

## **LIST OF GNHWPCA's CRITICAL ASSETS IN THE NEW HAVEN SYSTEM**

Our critical assets are shown on the attached figure and are summarized below;

### **THE EAST SHORE WATER POLLUTION ABATEMENT FACILITY (ESWPAF)**

- Average Daily Flow – 29 million gallons per day (MGD)
- Secondary Treatment Capacity – 60 MGD
- Peak Wet Weather Capacity – 100 MGD

### **MAJOR PUMP STATIONS**

- Boulevard Pump Station (BPS)
  - Average Daily Flow – 10 MGD
  - Peak Wet Weather Capacity – 30 MGD
- East Street Pump Station (ESPS)
  - Average Daily Flow – 10 MGD
  - Peak Wet Weather Capacity – 34 MGD
- Union Pump Station (UPS)
  - Average Daily Flow – 3 MGD
  - Peak Wet Weather Capacity – 22 MGD
- Morris Cove Pump Station (MCPS)
  - Average Daily Flow – 3 MGD
  - Peak Wet Weather Capacity – 18 MGD
- Quinnipiac Pump Station (QPS)
  - Average Daily Flow – 1 MGD
  - Peak Wet Weather Capacity – 7 MGD

### **MAJOR FORCE MAINS**

- BPS to 48 inch ductile iron (DI) force main
  - 6,806 feet of 36 inch DI force main
    - Average Daily Flow – 10 MGD
    - Peak Wet Weather Capacity – 71 MGD
- ESPS to 48 inch DI force main
  - 565 feet of 42 inch DI force main
    - Average Daily Flow – 10 MGD
    - Peak Wet Weather Capacity – 96 MGD
- 48 inch DI force main to Harbor Crossing
  - 2,971 feet of 48 inch DI force main
    - Average Daily Flow – 20 MGD
    - Peak Wet Weather Capacity – 126 MGD
- Twin 42 inch high density polyethylene (HDPE) force mains under New Haven Harbor (normally only one force main is in service at a time)

- 2,063 feet of 42 inch HDPE force main – South Crossing
      - Average Daily Flow – 20 MGD
      - Peak Wet Weather Capacity – 96 MGD
    - 2,181 feet of 42 inch HDPE force main – North Crossing
      - Average Daily Flow – 20 MGD
      - Peak Wet Weather Capacity – 96 MGD
  - 48 inch DI force main to ESWPAF
    - 5,497 feet of 48 inch DI force main
      - Average Daily Flow – 20 MGD
      - Peak Wet Weather Capacity – 126 MGD
  - UPS to 42 inch reinforced concrete (RCP) gravity sewer
    - 208 feet of 24 inch cast iron (CI) force main
      - Average Daily Flow – 3 MGD
      - Peak Wet Weather Capacity – 31 MGD
  - MCPS to 30 inch pre-stressed concrete cylinder pipe (PCCP) pressure sewer
    - 4,952 feet of 24 inch PCCP force main
      - Average Daily Flow – 3 MGD
      - Peak Wet Weather Capacity – 18 MGD (Max Capacity of MCPS)
    - 458 feet of 30 inch PCCP force main
      - Average Daily Flow – 3 MGD
      - Peak Wet Weather Capacity – 18 MGD (Max Capacity of MCPS)
  - QPS to 24 inch RCP gravity sewer
    - 230 feet of 16 inch DI force main
      - Average Daily Flow – 1 MGD
      - Peak Wet Weather Capacity – 14 MGD
    - 1,750 feet of 12 inch CI force main - Upper
      - Average Daily Flow – 1 MGD
      - Peak Wet Weather Capacity – 8 MGD
    - 1,735 feet of 12 inch CI force main - Lower
      - Average Daily Flow – 1 MGD
      - Peak Wet Weather Capacity – 8 MGD

**PRESSURE SEWERS**

- Whitney Avenue
  - 2,013 feet of 30 inch RCP pressure sewer
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 8 MGD
- Morris Cove
  - 360 feet of 30 inch polyvinyl chloride (PVC) pressure sewer
    - Average Daily Flow – 3 MGD
    - Peak Wet Weather Capacity – 18 MGD (Max Capacity of MCPS)

- 4,172 feet of 36 inch PCCP pressure sewer
  - Average Daily Flow – 3 MGD
  - Peak Wet Weather Capacity – 18 MGD (Max Capacity of MCPS)
- 560 feet of 36 inch PVC pressure sewer
  - Average Daily Flow – 3 MGD
  - Peak Wet Weather Capacity – 18 MGD (Max Capacity of MCPS)

**SEWERS ADJACENT TO LAKE WHITNEY (REGIONAL WATER AUTHORITY DRINKING WATER RESERVOIR)**

- Connolly Parkway Siphon
  - Twin 15 inch steel barrels under the Mill River (normally both barrels are in service)
    - 67 feet long
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 6 MGD
- Mill River Trunk Sewer
  - 5,207 feet of 36 inch RCP gravity sewer
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 8 MGD
- Lake Whitney Siphon
  - Twin 22 inch CI barrels under the Mill River (normally both barrels are in service)
    - 104 feet long
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 6 MGD
- Mill River Trunk Sewer
  - 3,438 feet of 36 inch RCP gravity sewer
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 8 MGD
  - 9,200 feet of 42 inch RCP gravity sewer
    - Average Daily Flow – 2 MGD
    - Peak Wet Weather Capacity – 10 MGD

