

CITY OF ST. MARYS STORM WATER TASK FORCE

MEETING # 1
APRIL 30, 2019



CITY OF
ST. MARYS



STORMWATER UTILITY FEASIBILITY STUDY

- TASK 1: SWMP EVALUATION AND ASSESSMENT
 - TASK 2: STAKEHOLDER GROUP COORDINATION
 - TASK 3: COMMUNITY SURVEY
 - TASK 4: SW UTILITY RATE METHODOLOGY & RATE MODEL
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STORMWATER TASK FORCE

Meeting Number & Date	Meeting Topics
GMC Meeting #1 April 30, 2019	<ul style="list-style-type: none"> • Intro to Stormwater Management Programs & Funding • St Marys Stormwater Capital Improvement Program • Current Cost of Stormwater Services • Future Goals for the Stormwater Management Program • Extent of Service (EOS)
Interim Meeting #1a May 2019	<ul style="list-style-type: none"> • Discuss & refine future goals • Future resource needs and program priorities
GMC Meeting #2 May 2019	<ul style="list-style-type: none"> • Future Cost of Service • Funding Options • Stormwater Utility Methodology & Rate • Billing Mechanism • Public Education
Interim meeting #2a June 2019	<ul style="list-style-type: none"> • Complete a public education plan • Discuss recommendations for City Council • Designate member to write white paper
GMC Meeting #3 June 2019	<ul style="list-style-type: none"> • Recommendations to City Council • Review and Update White Paper • Next Steps/Future Project Schedule
Presentation to City Council July 1, 2019	<ul style="list-style-type: none"> • Present findings of Feasibility Study • Stakeholder to present white paper

STORMWATER 101



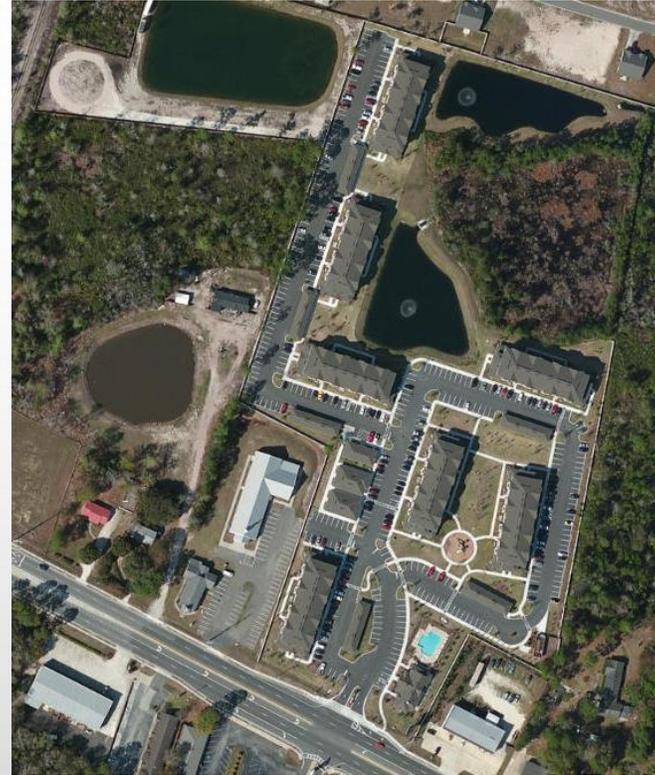
07/01/2012

07/01/2012

WHY IS THERE A NEED FOR STORMWATER MANAGEMENT?



