CITY OF NEW LONDON
STORMWATER MANAGEMENT

RECOMMENDATIONS, CHALLENGES AND FUNDING OPTIONS
TALKING POINTS

• WHAT IS THE MS4 PERMIT
• DEVELOP A BETTER UNDERSTANDING OF THE CITY’S EXISTING AND FUTURE STORMWATER MANAGEMENT CHALLENGES
• ESTIMATE THE REVENUE REQUIRED TO MEET PRIORITY NEEDS
• EXAMINE AND DISCUSS THE FEASIBILITY OF FUNDING STORMWATER SERVICES THROUGH A USER BASED FEE
• PRESENT A TIMELINE FOR COMPLIANCE WITH THE MS4 PERMIT
REMEMBER SEPTEMBER 11, 2015

BANK STREET

BROAD STREET
REMEMBER SEPTEMBER 11, 2015

BROAD STREET

GARFIELD & JEFFERSON
CITY-WIDE STORMWATER INFRASTRUCTURE

STORMWATER SYSTEM ASSETS

• ESTIMATED VALUE OF MORE THAN $50 MILLION
• DRAINAGE OUTFALLS: 60
• DRAINAGE STRUCTURES: 1,100
• CATCH BASINS: 1,100
• ROADS: 63 MILES (MOST WITH DRAINAGE PIPES)
• STORMCEPTORS®: 4
• ADDITIONAL MAPPING AND INVESTIGATIONS ARE NEEDED TO FULLY UNDERSTAND ASSETS
THE MS4 PERMIT REQUIREMENTS

MS4 DEFINED

• MUNICIPAL
• SEPARATE
• STORM
• SEWER
• SYSTEM

• THIS GENERAL PERMIT REQUIRES EACH MUNICIPALITY TO TAKE STEPS TO KEEP THE STORMWATER ENTERING ITS STORM SEWER SYSTEMS CLEAN BEFORE THAT STORMWATER ENTERS WATER BODIES

SIX MINIMUM CONTROL MEASURES

• PUBLIC OUTREACH
• PUBLIC PARTICIPATION
• ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)
• CONSTRUCTION SITE STORMWATER RUNOFF CONTROL
• POST CONSTRUCTION STORMWATER MANAGEMENT
• POLLUTION PREVENTION AND GOOD HOUSEKEEPING
MS4 COMMUNITIES IN CT

DEEP MAP SHOWING COMMUNITIES THAT REQUIRE MS4 PERMITS BASED ON 2010 CENSUS.

OVER 110 MUNICIPALITIES REQUIRE PERMITS.
STORMWATER REGULATORY MANDATES

• THE CITY HAS BEEN AN MS4 PERMIT HOLDER SINCE 2003.
• THE PERMIT IS REQUIRED UNDER THE FEDERAL CLEAN WATER ACT AND ADMINISTERED BY THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (DEEP).
• THE MS4 PERMIT AUTHORIZES MUNICIPALITIES TO DISCHARGE STORMWATER FROM THE PUBLIC STORMWATER SYSTEM INTO LOCAL WATERS
• NEW MS4 PERMIT – EFFECTIVE JULY 1, 2017
• NEW REQUIREMENTS:
  • ENHANCED OPERATION, MAINTENANCE, AND MAPPING REQUIREMENTS
  • STORMWATER ACTIVITIES FOCUSING ON ILLICIT DISCHARGE AND DETECTION ELIMINATION (IDDE), POST CONSTRUCTION STORMWATER MANAGEMENT REGULATIONS AND STORMWATER RETROFITS
  • ADDITIONAL REQUIREMENTS REQUIRED TO ENHANCE BEST MANAGEMENT PRACTICES IN THE PUBLIC EDUCATION AND IDDE PROGRAMS TO ADDRESS WATER QUALITY IMPAIRMENTS - PHOSPHOROUS, NITROGEN, BACTERIA, AND MERCURY
LACK OF FUNDING LEADS TO OPERATIONS AND MAINTENANCE CHALLENGES

