of Water Resources, Bureau of Water Pollution Control. "26th Ward Water Pollution Control Project." November 14, 1973. Prepared by Jerry Lastihenos, Associate, Hazen and Sawyer for the Met Section NYWPCA Luncheon and Field Trip.
- <sup>7</sup> New York City Department of Environmental Protection. "New York City Regulator Improvement Program, Supplemental Memo, State Pollutant Discharge Elimination System (SPDES) Permit Discrepancies." Prepared by Hazen and Sawyer. April 1985. Table 5, n.l.
- <sup>8</sup> This information has been supplied by City officials in communications with Commission staff.
- <sup>9</sup> "Supplemental Memo." Table 9.

10 This information has been supplied by City officials in communications with Commission staff.

11 Task 2.5.2 - Outfall Inspection.

12 Ibid.

13 Ibid.