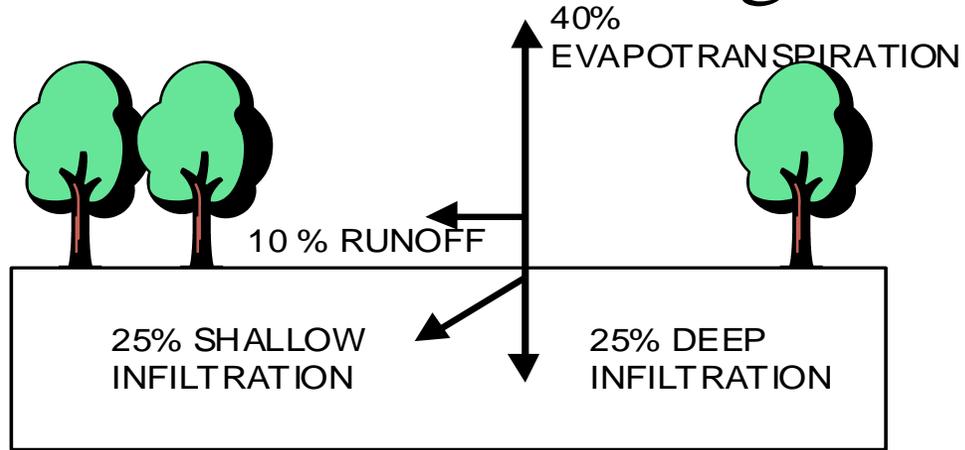
2006



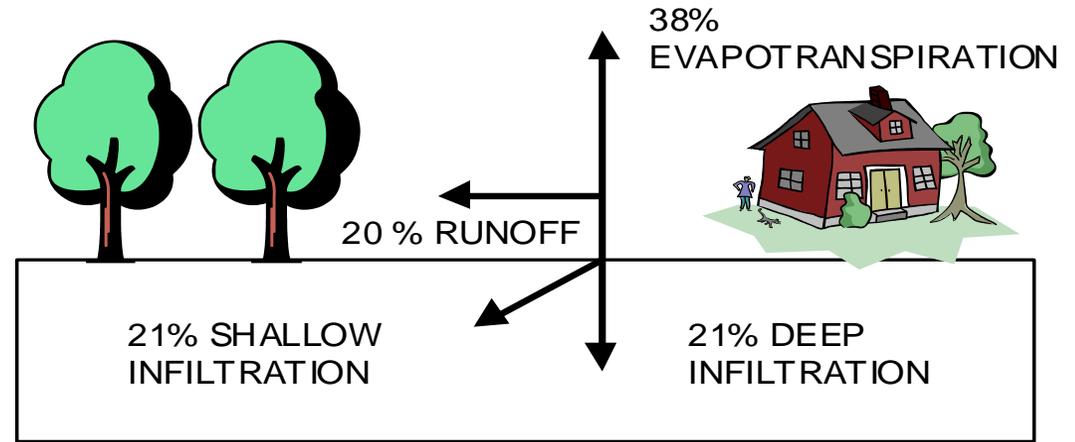
2013

NEW DEVELOPMENT = MORE STORMWATER RUNOFF

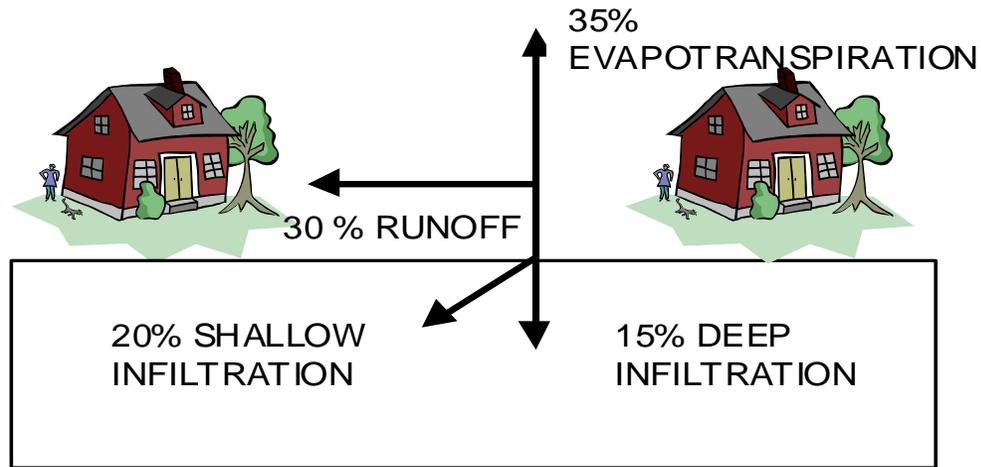
Changes in Runoff Flows



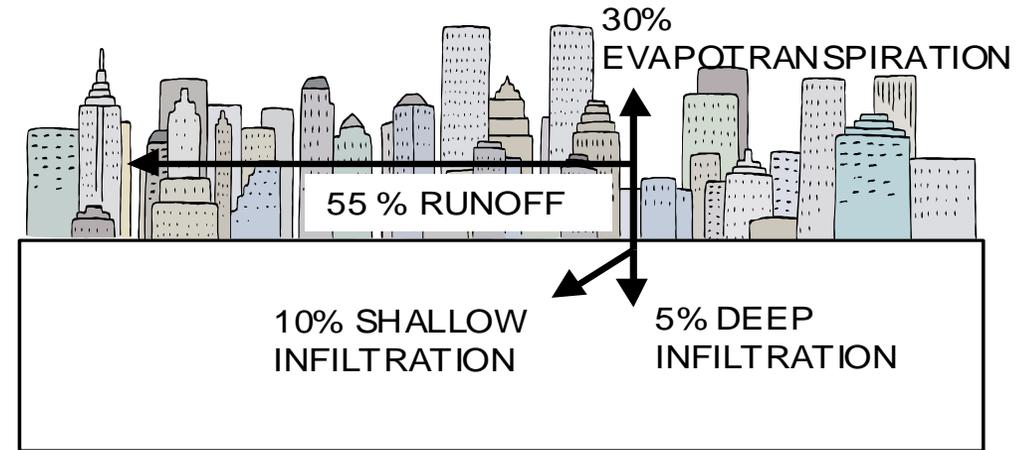
NATURAL GROUND COVER



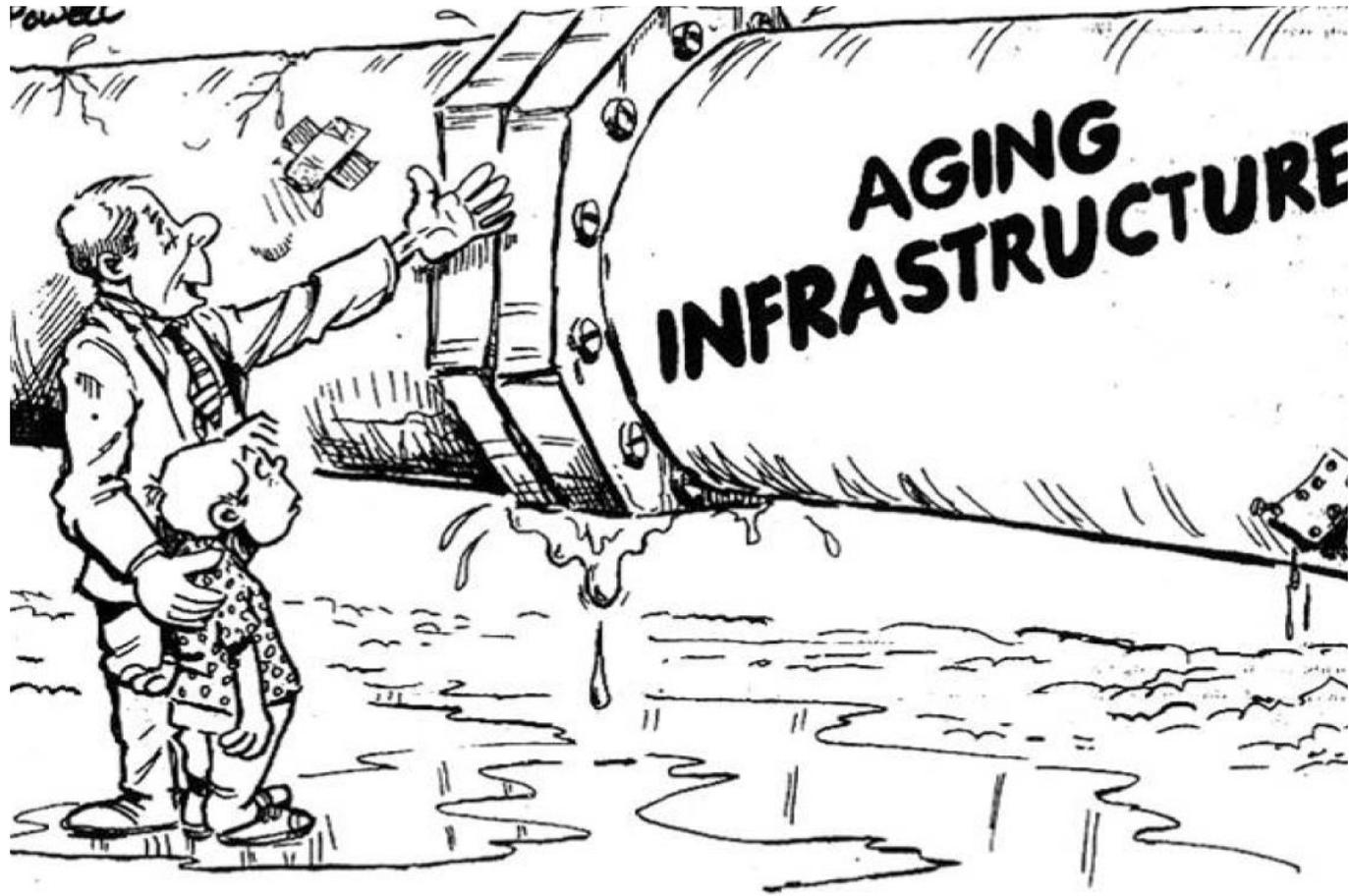
10% - 20% IMPERVIOUS SURFACE



35% - 50% IMPERVIOUS SURFACE



75% - 100% IMPERVIOUS SURFACE



"Someday, son, all this will be yours!"



PROPOSED STORM WATER IMPROVEMENTS
CAMDEN COUNTY, GEORGIA

PREPARED BY:
CITY OF ST. MARYS
JUNE 5, 2008



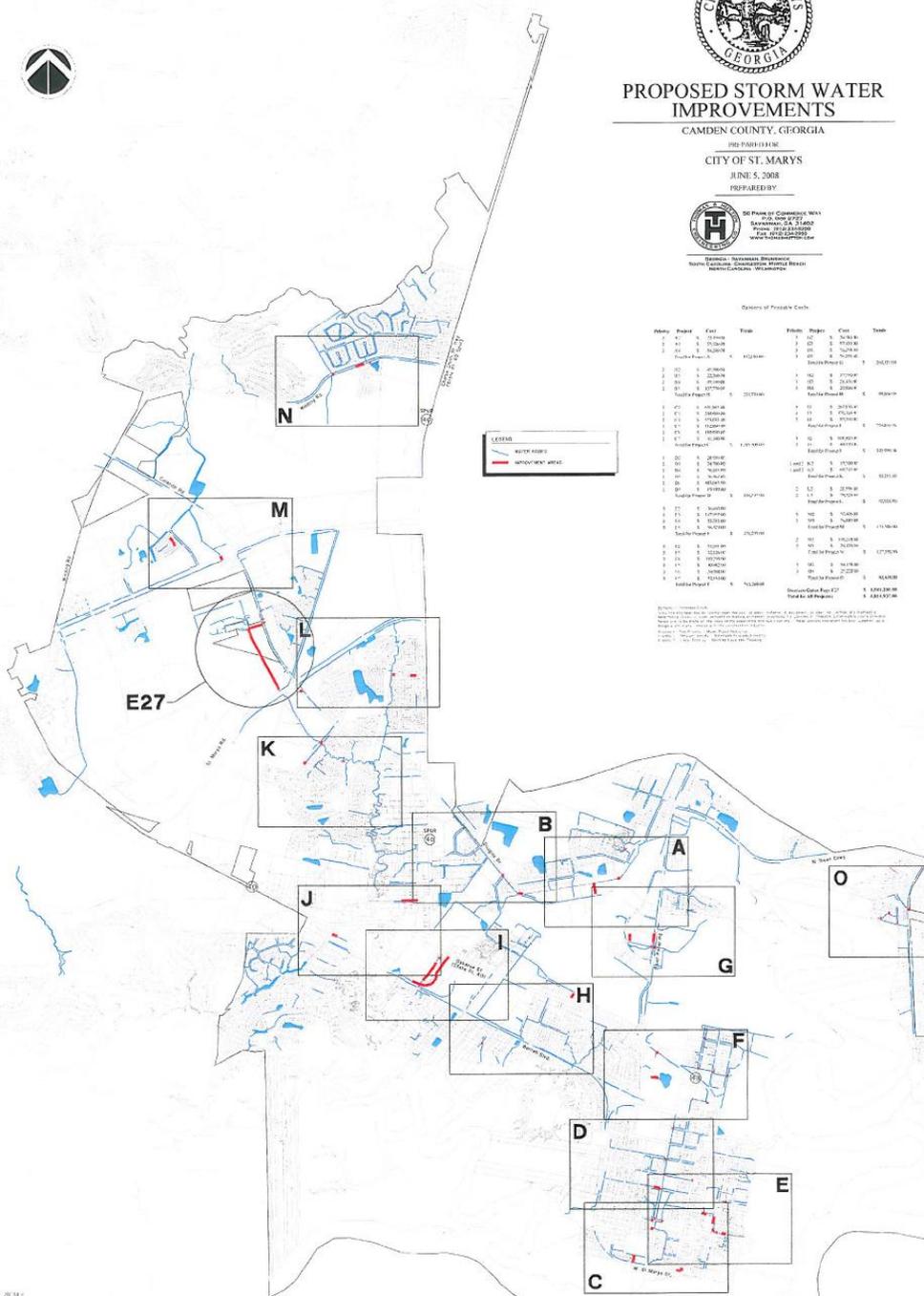
DESIGNED BY: **STORMWATER DRAINAGE**
CONSULTING ENGINEERS
1000 W. BROADWAY, SUITE 100
MARIETTA, GEORGIA 30067

Summary of Proposed Costs

Station	Project	Cost	Total	Priority	Project	Cost	Total
1	1	10,000	10,000	1	1	10,000	10,000
2	2	15,000	25,000	2	2	15,000	25,000
3	3	20,000	45,000	3	3	20,000	45,000
4	4	25,000	70,000	4	4	25,000	70,000
5	5	30,000	100,000	5	5	30,000	100,000
6	6	35,000	135,000	6	6	35,000	135,000
7	7	40,000	175,000	7	7	40,000	175,000
8	8	45,000	220,000	8	8	45,000	220,000
9	9	50,000	270,000	9	9	50,000	270,000
10	10	55,000	325,000	10	10	55,000	325,000
11	11	60,000	385,000	11	11	60,000	385,000
12	12	65,000	450,000	12	12	65,000	450,000
13	13	70,000	520,000	13	13	70,000	520,000
14	14	75,000	595,000	14	14	75,000	595,000
15	15	80,000	675,000	15	15	80,000	675,000
16	16	85,000	760,000	16	16	85,000	760,000
17	17	90,000	850,000	17	17	90,000	850,000
18	18	95,000	945,000	18	18	95,000	945,000
19	19	100,000	1,045,000	19	19	100,000	1,045,000
20	20	105,000	1,150,000	20	20	105,000	1,150,000
21	21	110,000	1,260,000	21	21	110,000	1,260,000
22	22	115,000	1,375,000	22	22	115,000	1,375,000
23	23	120,000	1,495,000	23	23	120,000	1,495,000
24	24	125,000	1,620,000	24	24	125,000	1,620,000
25	25	130,000	1,750,000	25	25	130,000	1,750,000
26	26	135,000	1,885,000	26	26	135,000	1,885,000
27	27	140,000	2,025,000	27	27	140,000	2,025,000
28	28	145,000	2,170,000	28	28	145,000	2,170,000
29	29	150,000	2,320,000	29	29	150,000	2,320,000
30	30	155,000	2,475,000	30	30	155,000	2,475,000
31	31	160,000	2,635,000	31	31	160,000	2,635,000
32	32	165,000	2,800,000	32	32	165,000	2,800,000
33	33	170,000	2,970,000	33	33	170,000	2,970,000
34	34	175,000	3,145,000	34	34	175,000	3,145,000
35	35	180,000	3,325,000	35	35	180,000	3,325,000
36	36	185,000	3,510,000	36	36	185,000	3,510,000
37	37	190,000	3,700,000	37	37	190,000	3,700,000
38	38	195,000	3,895,000	38	38	195,000	3,895,000
39	39	200,000	4,095,000	39	39	200,000	4,095,000
40	40	205,000	4,295,000	40	40	205,000	4,295,000
41	41	210,000	4,495,000	41	41	210,000	4,495,000
42	42	215,000	4,695,000	42	42	215,000	4,695,000
43	43	220,000	4,895,000	43	43	220,000	4,895,000
44	44	225,000	5,095,000	44	44	225,000	5,095,000
45	45	230,000	5,295,000	45	45	230,000	5,295,000
46	46	235,000	5,495,000	46	46	235,000	5,495,000
47	47	240,000	5,695,000	47	47	240,000	5,695,000
48	48	245,000	5,895,000	48	48	245,000	5,895,000
49	49	250,000	6,095,000	49	49	250,000	6,095,000
50	50	255,000	6,295,000	50	50	255,000	6,295,000
51	51	260,000	6,495,000	51	51	260,000	6,495,000
52	52	265,000	6,695,000	52	52	265,000	6,695,000
53	53	270,000	6,895,000	53	53	270,000	6,895,000
54	54	275,000	7,095,000	54	54	275,000	7,095,000
55	55	280,000	7,295,000	55	55	280,000	7,295,000
56	56	285,000	7,495,000	56	56	285,000	7,495,000
57	57	290,000	7,695,000	57	57	290,000	7,695,000
58	58	295,000	7,895,000	58	58	295,000	7,895,000
59	59	300,000	8,095,000	59	59	300,000	8,095,000
60	60	305,000	8,295,000	60	60	305,000	8,295,000
61	61	310,000	8,495,000	61	61	310,000	8,495,000
62	62	315,000	8,695,000	62	62	315,000	8,695,000
63	63	320,000	8,895,000	63	63	320,000	8,895,000
64	64	325,000	9,095,000	64	64	325,000	9,095,000
65	65	330,000	9,295,000	65	65	330,000	9,295,000
66	66	335,000	9,495,000	66	66	335,000	9,495,000
67	67	340,000	9,695,000	67	67	340,000	9,695,000
68	68	345,000	9,895,000	68	68	345,000	9,895,000
69	69	350,000	10,095,000	69	69	350,000	10,095,000
70	70	355,000	10,295,000	70	70	355,000	10,295,000
71	71	360,000	10,495,000	71	71	360,000	10,495,000
72	72	365,000	10,695,000	72	72	365,000	10,695,000
73	73	370,000	10,895,000	73	73	370,000	10,895,000
74	74	375,000	11,095,000	74	74	375,000	11,095,000
75	75	380,000	11,295,000	75	75	380,000	11,295,000
76	76	385,000	11,495,000	76	76	385,000	11,495,000
77	77	390,000	11,695,000	77	77	390,000	11,695,000
78	78	395,000	11,895,000	78	78	395,000	11,895,000
79	79	400,000	12,095,000	79	79	400,000	12,095,000
80	80	405,000	12,295,000	80	80	405,000	12,295,000
81	81	410,000	12,495,000	81	81	410,000	12,495,000
82	82	415,000	12,695,000	82	82	415,000	12,695,000
83	83	420,000	12,895,000	83	83	420,000	12,895,000
84	84	425,000	13,095,000	84	84	425,000	13,095,000
85	85	430,000	13,295,000	85	85	430,000	13,295,000
86	86	435,000	13,495,000	86	86	435,000	13,495,000
87	87	440,000	13,695,000	87	87	440,000	13,695,000
88	88	445,000	13,895,000	88	88	445,000	13,895,000
89	89	450,000	14,095,000	89	89	450,000	14,095,000
90	90	455,000	14,295,000	90	90	455,000	14,295,000
91	91	460,000	14,495,000	91	91	460,000	14,495,000
92	92	465,000	14,695,000	92	92	465,000	14,695,000
93	93	470,000	14,895,000	93	93	470,000	14,895,000
94	94	475,000	15,095,000	94	94	475,000	15,095,000
95	95	480,000	15,295,000	95	95	480,000	15,295,000
96	96	485,000	15,495,000	96	96	485,000	15,495,000
97	97	490,000	15,695,000	97	97	490,000	15,695,000
98	98	495,000	15,895,000	98	98	495,000	15,895,000
99	99	500,000	16,095,000	99	99	500,000	16,095,000
100	100	505,000	16,295,000	100	100	505,000	16,295,000