• NO DEDICATED STORMWATER STAFF – REACTIVE MAINTENANCE BASED ON IMMEDIATE PROBLEMS

• DEFERRED MAINTENANCE OF STORM SEWERS AND CATCH BASINS

• NO LONG TERM PROGRAM PLAN - HISTORICALLY “TASK ORIENTED” FOR PUBLIC WORKS BUDGETING PURPOSES

• CITY HAS NOT KEPT UP WITH INDUSTRY BEST PRACTICES FOR INFRASTRUCTURE RE-INVESTMENT WHICH IS 2% OF ASSET VALUE OR $1,000,000 ANNUALLY

• MS4 STORMWATER PERMIT CONTINUES TO EVOLVE REQUIRING ADDITIONAL O&M RESOURCES
STORMWATER MANAGEMENT FUNDING APPROACH

WHEN DO WE HAVE TO WORRY ABOUT THIS?

• WATER QUALITY ISSUES ARE A PROBLEM NOW AND STORMWATER MANAGEMENT IS PART OF THE SOLUTION
• STORMWATER PROGRAM IS NOT ADEQUATELY FUNDED ON AN ANNUAL BASIS TO MEET CURRENT NEEDS
• MS4 PHASE II PERMIT REQUIRES A SIGNIFICANT INCREASE TO EXISTING STORMWATER PROGRAMS

WHAT HAPPENS IF WE DO NOTHING?

• STILL HAVE TO MEET PERMIT CONDITIONS AND MANDATED PROGRAM INCREASES ARE EXPENSIVE
• DETERIORATION OF EXISTING ASSETS VALUED OVER $50 MILLION
• MS4 NONCOMPLIANCE CAN RESULT IN FINES & POTENTIAL 3RD PARTY SUITS

WHY A STORMWATER UTILITY MODEL?

• FEE BASED SYSTEM PROVIDES AN EQUITABLE AND FLEXIBLE DISTRIBUTION OF COST
• NO IMPACT ON TAX BASE AND USERS PAY FOR THEIR IMPACT
STORMWATER PROGRAM
FUNDING MECHANISMS

• OPTION A: TAX INCREASE
  • BASED ON PROPERTY VALUE
  • EXCLUDES CONTRIBUTION BY TAX EXEMPT PROPERTIES
  • FUNDING NOT GUARANTEED

• OPTION B: STORMWATER UTILITY (USER FEE)
  • BASED ON IMPERVIOUS COVER
  • ALL PROPERTY INCLUDED
  • DEDICATED FUNDING – STORMWATER ENTERPRISE FUND
BASIS FOR STORMWATER FUNDING

• ALL SYSTEM USERS PAY THEIR FAIR SHARE
• COMPLETELY BASED ON SQUARE FEET (SF) OF IMPERVIOUS COVER (IC) NOT PROPERTY VALUE
• RESIDENTIAL EQUIVALENT UNIT (REU) = 1000 SF OF IC
• CREDIT AND APPEALS SYSTEM
• QUARTERLY INTEGRATED BILLING SYSTEM WITH WATER AND SEWER BILLS
• ADEQUATE FUNDING FOR OPERATIONS AND MAINTENANCE AND CAPITAL IMPROVEMENTS
STORMWATER UTILITY OVERVIEW

HOW DOES IT WORK?

► ASSESSMENT ASSIGNED TO A PARCEL FOR A PORTION OF THE CITY’S STORMWATER SERVICES (SIMILAR TO WATER OR WASTEWATER FEES)

► ASSESSMENT IS PROPORTIONAL TO THE ESTIMATED STORMWATER RUNOFF FROM A PROPERTY
  • MORE IMPERVIOUS AREAS…
    ▪  …MORE STORMWATER RUNOFF…
    ▪  …LARGER BURDEN ON THE SYSTEM…
    ▪  …LARGER USER FEE

► TAX-EXEMPT PROPERTIES CONTRIBUTE 18% OF IMPERVIOUS COVER, DISTRIBUTING THE COST FAIRLY AND EQUITABLY
FUNDING ANALYSIS
BASIC APPROACH FOR CALCULATING FEES

- MEASURED IMPERVIOUS SURFACE FOR EACH PARCEL USING AERIAL PHOTOS AND GIS
- BILLING UNITS ARE CALCULATED BASED ON SET BILLING UNIT (SUCH AS 1,000 SQUARE FOOT INCREMENTS)
- TOTAL PROGRAM COSTS ÷ BILLING UNITS = $/BILLING UNIT
## STORMWATER PROGRAM COSTS

