



DEPARTMENT OF  
ENGINEERING

CITY OF NORWALK  
*Department of Engineering*  
125 East Avenue  
Norwalk, CT 06851  
[www.norwalkct.gov](http://www.norwalkct.gov)

**CITY OF NORWALK  
SPECIAL MEETING  
PUBLIC WORKS COMMITTEE  
NOVEMBER 12, 2024**

**ATTENDANCE:** James Frayer, Chairman; Barbara Smyth, Heather Dunn; Darlene Young; Ann Wennerstrand, Nora Niedzielski-Eichner (6:04p.m.)

**STAFF:** Vanessa Valadares, Chief of Operations and Public Works; James Meehan, Principal Engineer; Mario Pizighelli, Assistant Civil Engineer; Ralph Kolb, Senior Environmental Engineer; Neyla Bauer, WPCA

**OTHERS:** David Mason, CDM Smith; Nick Rossi, CDM Smith; Johan Lopez, Common Council Member; Nicole Eaddy, Common Council Member; Tom Livingston, Chief of Staff; Lisa Shanahan, Common Council Member

To allow public access, anyone may access a meeting by telephone, Zoom, and/or the City of Norwalk YouTube channel. Specific instructions and links can be found at: [norwalkct.org/meetings](http://norwalkct.org/meetings)



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Members of the public who wish to provide public comments are encouraged to submit those via email in advance of the meeting. For these comments to be read into the record, they should be submitted at least three hours in advance of the meeting's start time. Please email Monique Cipriano at [mcipriano@norwalkct.gov](mailto:mcipriano@norwalkct.gov) to provide written public comment prior to the meeting.

Chairman Frayer called the meeting to order at 6:01p.m.

**ROLL CALL**

Chairman Frayer called the Roll: James Frayer, Barbara Smyth, Heather Dunn,  
Ann Wennerstrand, Darlene Young

At Roll Call there were five (5) Committee members present constituting a quorum. Nora Niedzielski-Eichner arrived at 6:04p.m. Dajuan Wiggins was not present.

**PUBLIC INPUT**

**PUBLIC INPUT (GUESTS AT COMMITTEE MEETINGS MAY SPEAK TO ANY ITEM ON THE AGENDA. COMMENTS SHALL BE LIMITED TO NO MORE THAN THREE (3) MINUTES PER SPEAKER.)**

Ms. Lynnelle Jones of 10 Point Road spoke about agenda item 4. She stated she is happy to see the Stormwater Utility Preliminary Evaluation presentation and look forward to the CDM presentation. She said given the recent save the sound water quality ratings of the Norwalk Harbor, education about storm water and water quality is desperately needed. She thanked the Committee and CDM.

Chairman Frayer closed public input at 6:03p.m.

### **NEW BUSINESS**

**1. APPROVE THE MINUTES OF THE PUBLIC WORKS COMMITTEE MEETING OF TUESDAY, OCTOBER 1, 2024.**

There was no report on this item.

**\*\*MS. SMYTH MOVED THE ITEM**

**\*\*CHAIRMAN FRAYER AND MS. WENNERSTRAND ABSTAINED**

**\*\*MOTION PASSED WITH TWO (2) ABSTENTIONS**

**2. AUTHORIZE THE MAYOR, HARRY W. RILLING, TO EXECUTE THE SECOND SUPPLEMENTAL PROJECT AUTHORIZATION LETTER TO WALK BRIDGE PROGRAM - 301-0515NP PROJECT, WHEREBY THE CITY OF NORWALK WILL TRANSFER FUNDS IN THE AMOUNT OF \$821,637.00 ON NOVEMBER 15, 2024 AND \$821,637.00 ON JULY 1, 2025 TO FUND THE UNDERGROUNDING OF UTILITY LINES ON EAST AVE FROM FORT POINT STREET TO OLMSTEAD PLACE TO BE PERFORMED BY CONN DOT.**

**ACCOUNT NO.      09 22 4021 5777 C0471  
                         09 23 4021 5777 C0471  
                         09 24 4021 5777 C0471  
                         09 25 4021 5777 C0471  
                         09 26 4021 5777 C0471**

Ms. Valadares reported on this. She gave a brief background of the East Norwalk undergrounding of utilities. She stated this is a city project which was approved years ago. The State will be responsible for some of the costs and the city must cover the rest.

**\*\*MS. NIEDZIELSKI-EICHNER MOVED THE ITEM**

**\*\*MOTION PASSED UNANIMOUSLY**

**3. AUTHORIZE THE PURCHASING AGENT TO AUTHORIZE A SOLE SOURCE PURCHASE ORDER TO GABRIELLI TRUCK SALES FOR THE PURCHASE OF ONE (1) 2026 MACK GRANITE PLOW TRUCK, FOR A SUM NOT TO EXCEED \$310,139.00.**

**ACCOUNT NO.      09 25 4031 5777 C0313**

Ms. Valadares reported on this. This is part of the capital budget. The funds were approved in July, and they are just getting the quote now. She gave an explanation on what sole source

means and why some things are purchased that way. She stated that they use/buy from the State Contracts to purchase their vehicles. A discussion ensued about the vehicle's lifespan and size.

**\*\*MS. NIEDZIELSKI-EICHNER MOVED THE ITEM  
\*\*MOTION PASSED UNANIMOUSLY**

**4. STORMWATER UTILITY PRELIMINARY EVALUATION PRESENTATION.**

Ms. Valadares reported on this. She gave background information on how the stormwater utility came about. She introduced the presenters from CDM Smith, David Mason and Nick Rossi.

Mr. Mason gave the presentation and held a Q & A afterwards. (presentation attached)

**ADJOURNMENT:** Ms. Smyth moved to adjourn.  
Motion passed unanimously.  
The meeting was adjourned at 7:15p.m.

**NEXT MEETING:** **TUESDAY, DECEMBER 3, 2024**  
**PUBLIC WORKS COMMITTEE**  
**7:00 P.M. LOCATION TBD**

# Stormwater Utility Preliminary Evaluation

City of Norwalk, Connecticut

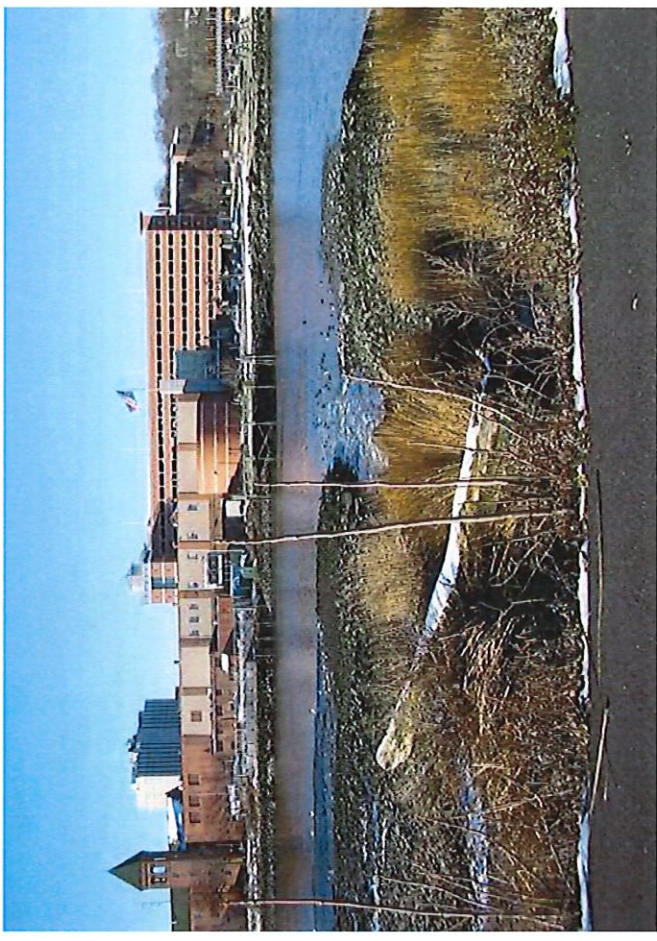
November 12, 2024

CDM  
smith®

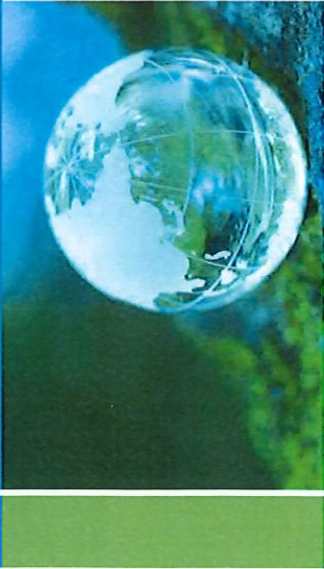


# Agenda

- Stormwater Overview
- Stormwater Utility Overview
- Current Budget Allocation for Stormwater
- Preliminary Rate Evaluation
- Non-Residential Examples
- Conclusions / Next Steps