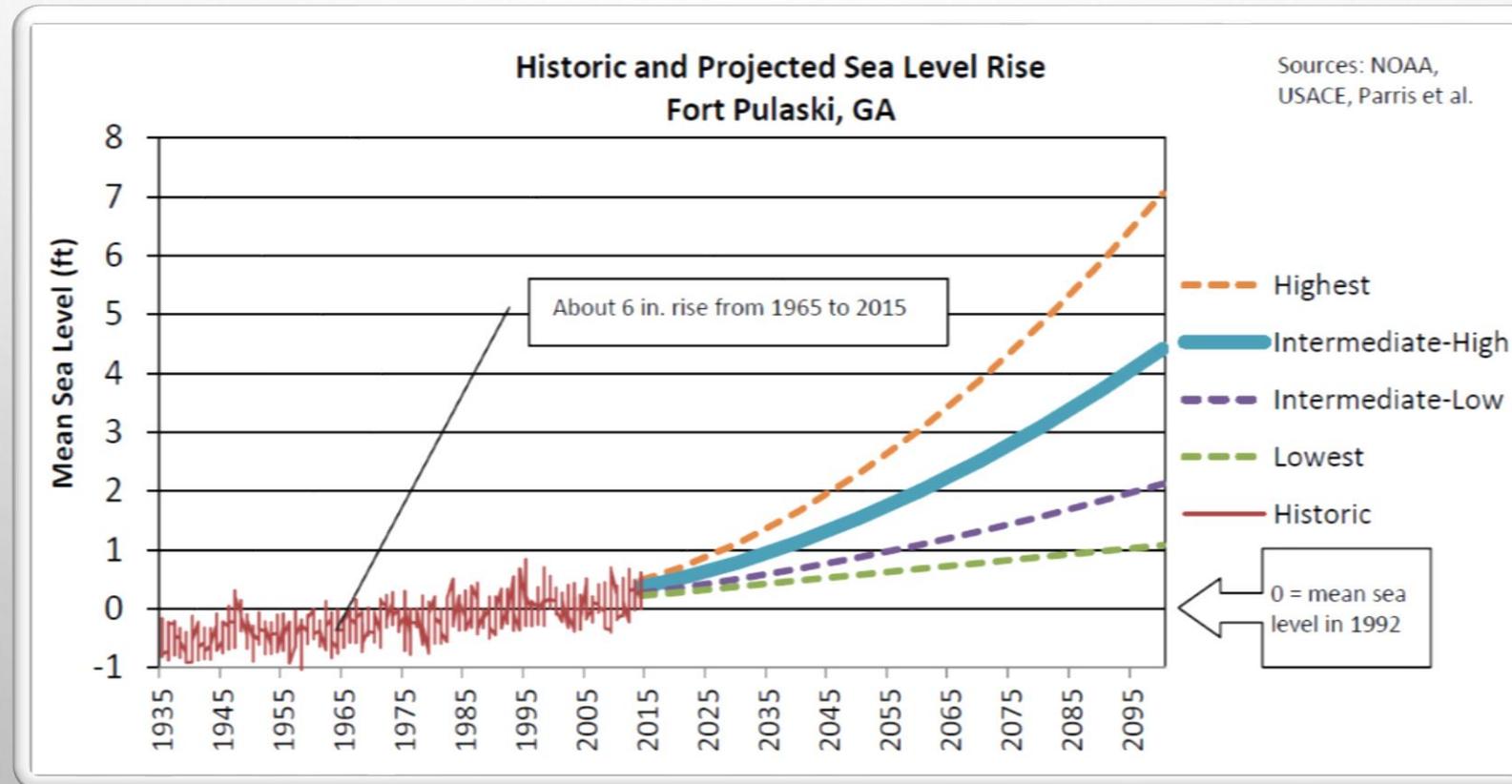
ST MARYS STORM WATER MASTER PLAN

- COMPLETED IN 2008
- \$6.9 MILLION IN NEEDED CAPITAL DRAINAGE PROJECTS
- \$4.0 MILLION HIGH PRIORITY

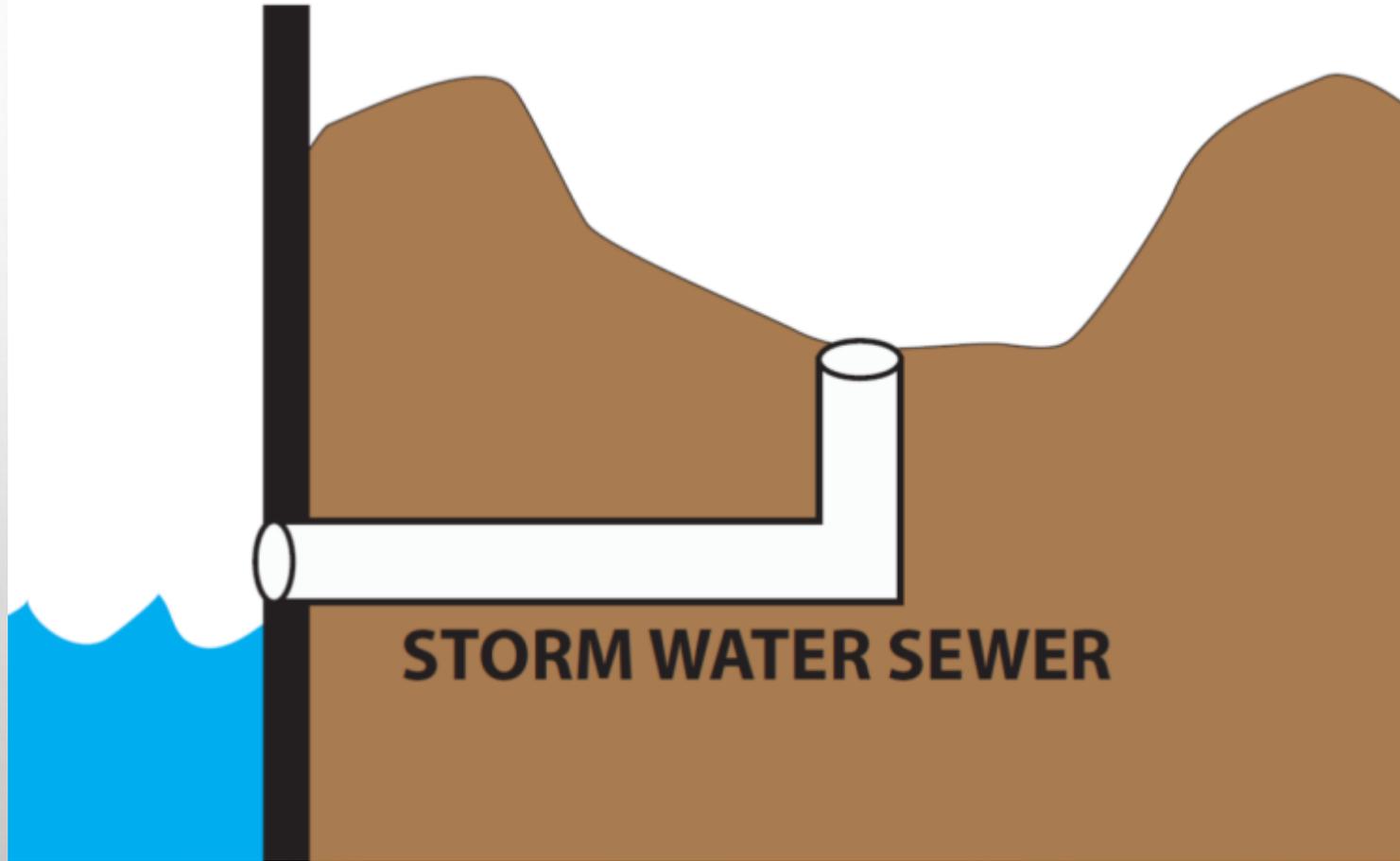


SEA LEVEL RISE STUDY

- STORMWATER DRAINAGE INFRASTRUCTURE IS VERY SENSITIVE TO CONTINUED SEA-LEVEL RISE
- LOW LYING AREAS IN DOWNTOWN ALSO SUBJECT TO INUNDATION