**MAJOR SIPHONS**

- James Street Siphon
  - One 18 inch, one 20 inch and one 24 inch DI barrels under the Quinnipiac River (normally all three barrels are in service during wet weather)
    - 890 feet long
    - Average Daily Flow – 7 MGD
    - Peak Wet Weather Capacity – 24 MGD

**MAJOR TRUNK SEWERS**

- Lower Boulevard Trunk Sewer – Ella T. Grasso Boulevard (Route 10)
  - 1,673 feet of 63 inch wide by 60 inch high brick gravity sewer

- 6,421 feet of 72 inch wide by 64 inch high brick gravity sewer
- 668 feet of 102 inch wide by 62 inch high RCP gravity sewer
- 2,385 feet of 78 inch wide by 64 inch high brick gravity sewer
- 1,135 feet of 78 inch wide by 66 inch high brick gravity sewer
- 769 feet of 78 inch wide by 69 inch high brick gravity sewer
- 381 feet of 84 inch wide by 69 inch high brick gravity sewer
- Upper Boulevard Trunk Sewer – Ella T. Grasso Boulevard and Whalley Avenue (Route 10)
  - 3,111 feet of 60 inch wide by 57 inch high brick gravity sewer
  - 1,453 feet of 66 inch wide by 63 inch high brick gravity sewer
  - 1,999 feet of 60 inch wide by 57 inch high brick gravity sewer
- James Street Siphon to ESWPAF – Connecticut Avenue
  - 5,709 feet of 54 inch RCP gravity sewer
- Front and River Street Sewers
  - 1,656 feet of 36 inch RCP gravity sewer
  - 3,325 feet of 42 inch RCP gravity sewer
  - 1,026 feet of 54 inch RCP gravity sewer
  - 452 feet of 60 inch RCP gravity sewer
- East Street Sewer
  - 5,297 feet of 54 inch brick gravity sewer
  - 989 feet of 60 inch brick gravity sewer
  - 218 feet of 66 inch PCCP gravity sewer
- Quinnipiac Trunk Sewer – Quinnipiac Avenue
  - 8,590 feet of 24 inch RCP gravity sewer

**CSO STORAGE TANKS**

- Truman Tank – located at Truman School on Ella T. Grasso Boulevard (Route 10)
  - 5 million gallon capacity

**ACTIVE CSO REGULATORS – (REGULATOR NUMBER – LOCATION – CSO OUTFALL NUMBER)**

- Regulator 001 – ESWPAF – CSO Outfall 001
- Regulator 003 – Ella T. Grasso Boulevard @ Orange Avenue – CSO Outfall 003
- Regulator 004 – Ella T. Grasso Boulevard @ Legion Avenue – CSO Outfall 004
- Regulator 005 – Ella T. Grasso Boulevard @ Derby Avenue – CSO Outfall 005
- Regulator 006 – Whalley Avenue @ Fitch Street – CSO Outfall 006
- Regulator 009 – Grand Avenue @ James Street – CSO Outfall 009
- Regulator 010(A) – East Street @ I-91 – CSO Outfall 011
- Regulator 011 – Humphrey Street @ I-91 – CSO Outfall 011
- Regulator 012 – Mitchell Drive east of Nicoll Street – CSO Outfall 012
- Regulator 015 – James Street Siphon – CSO Outfall 015
- Regulator 016 – Poplar Street @ River Street – CSO Outfall 016
- Regulator 019 – Pine Street @ North Front Street – CSO Outfall 019
- Regulator 020 – Quinnipiac Avenue @ Clifton Street – CSO Outfall 020

- Regulator 021 – East Street Pump Station – CSO Outfall 021
- Regulator 024 – Boulevard Pump Station – CSO Outfall 024
- Regulator 025 – Union Pump Station – CSO Outfall 025
- Regulator 026 – Humphrey Street Pump Station – CSO Outfall 011
- Regulator 028 – Mitchell Drive Pump Station – CSO Outfall 012
- Regulator 034 – George Street @ Temple Street – CSO Outfall 025

**ACTIVE CSO OUTFALLS – (CSO OUTFALL NUMBER – RECEIVING WATER)**

- CSO Outfall 001 – New Haven Harbor
- CSO Outfall 003 – West River
- CSO Outfall 004 – West River
- CSO Outfall 005 – West River
- CSO Outfall 006 – West River
- CSO Outfall 009 – Mill River
- CSO Outfall 011 – Mill River
- CSO Outfall 012 – Mill River
- CSO Outfall 015 – Quinnipiac River
- CSO Outfall 016 – Quinnipiac River
- CSO Outfall 019 – Quinnipiac River
- CSO Outfall 020 – Quinnipiac River
- CSO Outfall 021 – New Haven Harbor
- CSO Outfall 024 – New Haven Harbor
- CSO Outfall 025 – New Haven Harbor