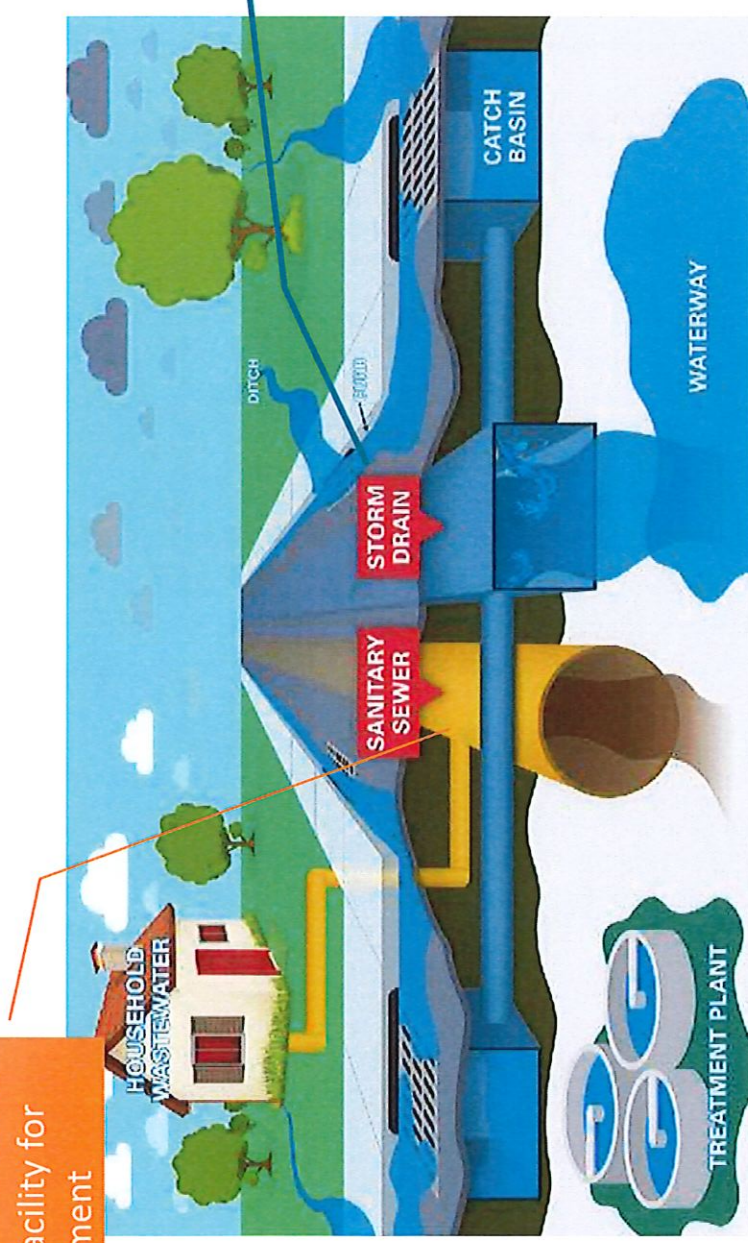


# Stormwater Overview



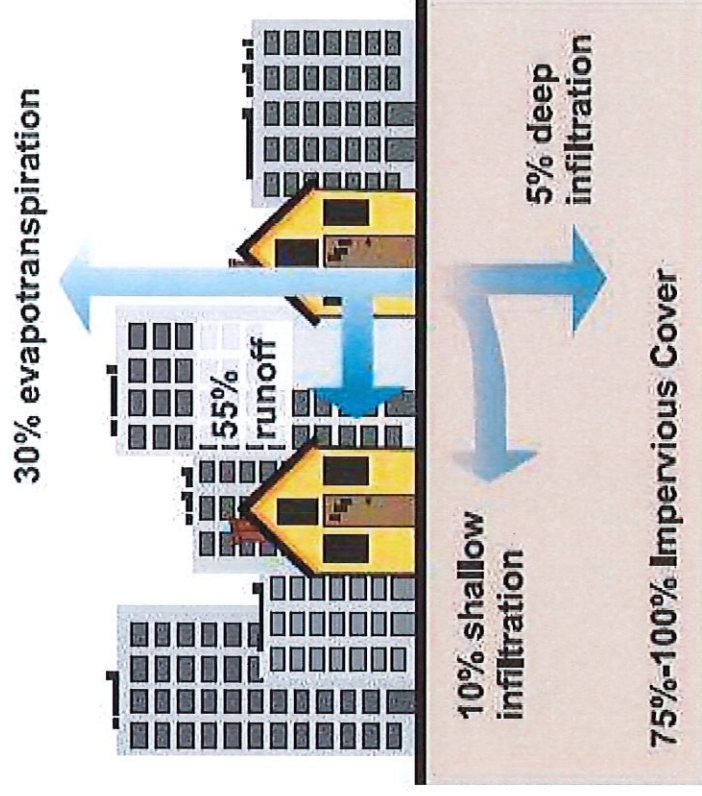
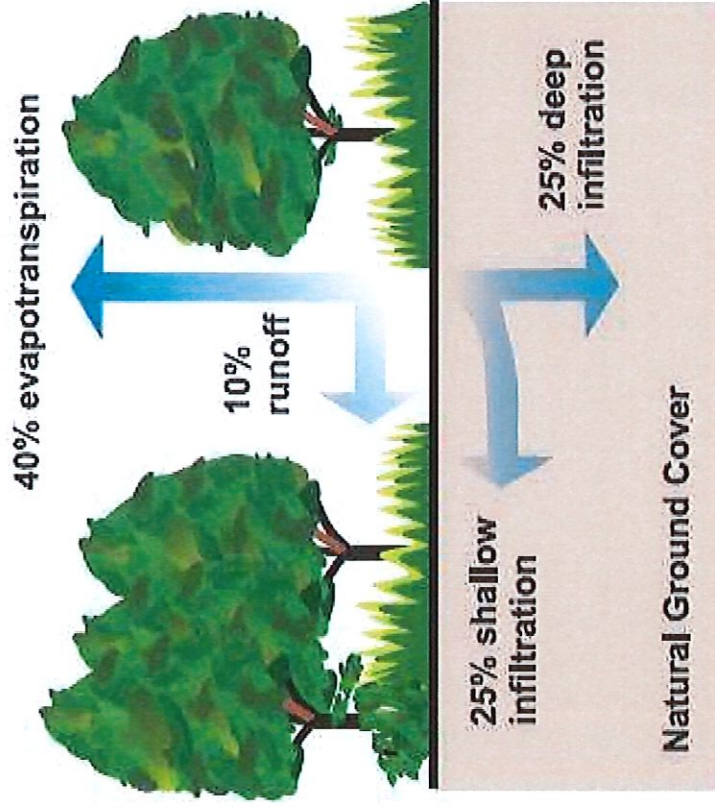
Wastewater is discharged to sanitary sewer systems and sent to the Water Pollution Control Facility for treatment

# Stormwater vs Wastewater



Rainfall and runoff drains into the stormwater system and is discharged directly to waterways

# Natural Environment vs. Impervious Surface



# Stormwater Pollution

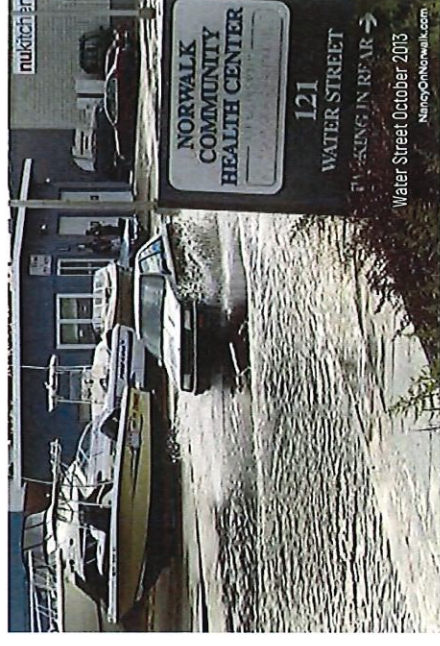
- Stormwater can pick up:
  - Road sand and salt
  - Construction site sediment
  - Yard waste
  - Fertilizers and pesticides
  - Animal waste
  - Oil and grease
  - Litter
- Pollutants discharge to nearby waterbodies without treatment



Picture Credits: AUSMEPA, City of Burnaby, STK

# Runoff and Flooding

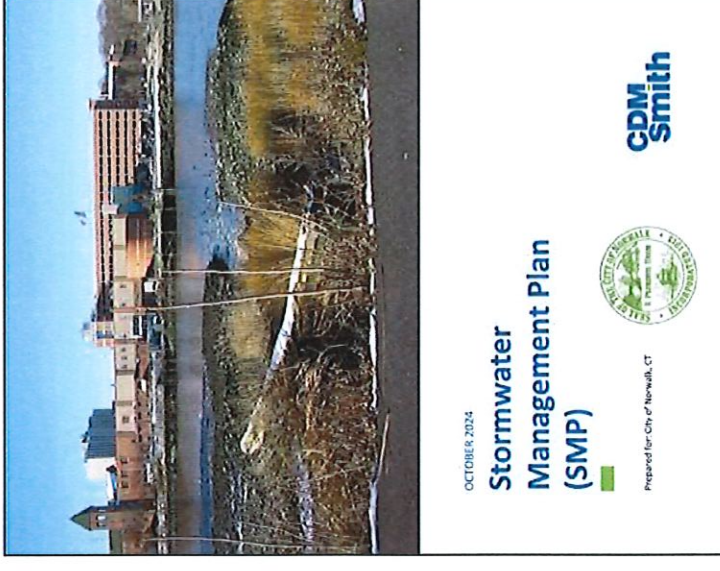
- Higher impervious area results in more runoff into the stormwater system.
- Runoff from more frequent and larger storms can exceed the capacity of aging drainage systems, contributing to flooding.