SEAWALL

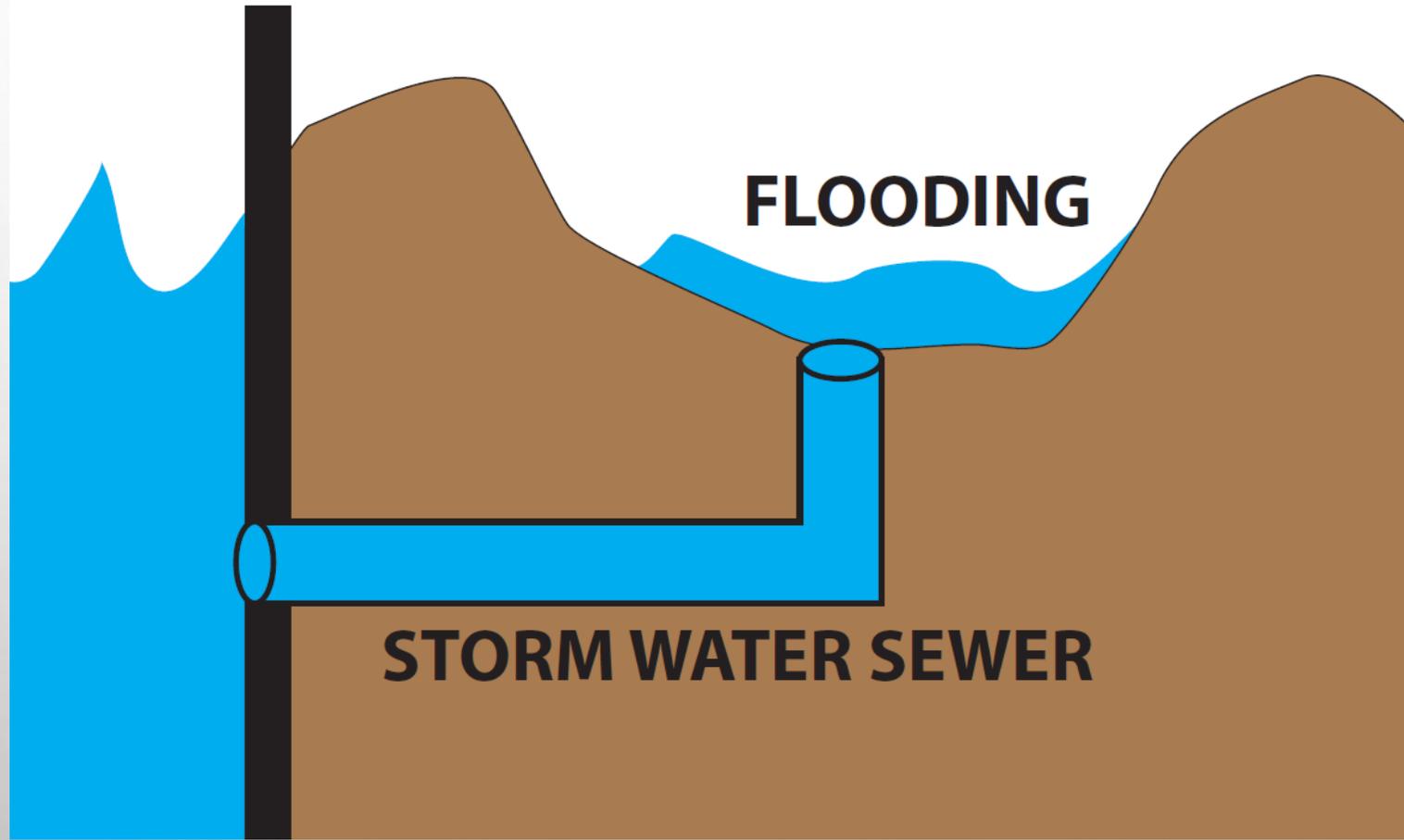


STORM WATER SEWER

SEAWALL

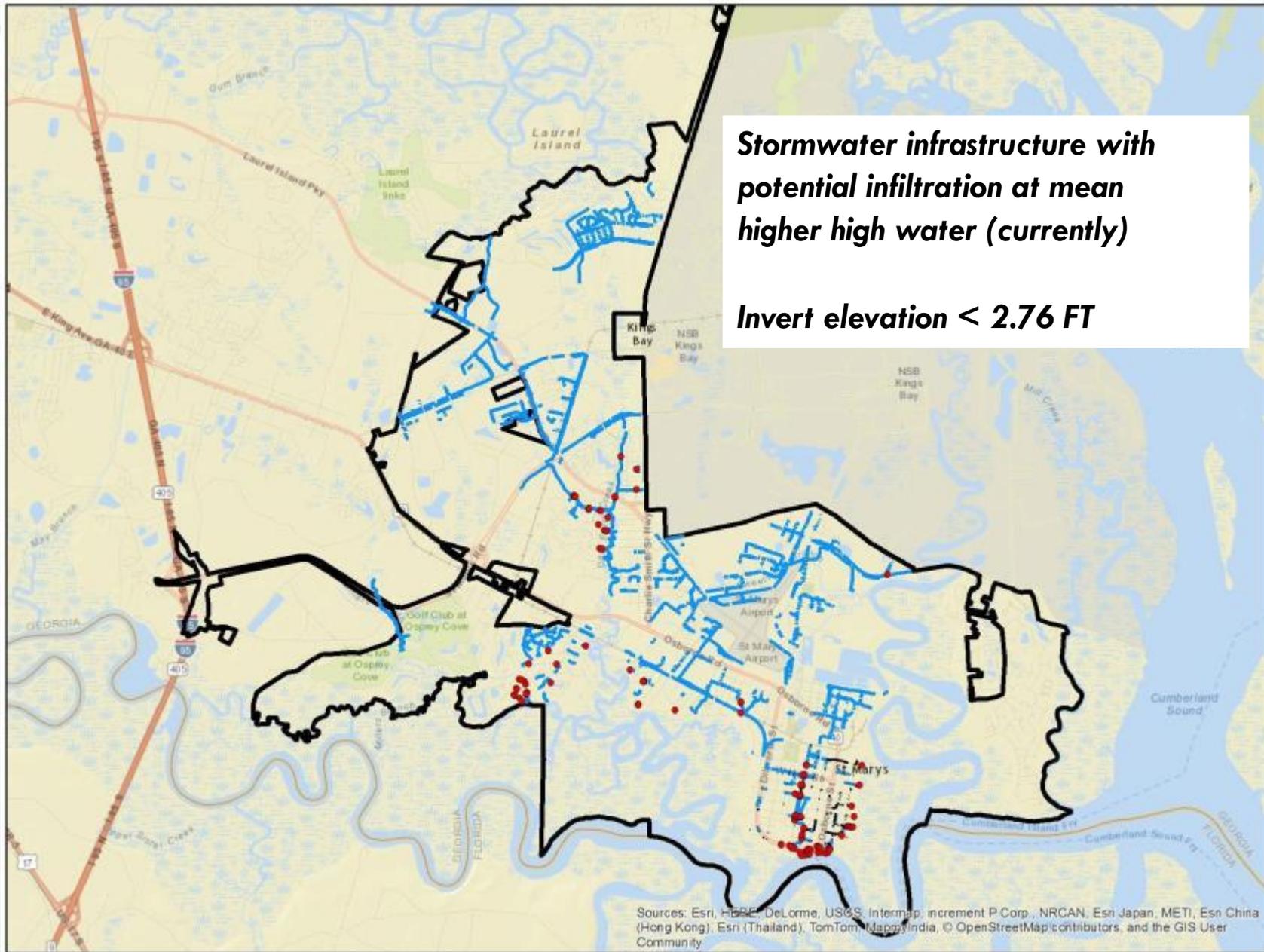
FLOODING

STORM WATER SEWER



**Stormwater infrastructure with
potential infiltration at mean
higher high water (currently)**

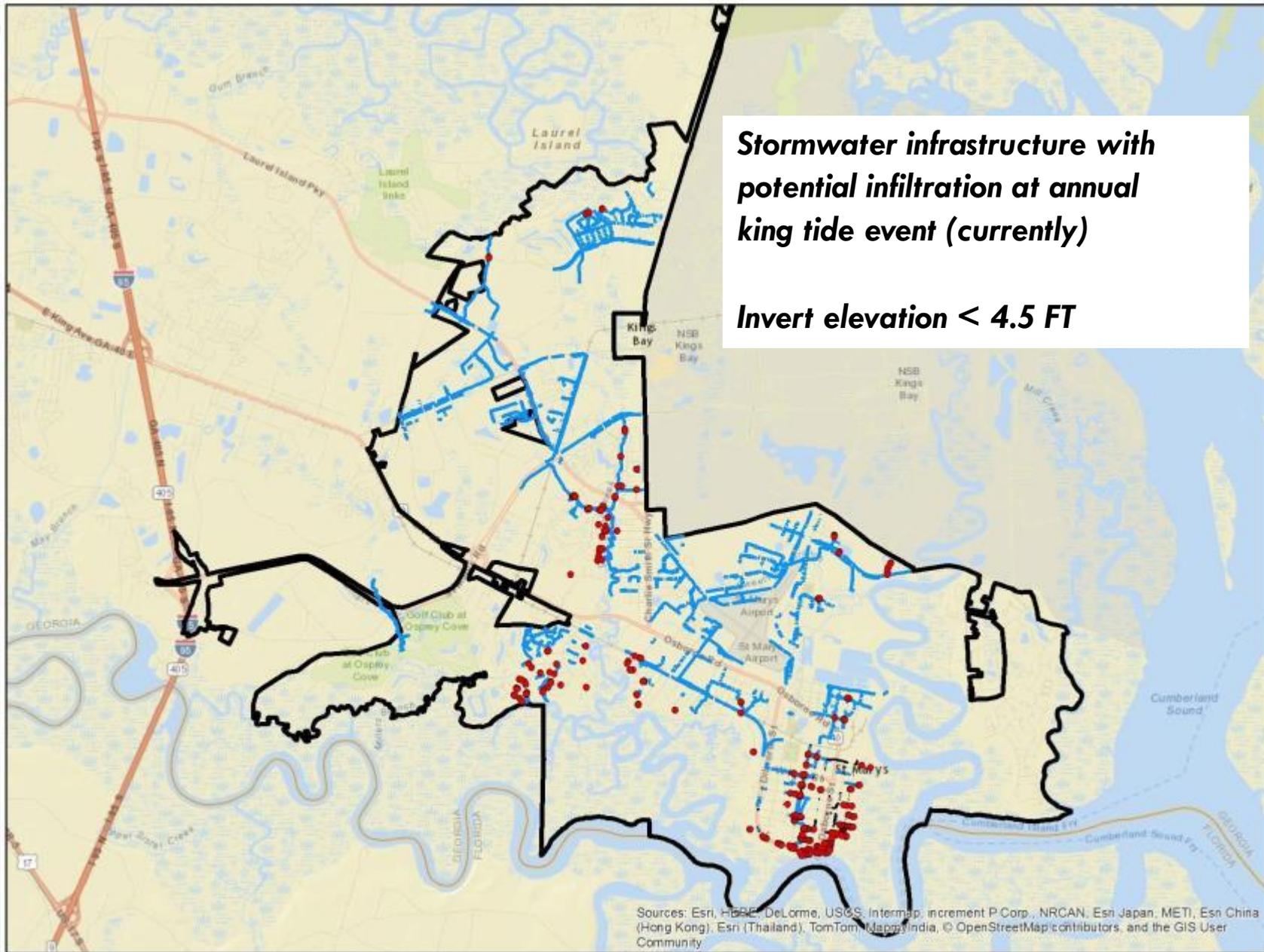
Invert elevation < 2.76 FT



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, Mapbox, India, © OpenStreetMap contributors, and the GIS User Community

**Stormwater infrastructure with
potential infiltration at annual
king tide event (currently)**

Invert elevation < 4.5 FT



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, Mapbox, India, © OpenStreetMap contributors, and the GIS User Community

POTENTIAL SOLUTIONS

Stormwater backflow preventers and pipe enlargement



FIGURE 4.9: STORMWATER TIDAL BACKFLOW PREVENTERS, NEAR INTERSECTION OF 14TH ST. AND VENETIAN DR.