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Units</th>
<th>Total IC</th>
<th>% of IC</th>
<th>Average IC</th>
<th>REU</th>
<th>Quarterly Cost</th>
<th>Revenue</th>
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<tbody>
<tr>
<td>Residential</td>
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<tr>
<td>0-1000</td>
<td>286</td>
<td>191,916</td>
<td>0.47%</td>
<td>671</td>
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<td>$ 7.50</td>
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<td>1000-2000</td>
<td>1930</td>
<td>3,021,388</td>
<td>7.42%</td>
<td>1,565</td>
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<td>$ 15.00</td>
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<td>2000-3000</td>
<td>1520</td>
<td>3,705,912</td>
<td>9.10%</td>
<td>2,438</td>
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<td>$ 136,800</td>
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<td>3000 +</td>
<td>1218</td>
<td>5,504,091</td>
<td>13.52%</td>
<td>4,519</td>
<td>5</td>
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<td>Commercial</td>
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<td>16,880,522</td>
<td>41.46%</td>
<td>20,387</td>
<td>20.4</td>
<td>$ 152.90</td>
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<td>Tax Exempt</td>
<td>168</td>
<td>7,078,629</td>
<td>17.39%</td>
<td>42,135</td>
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<td>$ 316.01</td>
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<td>Municipal</td>
<td>112</td>
<td>4,330,290</td>
<td>10.64%</td>
<td>38,663</td>
<td>38.7</td>
<td>$ 289.97</td>
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<td>Totals</td>
<td>6062</td>
<td>40,712,748</td>
<td>100.00%</td>
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<td>$ 1,292,563</td>
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Residential Equivalent Unit = 1000
Square Feet (SF) of Impervious Cover (IC) = $7.50
EXAMPLES OF STORMWATER REGULATORY COMPLIANCE COSTS

NEW NPDES MS4 PERMIT – COST FOR CT COMMUNITIES*

• NEW LONDON - 4,985 PEOPLE/SQ. MILE
  ESTIMATED $1,300,000
• BRISTOL - 2,257 PEOPLE/SQ. MILE
  $882,000
• EAST HARTFORD - 2,593 PEOPLE/SQ. MILE
  $1.9 MILLION
• NEW MILFORD - 445 PEOPLE/SQ. MILE
  $2.2 MILLION
• KILLINGLY - 357 PEOPLE/SQ. MILE
  $467,000

*FROM CT CONFERENCE OF MUNICIPALITIES (CCM) TESTIMONY (DECEMBER 2014)
RECOMMENDATIONS OF THE STORMWATER COMMITTEE

GENERAL RECOMMENDATIONS

• ESTABLISH A STORMWATER ORDINANCE
• CREATE A STORMWATER AUTHORITY
• ESTABLISH A USER BASED FEE FUNDING PLAN
• ESTABLISH A DEDICATED ENTERPRISE FUND FOR STORMWATER
• ADMINISTER THE PROGRAM THROUGH THE W&WPCA
• UTILIZE EXISTING CONTRACT OPERATIONS
PATH TO IMPLEMENTATION

Get support for drafting a stormwater utility ordinance for Council consideration in June 2017

Outreach to the community to educate and get feedback on the proposed approach

Hold Public Hearing to consider ordinance

If approved, build billing database and implement new fee in October 2018
MEMBER RECOGNITION

STORMWATER TASKFORCE MEMBERS
BARRY WEINER
CHRIS BAKER
MARTHA CONN
DICK FRASER
GLENN HAMLER
MARGARITA MOGOLLON
MARTY OLSEN
CHUCK PRIMUS

W&WPCA MEMBERS
BARRY WEINER, CHAIRMAN
JOHN RUSSELL, VICE CHAIRMAN
MARGARITA MOGOLLON
MELISSA MAJOR
SCOTT LORING
GREG DZICZEK
ANGELA LEWIS-PETERS
MARTY OLSEN, COUNCIL LIAISON

CONSULTANTS
KLEINFELDER
JACOBS
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