Picture Credit: Nancy on Norwalk

# Municipal Separate Storm Sewer System (MS4) Permit

- USEPA Clean Water Act → CTDEEP MS4 Permit
- Requires each municipality to take steps to keep stormwater clean before that stormwater enters water bodies
- As part of MS4 compliance, Norwalk recently revised and submitted its Stormwater Management Plan



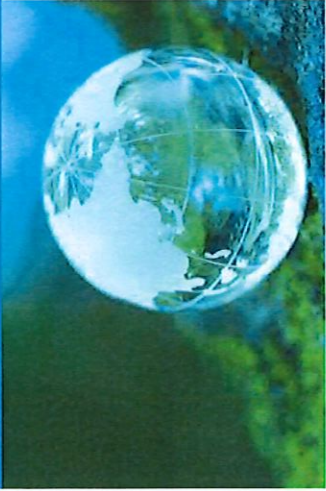
# Norwalk's Stormwater Needs

- MS4 Permit Compliance / Meet commitments outlined in updated Stormwater Management Plan (SMP)
  - Outfall Screenings
  - Illicit Discharge Detection and Elimination (IDDE) Investigations
  - Mapping of Stormwater Assets
  - Annual Reporting
  - Public Outreach and Education
- Continued maintenance and improvements to the stormwater system
- Resiliency to larger and more frequent storms and flooding



Photos from Norwalk's 2024 Outfall Inspection Program

# Stormwater Utility Overview



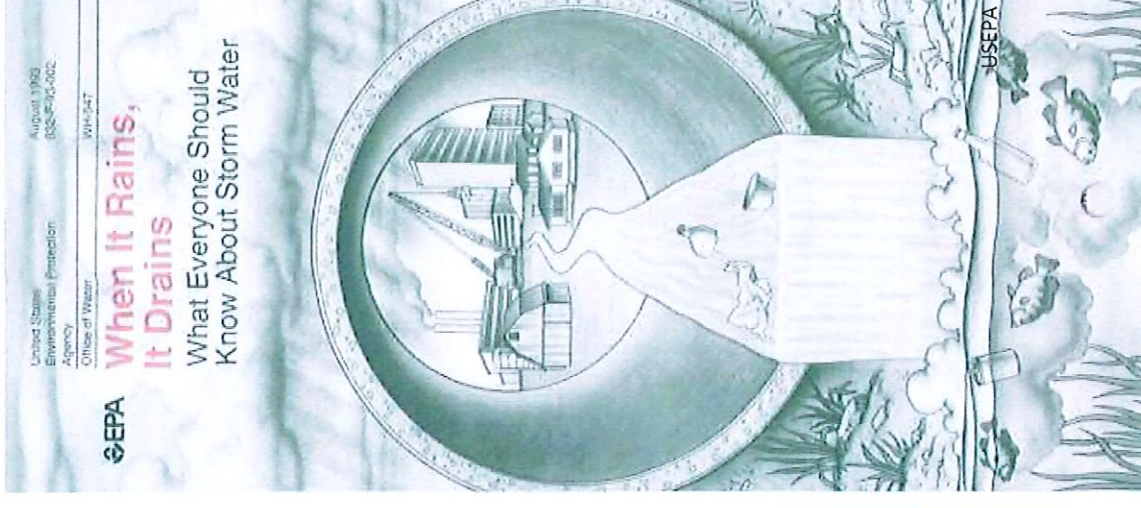
# Stormwater Utility 101

## *What is It? How Does It Work?*

- Dedicated funding for stormwater system
- User contribution based on impervious area
- Provides funding for MS4 compliance
- Encourage stormwater best management practices

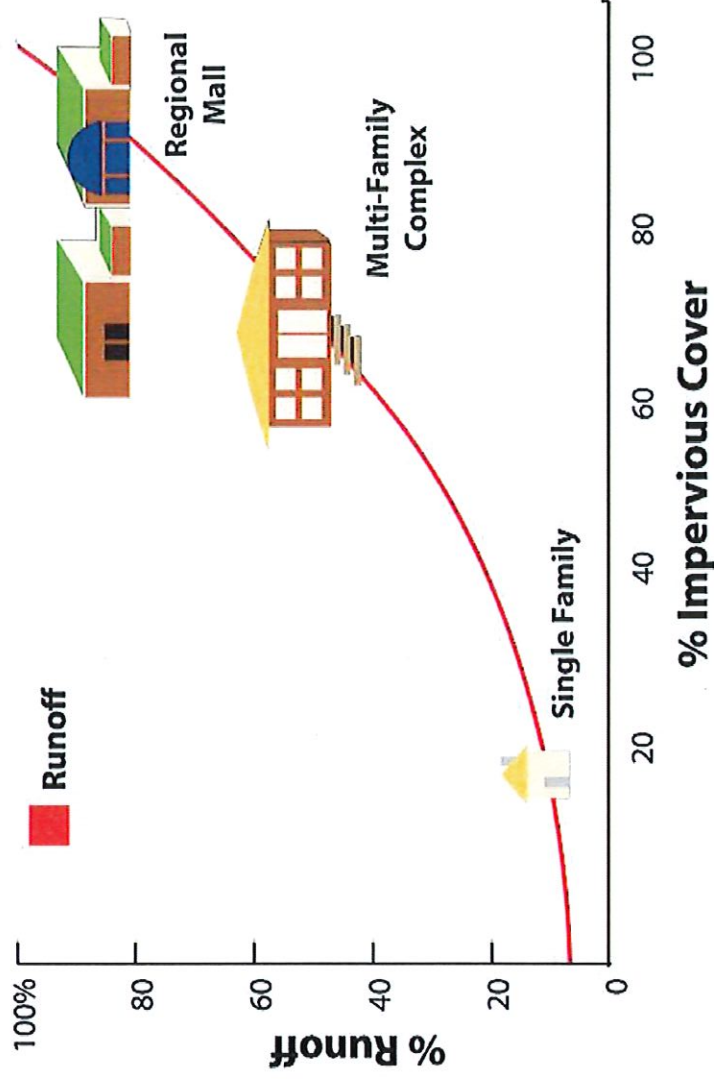
**Connecticut Substitute House Bill No. 6441 / Public Act No. 21-115 - An Act Concerning Climate Change Adaptation**

Signed into law in July 2021 and allows for Connecticut Municipalities to be able to implement stormwater utilities



# Impervious Cover vs. Runoff

- Common proxy for runoff is impervious area



Customer receives services from the utility in direct proportion to the runoff burden

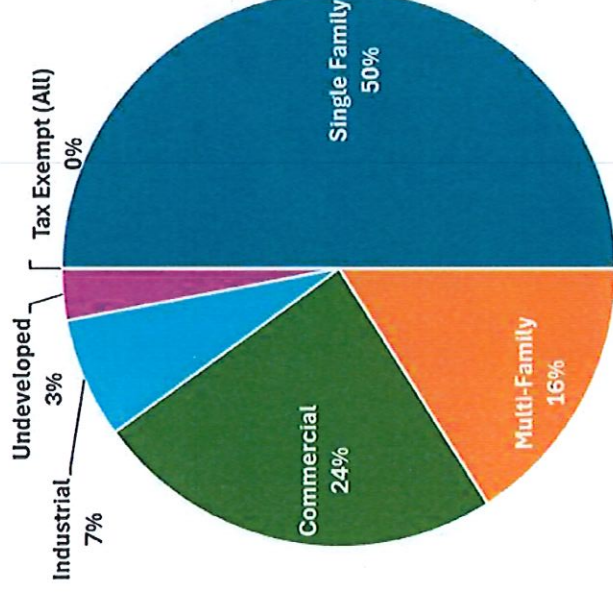
# Tax vs Service Charge

- All properties with impervious area contribute, including tax-exempt properties

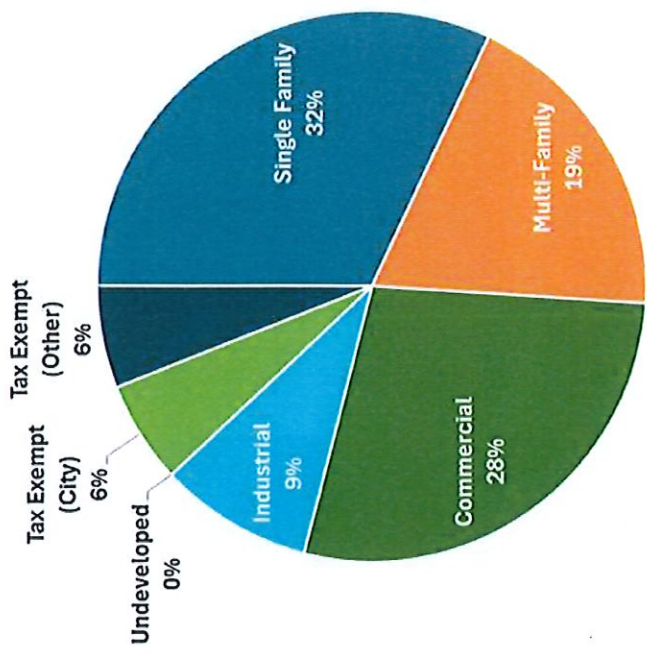
## Example of Tax vs Service Charge

Any Town, USA

Tax Contribution by Property Class  
(Based on assessed property value)