CIP PRIORITIZATION METRIC (2008 SW MASTERPLAN)

- PRIORITY 1 = MAJOR FLOOD REDUCTION
- PRIORITY 2 = MINIMIZES ROADWAY FLOODING
- PRIORITY 3 = MINIMIZES LOCALIZED FLOODING

	Priority 1	Priority 1 (Colerain Oaks S/D)	Priority 2	Priority 3	Total
Sheet #'s SW Masterplan	C, D, & K (1&2)	Extra	A, B, L, & N	E, F, G, H, I, J, M, & O	
Cost	\$2.52 Million	\$1.54 Million	\$0.62 Million	\$2.24 Million	\$6.92 Million
Projects	14	1	11	26	52

CIP PROGRESS/UPDATES SINCE 2008

- **PROGRESS**

- COMPLETED (C3, C4, C6, & J2); UNDER CONTRACT (A3 & B5); SHRIMP (C5 & C7); REMOVED (H2 – ADDRESSED BY CREDIT UNION)
 - \$1.46 MILLION
- PARTIALLY COMPLETED/REDUCED SCALE: C2, E3 (SHRIMP), & F4
- REMOVED PRIVATE SEGMENTS: I2, I3, & I4 (MALL)

- **UPDATES**

- M3 NEEDS TO BE EXPANDED; F6 IS STILL AN ISSUE; OTHER (PRIVATE) FLOODING NEAR J2
- 8 NEW PROJECT AREAS IDENTIFIED BASED ON COMPLAINTS/PUBLIC WORKS STAFF INPUT
- NEW DATA AVAILABLE FOR STRUCTURES IMPACTED BY SEA LEVEL RISE

PROCESS TO UPDATE CIP LIST

- CREATED MASTER EXCEL FILE WITH UNIT PRICING AND UNITS NEEDED
- UPDATED PROGRESS SINCE 2008 AND ONGOING EFFORTS
- INCREASED UNIT PRICING FROM 2008 TO 2019 BASED ON RECENT DATA
 - TOTAL COST INCREASE FOR 30 PROJECTS WITH NO CHANGE IN SCOPE WAS 29.0%

Stormwater Masterplan Projects Only	2008	2019
Total Projects	52	43
Total Cost	\$6.92 Million	\$5.86 Million
Flow Diversion Colerain Oaks S/D	\$1.54 Million	\$1.99 Million
All Other Projects	\$5.38 Million	\$3.87 Million

ADDITIONAL PROJECTS: “P”

- THESE WERE IDENTIFIED BY PUBLIC WORKS STAFF
 - COMPLAINTS AND/OR KNOWN DRAINAGE DEFICIENCIES
- P1-P3 & P5-P9 WERE ASSIGNED COSTS FOR SURVEY AND ENGINEERING CALCULATIONS TO DEVELOP DRAINAGE SOLUTIONS
 - \$166,750 (38% FOR CROOKED RIVER SUBDIVISION)
- SLR PRIORITIZATION STUDY - \$23,000
 - DETERMINE FEASIBILITY WITH EXISTING INFRASTRUCTURE (63+ OUTFALLS IDENTIFIED)
 - DETERMINE POTENTIAL EFFECTIVENESS (E.G., ADJACENT ELEVATIONS)
 - DETERMINE EXTENTS & CATEGORIZE IMPACTED AREA

UPDATED CIP SUMMARY: 2019

- CONTINUED WITH 30% CONTINGENCY FROM 2008 ESTIMATE
- ADDED THE FOLLOWING:
 - 15% FOR SURVEY/ENGINEERING
 - \$10,000/PROJECT FOR GENERAL E&S CONTROL, TRAFFIC CONTROL, STRIPING, SURVEY/STAKING, AND AS-BUILTS
 - ADDITIONAL COST = \$1.31 MILLION
- UPDATED TOTAL CIP = \$7.354 MILLION; 52 PROJECTS
 - COST WILL INCREASE WHEN CONSTRUCTION COST IS ADDED FOR “P” PROJECTS (DRAINAGE STUDIES/SLR PRIORITIZATION)

COMMUNITY RATING SYSTEM (CRS)

- NFIP VOLUNTARY PROGRAM OFFERS DISCOUNTS ON FLOOD INSURANCE TO REWARD GOOD FLOODPLAIN MANAGEMENT WITHIN A COMMUNITY.
- COMMUNITIES RECEIVE POINTS FOR IMPLEMENTING ACTIVITIES ABOVE MINIMUM STANDARDS.
- THE MORE POINTS THE GREATER THE REDUCTION ON FLOOD INSURANCE POLICIES WITHIN THAT COMMUNITY.
- ST. MARYS RECEIVED A 7, WHICH RESULTS IN A 10 - 15% DISCOUNT ON FLOOD POLICIES.

OPERATIONS AND MAINTENANCE OF THE DRAINAGE SYSTEM

- 96,000 FT (18 MILES) OF STORM SEWER PIPE AND ASSOCIATED STRUCTURAL CONTROLS, INCLUDING CATCH BASINS, INLETS, HEADWALLS AND OUTFALLS
- NEW DEDICATED DRAINAGE CREW



CURRENT STORMWATER MANAGEMENT COSTS

<i>Cost Center</i>		<i>FY 2017</i>	<i>FY 2018</i>	<i>FY 2019</i>
Salaries, Wages and Employee Benefits				
Public Works	25% of Crew Time on Drainage Maintenance and CIP	\$233,665	\$240,791	\$244,916
Planning	10% of Staff Time on Floodplain Management	\$18,776	\$23,458	\$22,903
Purchased/Contracted Services				
Public Works	25% of Dept.	\$16,702	\$16,287	\$30,519
Hwy & Streets	100% of Engineers & Consultants (FY 2019), 10% of road paving and drainage	\$14,305	\$5,000	\$46,000
Planning	10% related to Floodplain Management	\$1,197	\$2,290	\$3,865
Sewer	100% of WPP Monitoring Fees	\$36,000	\$23,000	\$36,000
Supplies				
Public Works	25% of Dept.	\$37,869	\$38,258	\$39,196
Hwy & Streets	50% of Road Paving & Drainage Supplies	\$29,936	\$30,000	\$30,000
Planning	10% related to Floodplain Management	\$574	\$1,052	\$590
Capital Outlays				
	* CIP allocations have been project specific. There is not a set CIP budget for stormwater.	\$0	\$0	\$0
Debt Service				
	* There is currently no amortized costs related to stormwater.	\$0	\$0	\$0
Total Expenditures		\$389,024	\$380,135	\$453,989

ADDITIONAL FINANCIAL NEEDS

- **DRAINAGE SYSTEM MAINTENANCE**
 - NEW DEDICATED DRAINAGE CREW - \$180,345.68
 - DRAINAGE SUPPLIES - \$50,000
 - PURCHASED CONTRACTED SERVICES - \$150,000
- **CIP IMPLEMENTATION**
 - ANNUAL “PAY AS YOU GO” PROJECTS
 - AMORTIZE COSTS

TWO STEP BUILDING PROCESS



HOW CAN YOU FUND AN SWMP?

PRIMARY FUNDING SOURCES

- GENERAL FUND APPROPRIATIONS
- USER FEES/STORMWATER UTILITIES



SECONDARY FUNDING SOURCES

- *SPECIAL PURPOSE LOCAL OPTION SALES TAX (SPLOST) ~ \$400K AVAILABLE FOR ALL CIP*
- SPECIAL ASSESSMENTS/TAX DISTRICTS
- SPECIAL SERVICE FEES
- GENERAL OBLIGATION BONDS OR REVENUE BONDS
- IN-LIEU OF CONSTRUCTION FEES
- FEDERAL AND STATE GRANT FUNDING

STORMWATER UTILITY OVERVIEW

- FUNCTIONS AS A USER FEE BASED SYSTEM SIMILAR TO OTHER PUBLIC UTILITIES (WATER, SEWER, SANITATION, ETC.)
- 100% OF THE REVENUES DEDICATED TO THE STORMWATER PROGRAM
- ASSIGNS COSTS TO ALL PARCELS BASED ON IMPERVIOUS SURFACE



WHY CONSIDER A STORMWATER UTILITY?

- ASSIGNS SWMP COSTS TO ALL PARCELS IN AN EQUITABLE MANNER
 - EVERY DEVELOPED PROPERTY CONTRIBUTES
 - FEES ACCORDING TO DEMAND AND SERVICES RECEIVED
- STABLE/CONSISTENT ANNUAL REVENUE STREAM
- ELIMINATE NEED FOR FUTURE MILLAGE INCREASE
- LOWER COST TO RESIDENTIAL CUSTOMERS VS. TAX LEVY
- REVENUES CAN PAY FOR BOND AND GEFA LOANS DEBT SERVICE AS WELL AS “CITY MATCH” FOR GRANTS

GEORGIA STORMWATER UTILITIES

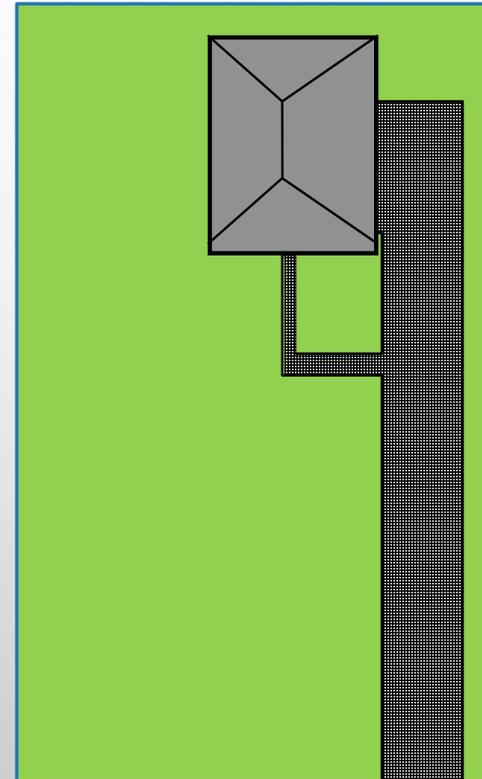


- HOW MANY?
 - FIRST GEORGIA SW UTILITY WAS GRIFFIN, GA IN 1998
 - OVER 65 SW UTILITIES IN 2018
- WHAT ABOUT COASTAL GEORGIA AREA?
 - HINESVILLE, GARDEN CITY, VALDOSTA, STATESBORO, RICHMOND HILL, BRUNSWICK
- TYPICAL RESIDENTIAL CUSTOMER RATE IN GEORGIA?
 - APPROXIMATELY \$4.50 - \$5.00 PER MONTH STATEWIDE

HOW A SW UTILITY USER FEE IS CALCULATED:

EQUIVALENT RESIDENTIAL UNIT (ERU) = BILLING UNIT

- ERU = SINGLE-FAMILY RESIDENTIAL MEDIAN IMPERVIOUS AREA
- EXAMPLE ERU:
 - ROOFTOP = 1,600 SQFT
 - DRIVEWAY = 1,000 SQFT
 - SIDEWALK = 400 SQFT
 - **TOTAL ERU = 3,000 SQFT**
- **EXAMPLE: 1 ERU = 3,000 SQ FT = 1.0 BILLING UNIT**



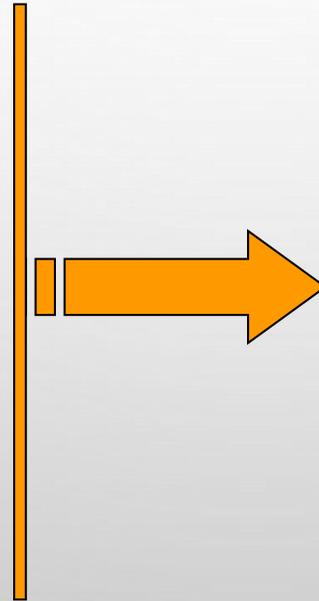
HOW A SW UTILITY USER FEE IS CALCULATED (ERU):

- Single-Family



Flat Fee
(1 ERU)

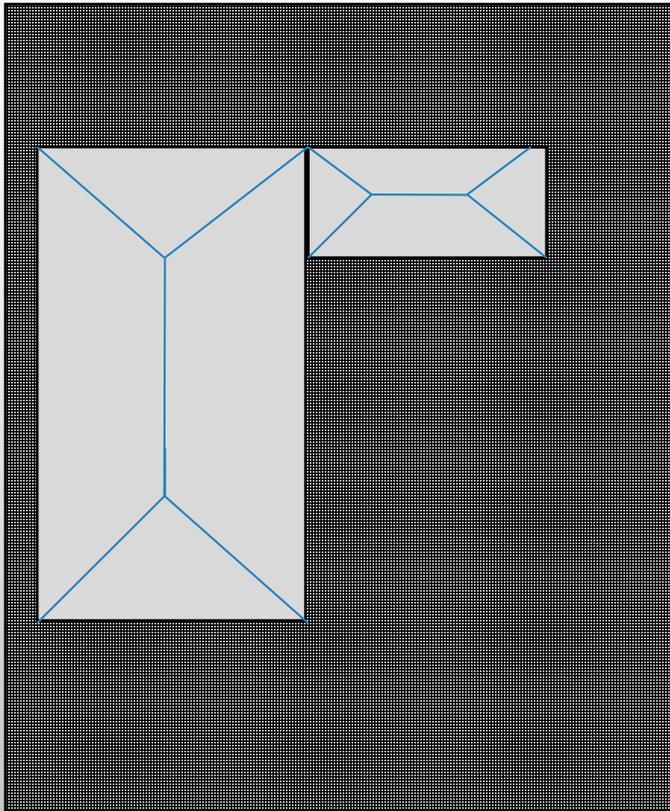
- Multi-Family
- Duplexes
- Commercial
- Industrial
- Institutional
- Governmental



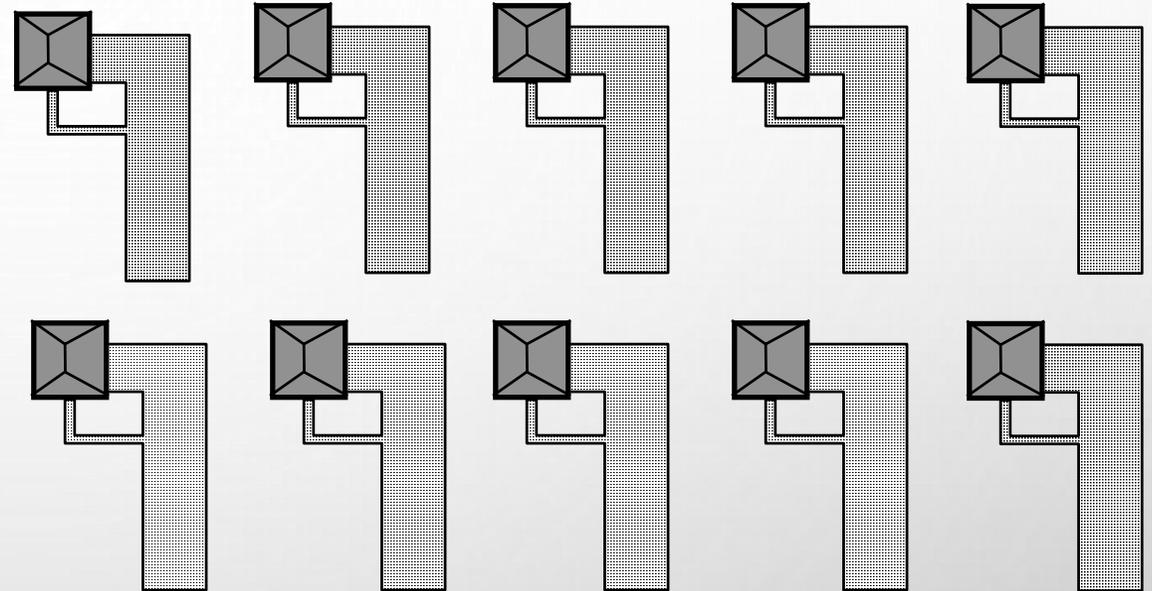
Custom Fee
(impervious area/ERU =
number of billing units)

HOW A SW USER FEE IS CALCULATED (ERU)

NON-SINGLE FAMILY RESIDENTIAL (NSFR)



=



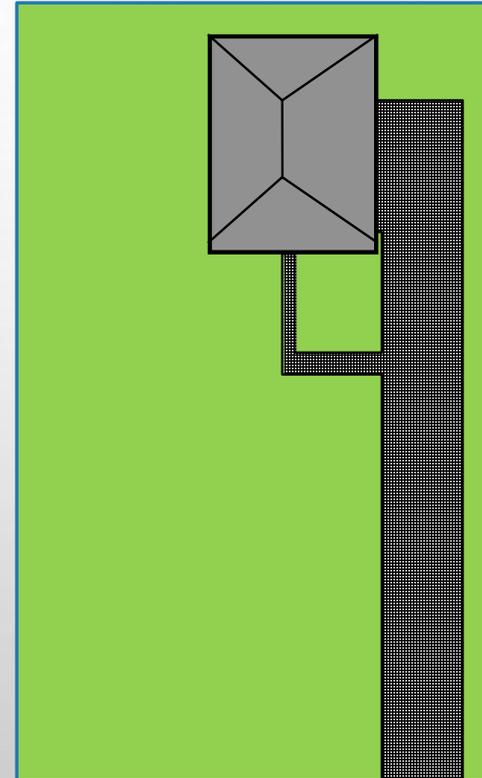
Building Footprint = 14,000 sqft
Parking Lot = 16,000 sqft
Total Impervious Area = 30,000 sqft

Total ERUs = $30,000/3,000 = 10$ ERUs

HOW A SW UTILITY USER FEE IS CALCULATED:

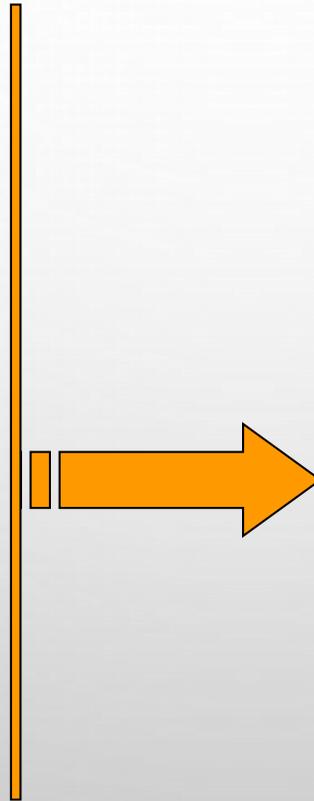
PER-EQUIVALENT AREA

- BILLING UNIT = 1,000 SQ FT
- EXAMPLE ERU:
 - ROOFTOP = 1,600 SQFT
 - DRIVEWAY = 1,000 SQFT
 - SIDEWALK = 400 SQFT
 - **TOTAL ERU = 3,000 SQFT**
- **EXAMPLE: THIS PROPERTY HAS 3.0 BILLING UNITS**



HOW A SW UTILITY USER FEE IS CALCULATED (PER EQUIVALENT AREA):

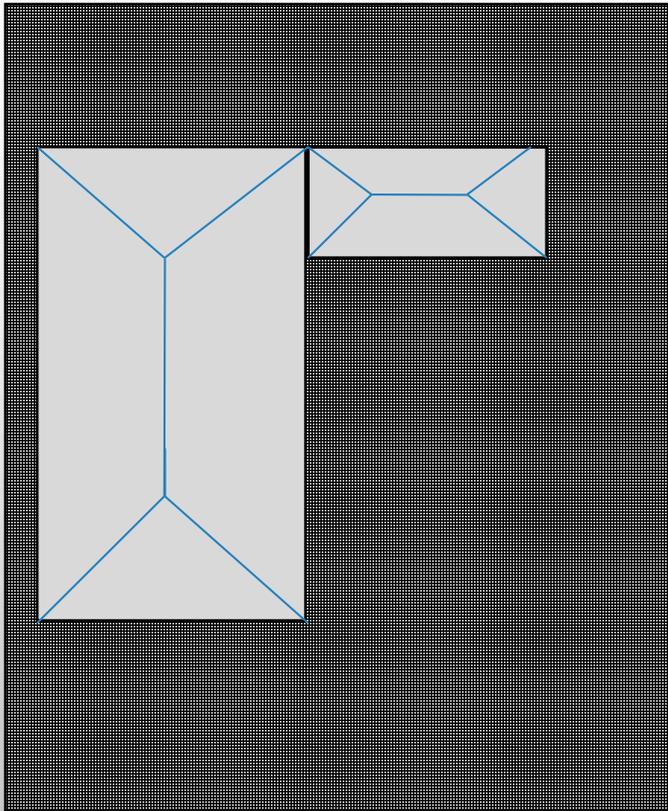
- Single-Family
- Multi-Family
- Duplexes
- Commercial
- Industrial
- Institutional
- Governmental



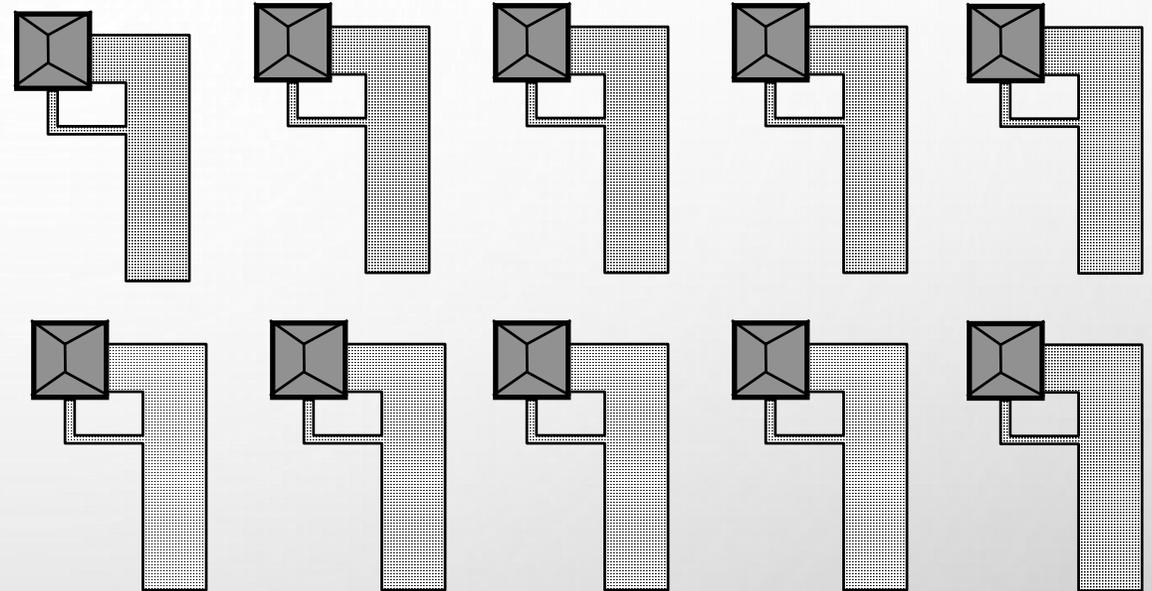
Custom Fee
(impervious area/1,000 SQ FT
= number of billing units)