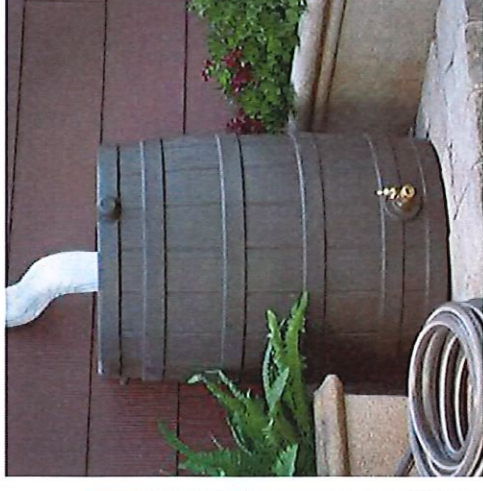


Fee Contribution by Property Class  
(Based on impervious area)



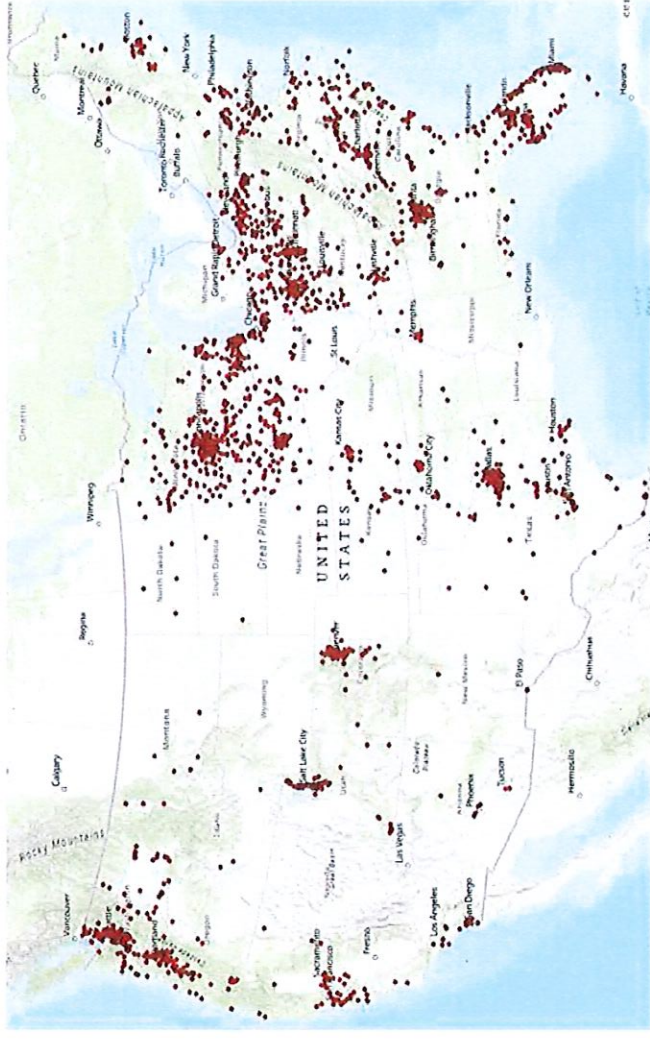
# Encourage Stormwater Best Practices

- Properties with less impervious area pay less
- Credits can be applied for stormwater best practices (examples: rain barrels, rain gardens, detention basins)



# U.S. Stormwater Utilities

- Over 2,000 documented stormwater utilities nationally
  - Smallest: Indian Creek Village, Florida (pop: 84)
  - Largest: Los Angeles County (pop: over 10 million)
- Existing Connecticut Stormwater Utilities (New Britain & New London)

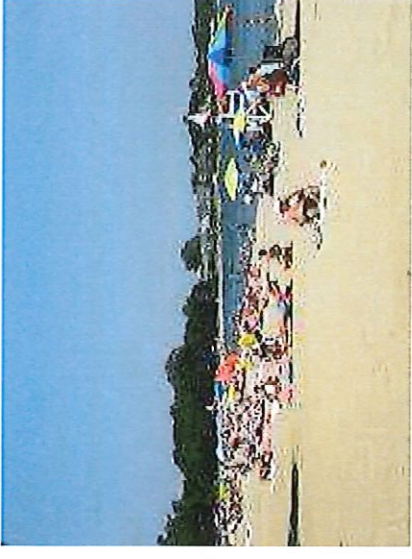


# Is A Stormwater Utility Right for Norwalk?

- Dedicated funding source for stormwater management
- Stormwater has a direct impact on Norwalk's water quality (harbor, shell fishing, beaches) and flooding
- Regulatory commitments: MS4 and Stormwater Management Plan
- Nationwide increases in flooding due to climate change



Visit Norwalk



Long Island Sound Study

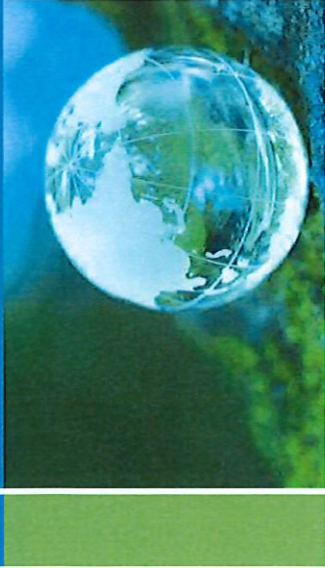


Norwalk Shellfish Education



CorpsNewEngland

# Current Budget Allocation for Stormwater



# Labor & Staffing

- 9 Office/Engineering/Admin Staff
  - Ranging from 5 to 50% Stormwater Utilized
- 27 Field Staff
  - All 100% Stormwater Utilized
  - Construction & Stormwater Work Groups
- Salaries and Overtime = \$2.6M
- Benefits = \$1.6M
- Total Labor Cost = \$4.2M

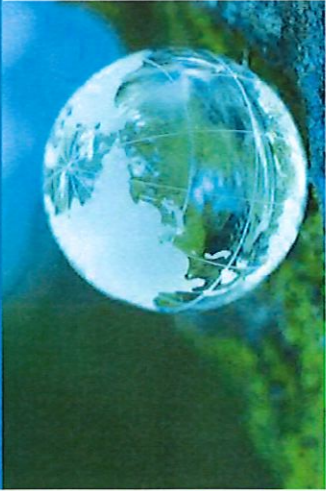


# Capital Improvement Projects

- \$3M - \$5M Stormwater Improvements Projects
- \$1M On-Call Contract for Stormwater Emergencies
- \$250k on Small Sewer Separation Projects
- Total Capital = \$4.25M - \$6.25M