HOW A SW USER FEE IS CALCULATED: (PER EQUIVALENT AREA)

NON-SINGLE FAMILY RESIDENTIAL (NSFR)



=



Building Footprint = 14,000 sqft
Parking Lot = 16,000 sqft
Total Impervious Area = 30,000 sqft

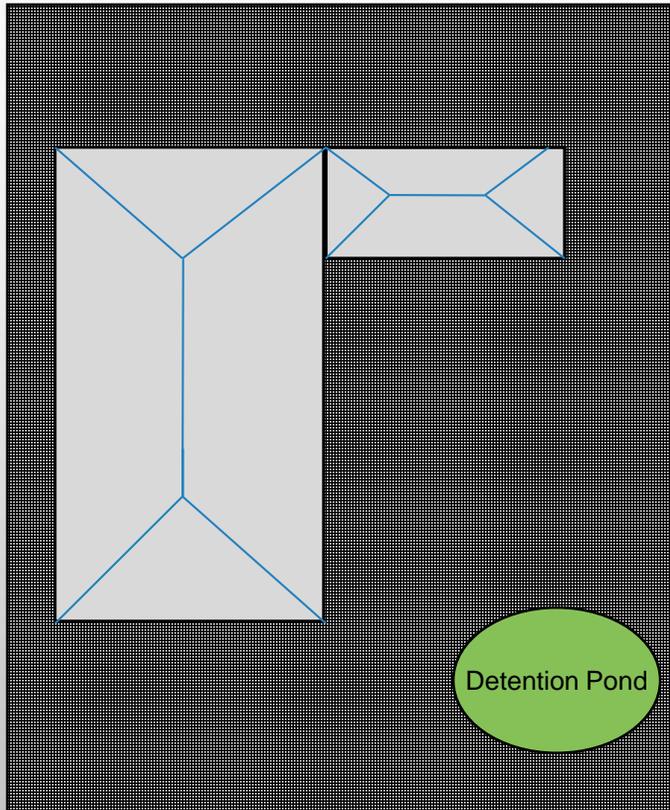
Total Billing Units = $30,000/1,000 = 30$
Billing Units

STORMWATER USER FEE CREDITS

- REDUCE USER FEE CHARGE AMOUNT FOR CUSTOMERS THAT REDUCE THE CITY'S COST TO PROVIDE SWMP SERVICES
- TYPICAL CREDITS
 - DETENTION FACILITIES
 - NO DIRECT DISCHARGE
 - WATER QUALITY MANAGEMENT
- INNOVATIVE CREDITS
 - WATER RESOURCES EDUCATION
 - WATERSHED STEWARDSHIP



HOW A SW UTILITY USER FEE CREDIT IS CALCULATED



Building Footprint = 14,000 sqft

Parking Lot = 16,000 sqft

Total Impervious Area = 30,000 sqft

ERU = 3,000 sq ft

Total = $30,000 / 3,000 = 10$ ERUs

1 ERU = \$5.00/month

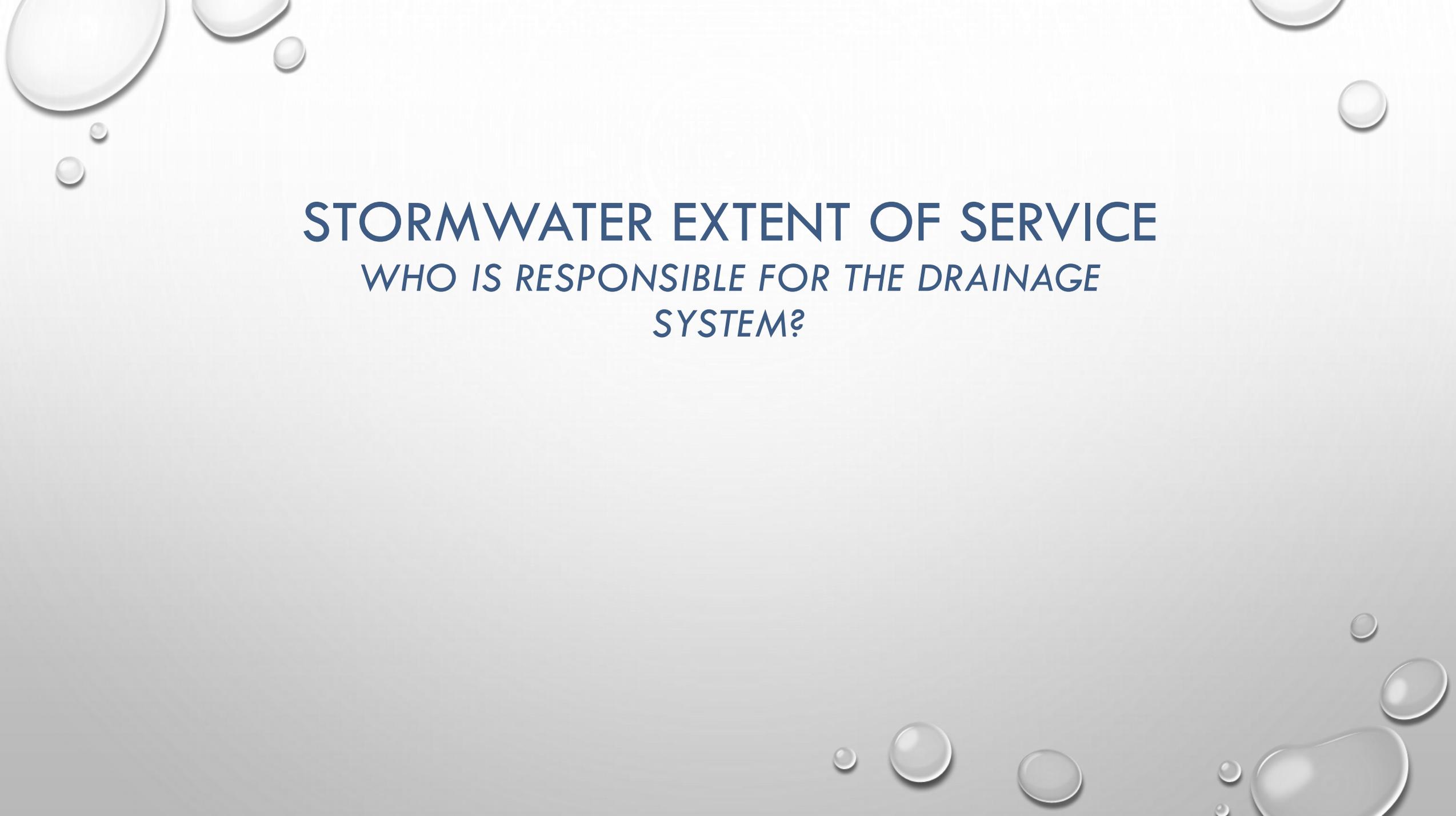
10 ERUs = $10 \times \$5.00 = \50.00 /month

Credit for Detention Pond = 30%

New Bill Amount \$35.00/month

EXAMPLE STORMWATER UTILITY RATES IN GA

Community	Billing Rate	ERU	Typical Monthly Residential Bill	Example Commercial Monthly Bill (50,000 Sq Ft impervious)
Valdosta	\$2.50/ERU	3,704 Sq. Ft.	\$2.50	\$33.75
Statesboro	\$3.95/ERU	3,200 Sq. Ft.	\$3.95	\$61.72
Brunswick	\$3.95/ERU	2,220 Sq. Ft.	\$3.95	\$88.88
Griffin	\$4.65/ERU	2,200 Sq. Ft.	\$4.65	\$105.68
Richmond Hill	\$4.75/ERU	3,300 Sq. Ft.	\$4.75	\$71.97
Garden City	\$4.75/ERU	3,000 Sq. Ft.	\$4.75	\$79.17
Albany	\$4.75/ERU	2,700 Sq. Ft.	\$4.75	\$87.96
Hinesville	\$5.86/ERU	2,635 Sq. Ft.	\$5.86	\$111.20
Augusta	\$6.40/ERU	2,200 Sq. Ft.	\$6.40	\$156.60

The background of the slide is a light gray gradient. In the top-left and bottom-right corners, there are several realistic-looking water droplets of various sizes, some overlapping. The text is centered in the upper half of the slide.