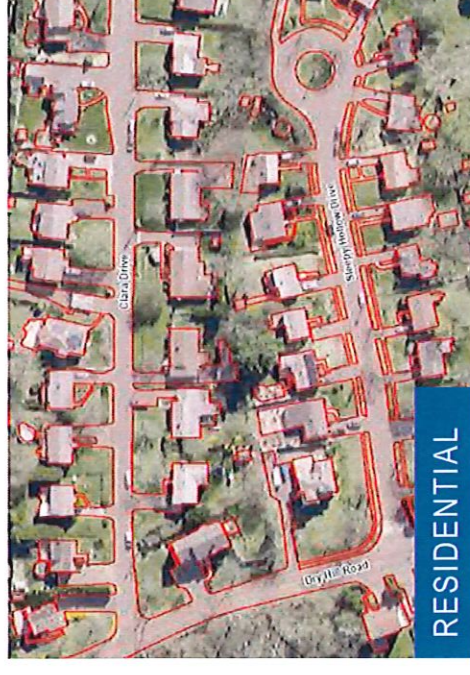
# Preliminary Rate Evaluation



# Project Approach – Impervious Area

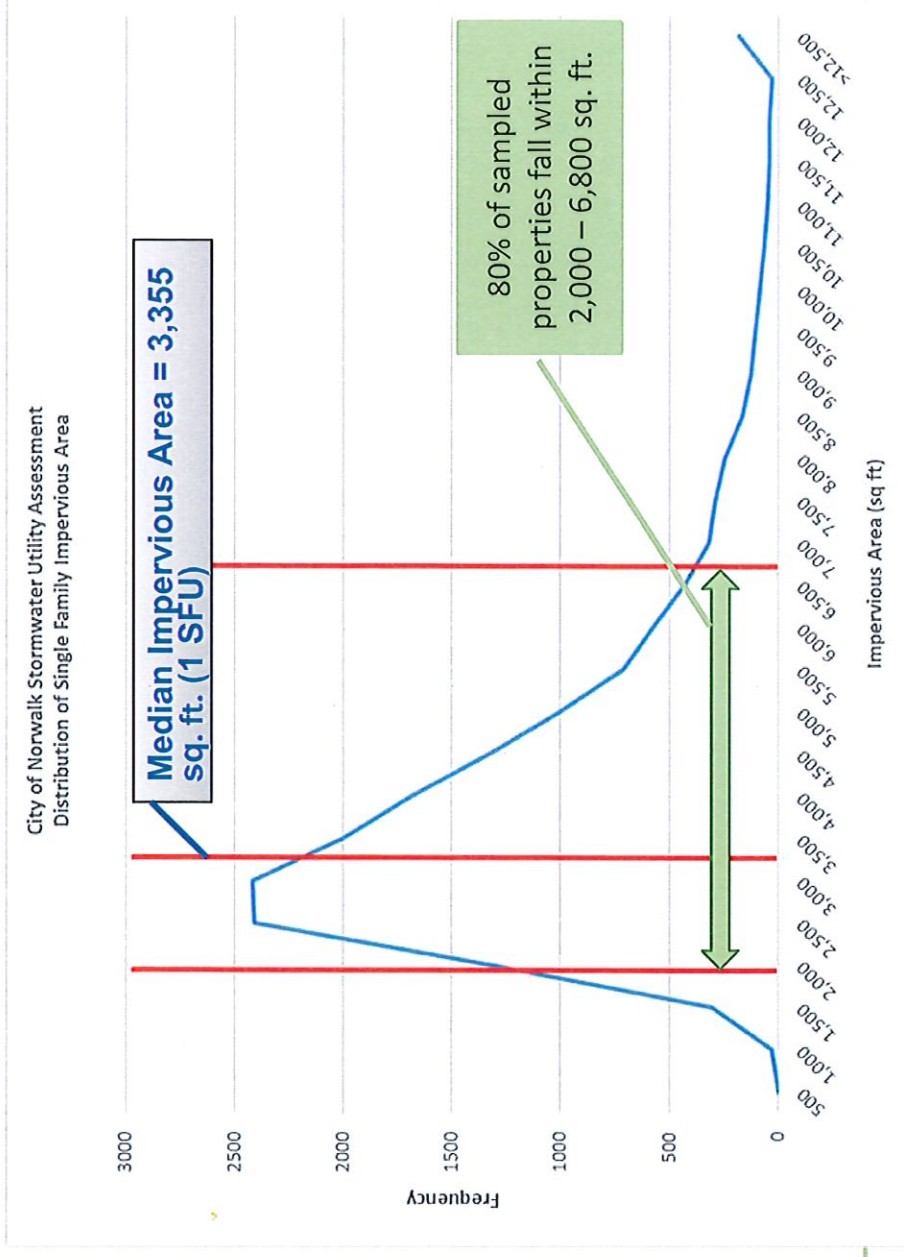
- Utilize existing impervious area GIS layer from UConn/DEEP (CTeco 2012 data) or from each municipality
- For feasibility study, will focus on single-family unit (SFU) rate structure since vast majority of parcels are single family
- Other rate structures may be possible based on a more detailed analysis

*The total impervious area does not include City, State, or Private roads and sidewalks.*



# Statistical Analysis of Single-Family Properties Impervious Area

- Statistical analysis of all 16,000+ single family parcels
- Consider three SFU tiers:
  1. Less than 2,000 sq. ft.
  2. Between 2,000 and 6,800 sq. ft.
  3. Greater than 6,800 sq. ft.



# Impervious Area Data Review - Norwalk

| Land Use Type                   | Parcel Count  | % of Total<br>Parcels | Impervious Area<br>(sq. ft.) | % of Total<br>Impervious Area |
|---------------------------------|---------------|-----------------------|------------------------------|-------------------------------|
| <b>Residential</b>              |               |                       |                              |                               |
| Single Family                   | 16,102        | 74%                   | 63,936,294                   | 43%                           |
| 2 Family                        | 2,256         | 10%                   | 8,527,817                    | 6%                            |
| 3 Family                        | 375           | 2%                    | 1,647,921                    | 1%                            |
| 4 Family                        | 119           | 1%                    | 622,946                      | 0%                            |
| Residential (Other)             | 569           | 3%                    | 2,320,816                    | 2%                            |
| <b>Residential Subtotal</b>     | <b>19,421</b> | <b>89%</b>            | <b>77,055,793</b>            | <b>52%</b>                    |
| <b>Non-Residential</b>          |               |                       |                              |                               |
| Commercial/Industrial           | 1,406         | 6%                    | 45,739,807                   | 31%                           |
| Condo Buildings                 | 392           | 2%                    | 10,746,092                   | 7%                            |
| Apartment Buildings             | 238           | 1%                    | 4,358,060                    | 3%                            |
| City Owned                      | 269           | 1%                    | 10,570,777                   | 7%                            |
| <b>Non-Residential Subtotal</b> | <b>2,305</b>  | <b>11%</b>            | <b>71,414,736</b>            | <b>48%</b>                    |
| <b>Grand Total</b>              | <b>21,726</b> | <b>100%</b>           | <b>148,470,530</b>           | <b>100%</b>                   |

Statistically more appropriate to use the *MEDIAN* impervious area as the basis, which is 3,355 sq. ft. for this database  
 Analysis is approximate based on existing impervious area database; data would need to be validated for implementation

# Potential Tiered SFU Structure for Norwalk

- A tiered SFU structure is more equitable than a flat fee SFU structure; more closely represents contribution to runoff and generates the same revenue.



< 1,999 Sq. Ft. = 0.6 SFU



2,000 to 6,800 Sq. Ft. = 1.0 SFU



> 6,801 Sq. Ft. = 2.0 SFU

# Estimated Revenue Generation

| Base Rate (Monthly) | Total Estimated Revenue (Annual) | Estimated Revenue from City Parcels (Annual) | Estimated Revenue from Tax Exempt Parcels (Annual) |
|---------------------|----------------------------------|----------------------------------------------|----------------------------------------------------|
| \$ 5.00             | \$ 2,390,000                     | \$ 190,000                                   | \$ 60,000                                          |
| \$ 6.00             | \$ 2,870,000                     | \$ 230,000                                   | \$ 70,000                                          |
| \$ 7.00             | \$ 3,350,000                     | \$ 270,000                                   | \$ 90,000                                          |
| \$ 8.00             | \$ 3,830,000                     | \$ 310,000                                   | \$ 100,000                                         |
| \$ 9.00             | \$ 4,310,000                     | \$ 350,000                                   | \$ 110,000                                         |
| \$ 10.00            | \$ 4,790,000                     | \$ 380,000                                   | \$ 120,000                                         |
| \$ 11.00            | \$ 5,270,000                     | \$ 420,000                                   | \$ 140,000                                         |
| \$ 12.00            | \$ 5,750,000                     | \$ 460,000                                   | \$ 150,000                                         |
| \$ 13.00            | \$ 6,220,000                     | \$ 500,000                                   | \$ 160,000                                         |
| \$ 14.00            | \$ 6,700,000                     | \$ 540,000                                   | \$ 170,000                                         |
| \$ 15.00            | \$ 7,180,000                     | \$ 580,000                                   | \$ 190,000                                         |
| \$ 16.00            | \$ 7,660,000                     | \$ 610,000                                   | \$ 200,000                                         |
| \$ 17.00            | \$ 8,140,000                     | \$ 650,000                                   | \$ 210,000                                         |
| \$ 18.00            | \$ 8,620,000                     | \$ 690,000                                   | \$ 220,000                                         |
| \$ 19.00            | \$ 9,100,000                     | \$ 730,000                                   | \$ 230,000                                         |
| \$ 20.00            | \$ 9,580,000                     | \$ 770,000                                   | \$ 250,000                                         |

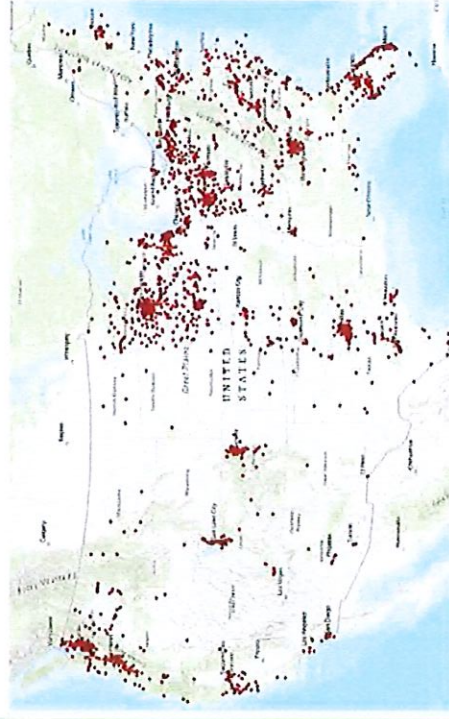
- City Parcels about 7% of total contributions
- Tax Exempt Parcels about 2.5% of total contributions
- National Average = about \$6 per SFU

# Typical SWU Rates

2,000+ Utilities; National Average  
= \$6 per SFU. Per Western  
Kentucky SWU Survey (2023)

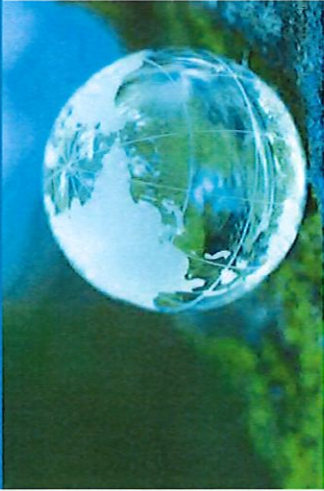
## Connecticut Stormwater Utilities:

- New Britain – \$6.01 Average, Monthly
- New London – \$2.50 per 1,000 sf, Monthly  
(or about \$8.40 for median Norwalk SF, Monthly)

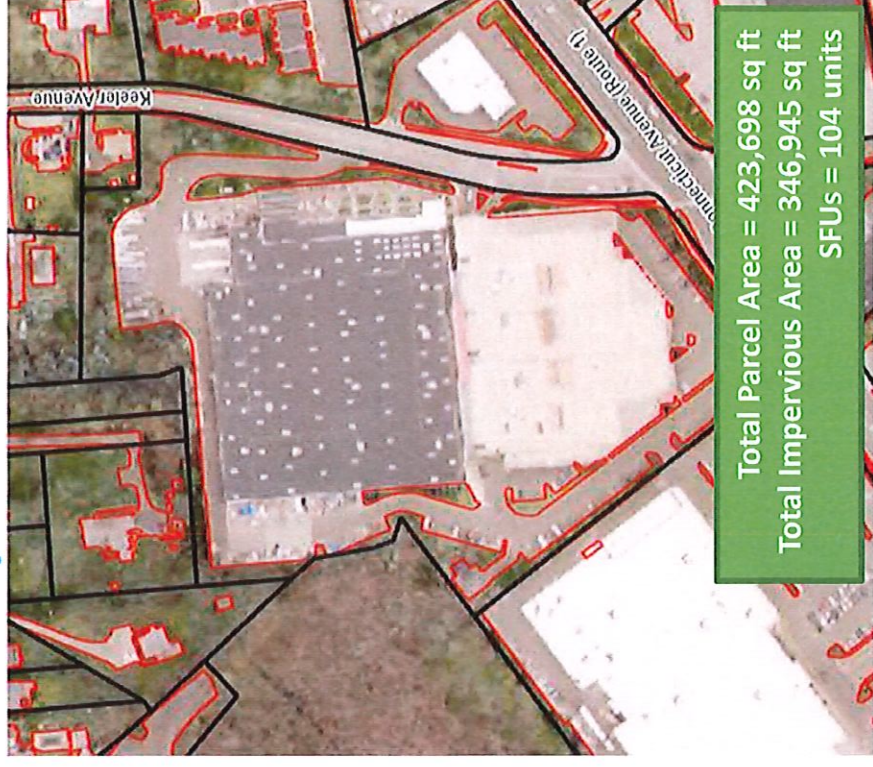
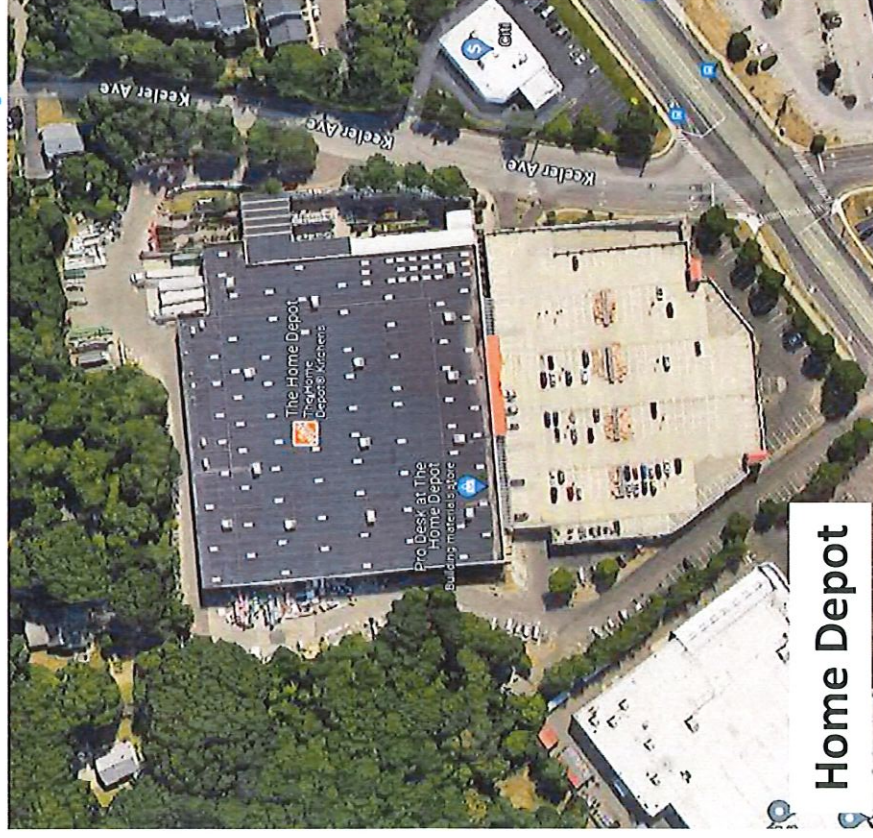


| New England Municipality | State | Monthly Rate | Population (as of Jul-22) | Stormwater Budget for FY2024 | Per capita stormwater budget |
|--------------------------|-------|--------------|---------------------------|------------------------------|------------------------------|
| Ashland                  | MA    | \$2.90       | 18,466                    | \$331,000                    | \$18                         |
| Augusta                  | ME    | \$7.54       | 18,560                    | \$1,220,000                  | \$66                         |
| Bangor                   | ME    | \$1.83       | 33,011                    | \$1,272,000                  | \$39                         |
| Bellingham               | MA    | \$8.00       | 17,407                    | \$824,000                    | \$47                         |
| Braintree                | MA    | \$3.80       | 38,567                    | \$1,413,000                  | \$37                         |
| Burlington               | VT    | \$6.60       | 38,889                    | \$2,085,000                  | \$54                         |
| Chelmsford               | MA    | \$3.30       | 35,906                    | \$1,563,000                  | \$44                         |
| Chicopee                 | MA    | \$8.30       | 54,980                    | \$405,000                    | \$7                          |
| Colchester               | VT    | \$4.58       | 17,067                    | \$1,069,000                  | \$63                         |
| East Longmeadow          | MA    | \$2.10       | 16,343                    | \$302,000                    | \$18                         |
| Fall River               | MA    | \$14.70      | 93,682                    | \$7,037,000                  | \$75                         |
| Lewiston                 | ME    | \$5.00       | 35,690                    | \$3,070,000                  | \$86                         |
| Longmeadow               | MA    | \$4.40       | 15,632                    | \$1,214,000                  | \$78                         |
| Milton                   | MA    | \$5.10       | 28,364                    | \$1,012,000                  | \$36                         |
| Newton                   | MA    | \$8.30       | 87,381                    | \$4,541,000                  | \$52                         |
| Portland                 | ME    | \$6.75       | 68,408                    | \$2,464,000                  | \$36                         |
| Reading                  | MA    | \$5.00       | 25,205                    | \$584,000                    | \$23                         |
| Saint Albans City        | VT    | \$2.50       | 6,795                     | \$373,000                    | \$55                         |
| Saint Albans Town        | VT    | \$4.17       | 5,999                     | \$75,000                     | \$13                         |
| South Burlington         | VT    | \$5.94       | 15,814                    | \$350,000                    | \$22                         |
| Westfield                | MA    | \$2.50       | 40,535                    | \$1,751,000                  | \$43                         |
| Westford                 | MA    | \$6.30       | 24,353                    | \$1,415,000                  | \$58                         |
| Williston                | VT    | \$4.25       | 8,698                     | \$721,000                    | \$83                         |

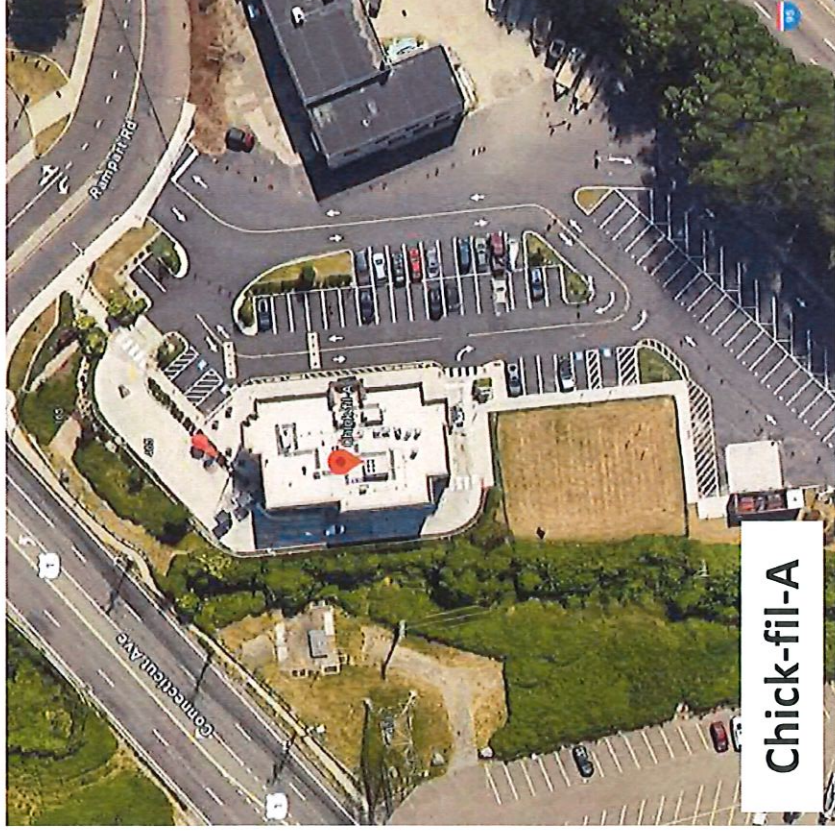
# Non-Residential Examples



# Non-Residential Property Example #1



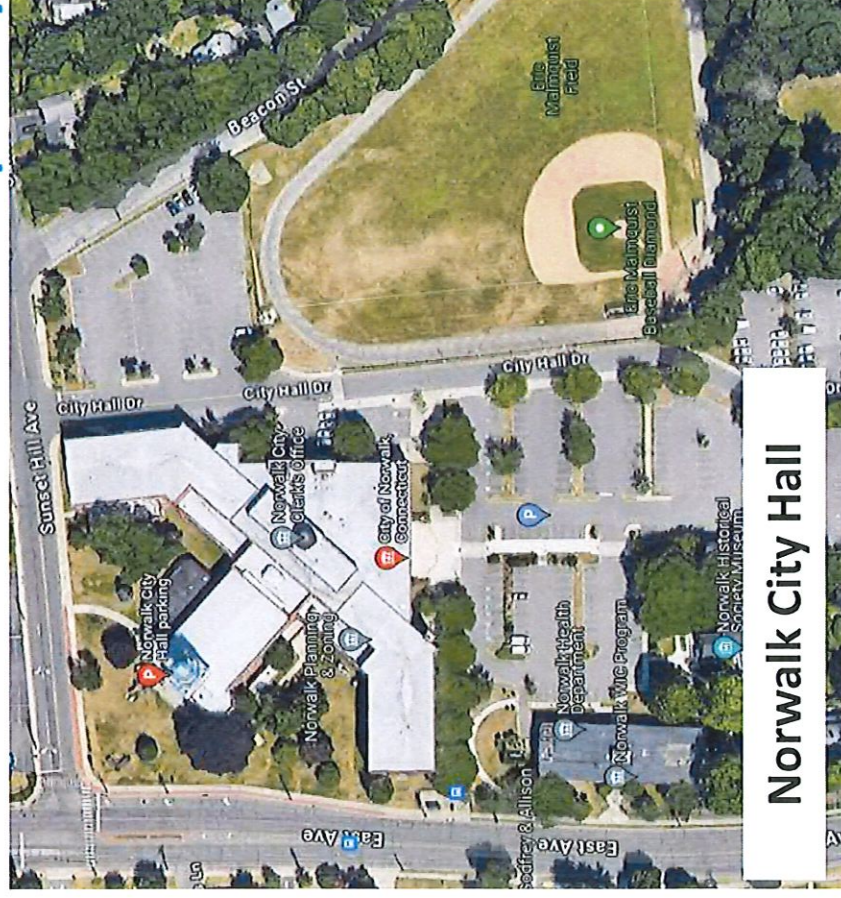
## Non-Residential Property Example #2



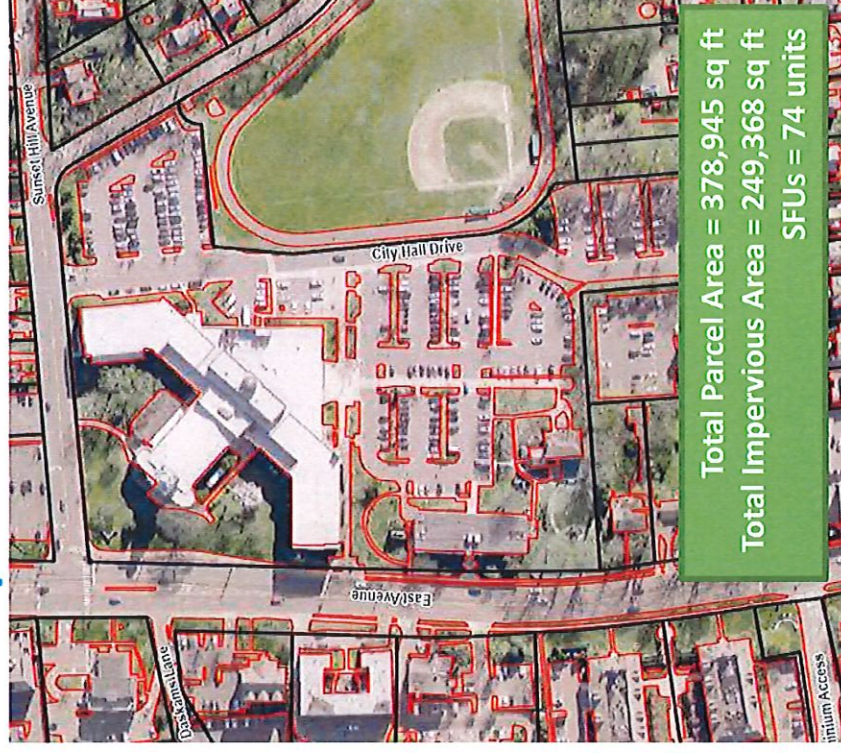
Chick-fil-A



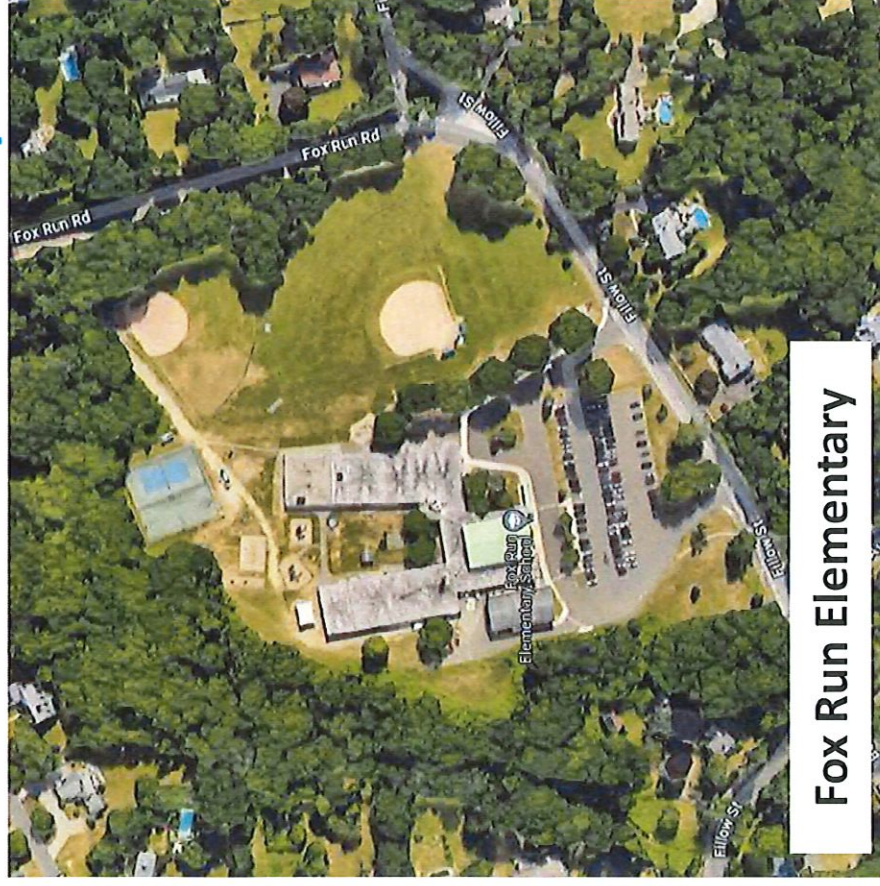
# Non-Residential Property Example #3



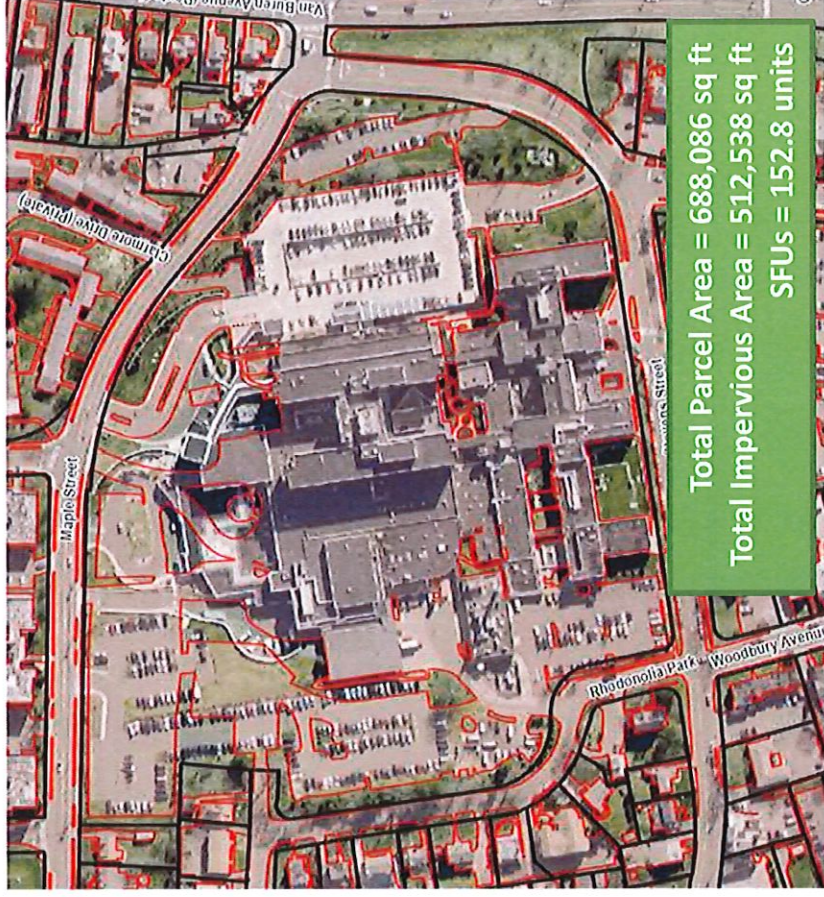
Norwalk City Hall



# Non-Residential Property Example #4



# Non-Residential Property Example #5



## Non-Residential Property Example #6



St. Paul's on the Green

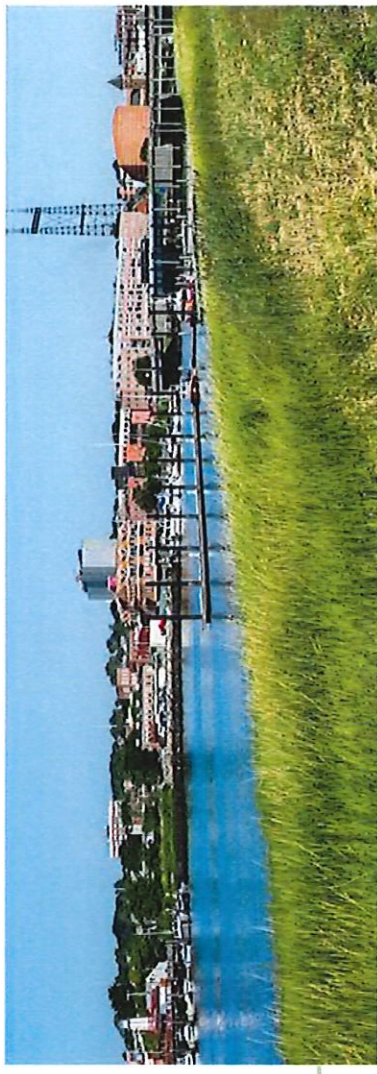


# Conclusions / Next Steps



# Conclusions

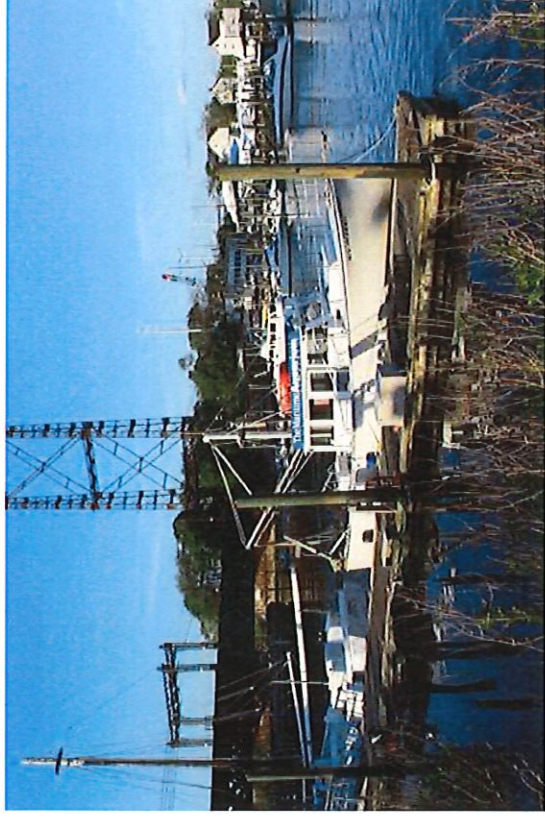
- Pros:
  - Equitable approach for contributing toward stormwater management
  - Dedicated funding for stormwater system management
  - Incentivizes stormwater best practices
- Cons:
  - Requires property owners to see a need for stormwater management funding
  - Contributions from City-Owned and Tax-Exempt Parcels
  - Requires program administration



## Next Steps

Engage a consultant to further evaluate the following:

- Level of Service Analysis
- Stakeholder/Public Outreach
- Update/Finalize SFU Model
- Review Ordinances
- Investigate Billing Systems – User fee



# Questions & Answers

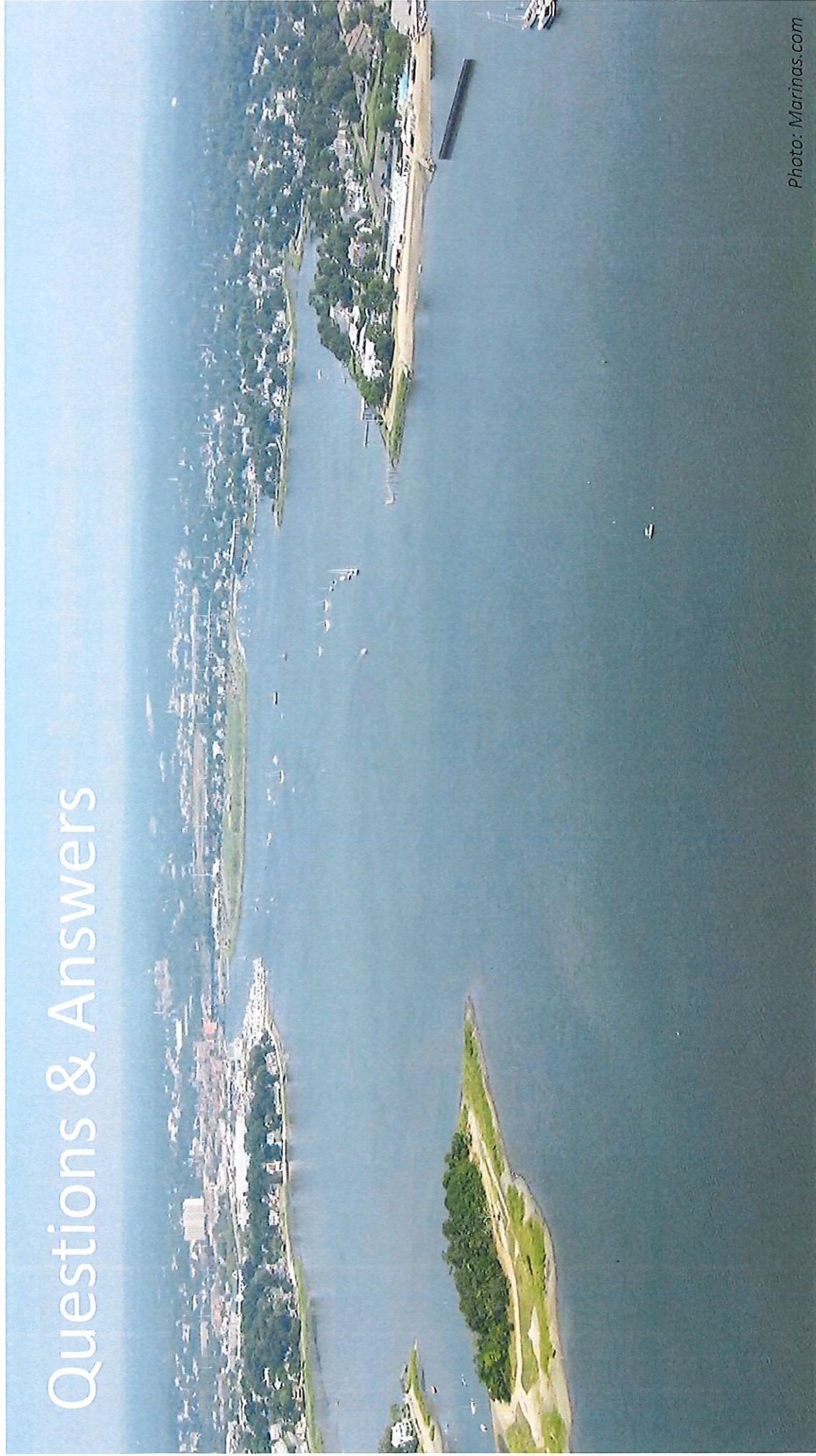


Photo: Marinas.com