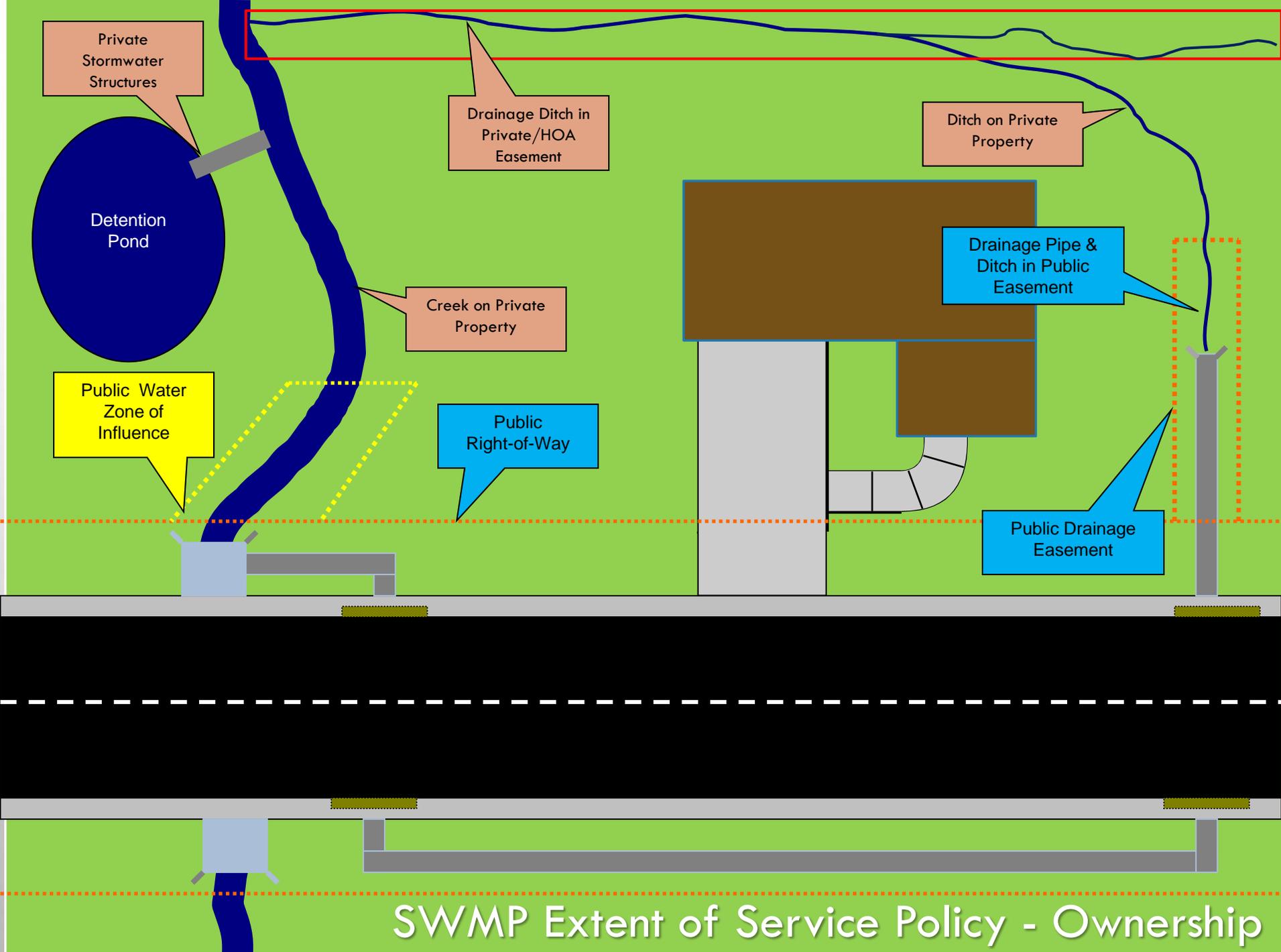
STORMWATER EXTENT OF SERVICE

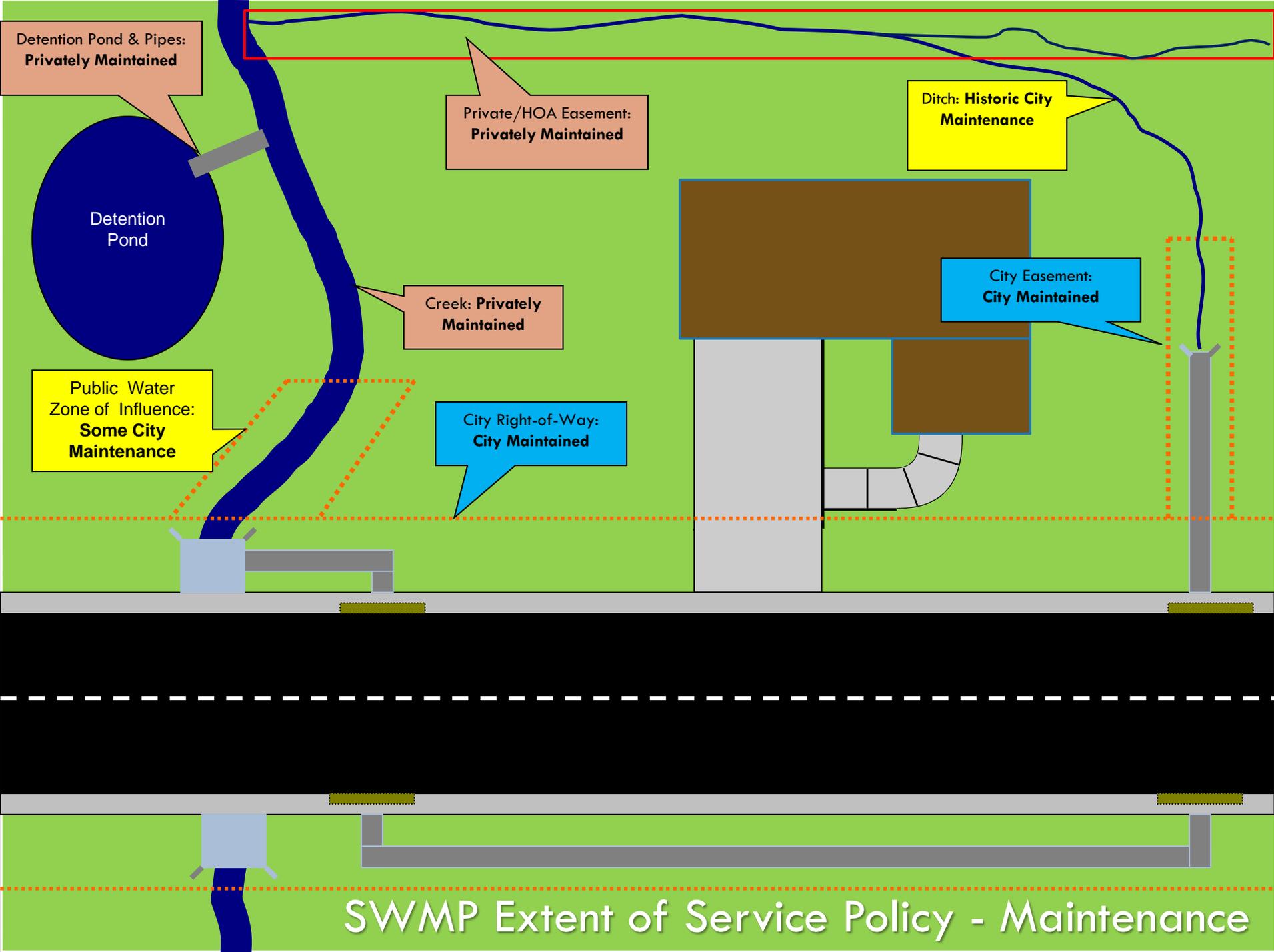
*WHO IS RESPONSIBLE FOR THE DRAINAGE
SYSTEM?*

WHERE DOES YOUR CITY PROVIDE STORMWATER SERVICES?



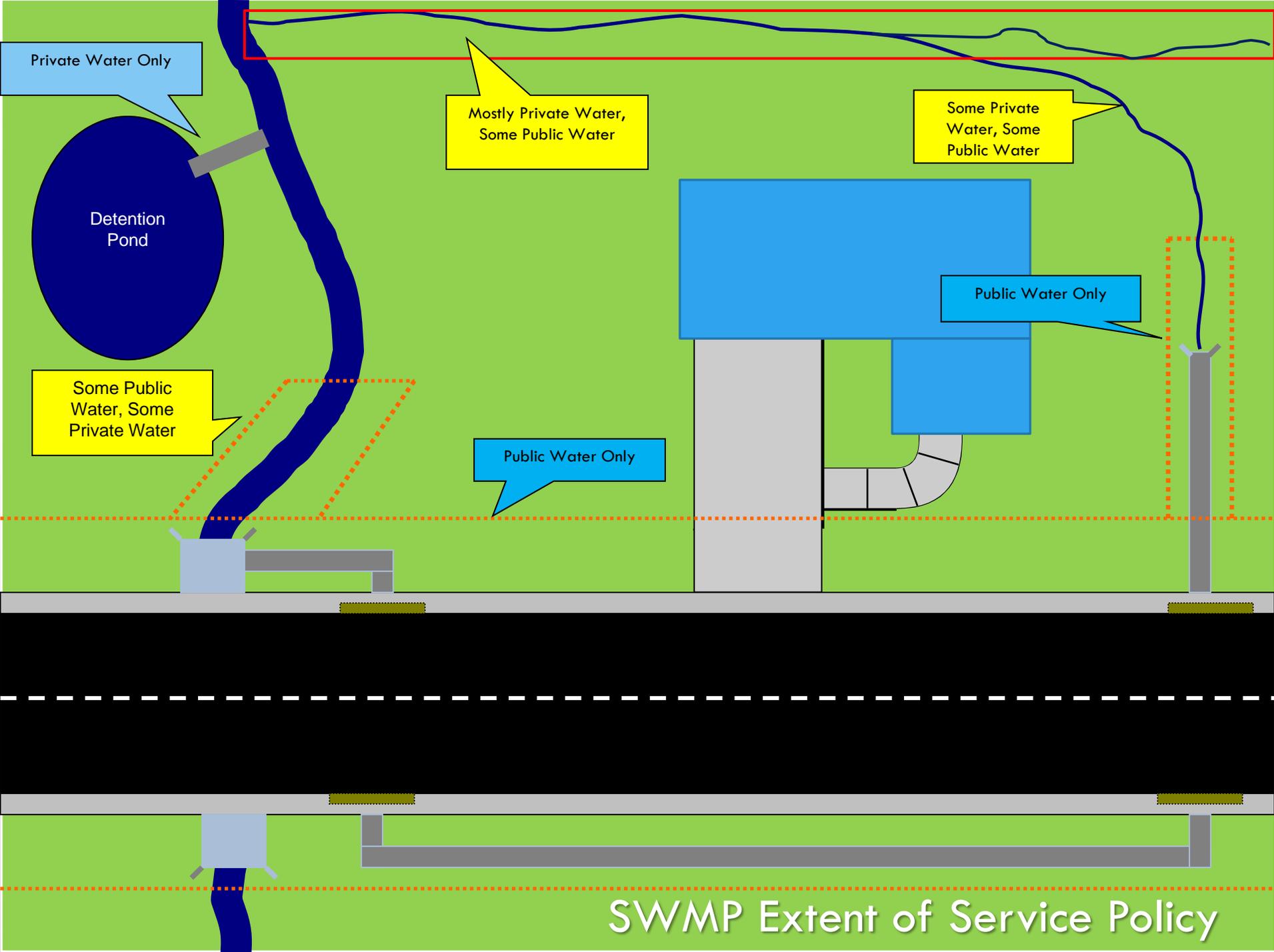
- **EXTENT OF SERVICE:** THE GEOGRAPHICAL EXTENT OF A LOCAL GOVERNMENT'S RESPONSIBILITY TO PROVIDE STORMWATER SERVICES WITHIN THE DRAINAGE SYSTEM.
 - OWNERSHIP
 - MAINTENANCE RESPONSIBILITY





WHY IS THIS SO IMPORTANT TO DEFINE?

- ESTABLISHES FORMAL POLICY FOR ALLOCATION OF LIMITED RESOURCES
- MANAGES HOMEOWNER EXPECTATIONS
- REDUCES “PET PROJECTS” IN THE DRAINAGE SYSTEM
- IN THE CASE OF A STORMWATER UTILITY:
 - DEFINES THE PROGRAM TO SUPPORT THE FEE
 - SUPPORTS CREDIT POLICY
- REDUCES LEGAL EXPOSURE



WHAT'S FEDERAL LAW SAY?

- NPDES MS4 PERMITS REQUIRE

- INSPECTION & MAINTENANCE OF THE “PUBLIC SYSTEM”.

- INSPECTIONS OF DETENTION PONDS AND ENFORCEMENT OF MAINTENANCE AGREEMENTS

- NPDES PHASE II PERMIT GIVES LOCAL GOVERNMENT RESPONSIBILITY FOR PONDS WITH NO AGREEMENT
- NPDES PHASE I PERMIT NO LONGER ASSIGNS INSPECTION OR MAINTENANCE RESPONSIBILITY FOR PRIVATE PONDS

- ULTIMATELY LOCAL GOVERNMENT IS RESPONSIBLE FOR DISCHARGE FROM THE MS4 OUTFALL.

- PRIVATE DRAINAGE SYSTEMS MAY IMPACT THIS, AND THEREFORE BECOME A LOCAL GOVERNMENT PROBLEM.

WHAT'S GEORGIA CASE LAW SAY?

- HIBBS V. CITY OF RIVERDALE, 267 GA. 337
 - **DOMINION AND CONTROL OVER A STORMWATER CONVEYANCE OR FACILITY** ESTABLISHES LOCAL GOVERNMENT DUTY TO MAINTAIN IT
 - AFFIRMED BY CITY OF ATLANTA V. KLEBER, 285 GA. 413 (2009)
- FOUR TYPES OF STORMWATER SYSTEMS FROM A LEGAL PERSPECTIVE:
 - BUILT AND/OR OWNED BY THE LOCAL GOVERNMENT
 - BUILT BY A PRIVATE DEVELOPER AND DEDICATED TO THE LOCAL GOVERNMENT
 - BUILT BY A PRIVATE DEVELOPER AND NOT EXPRESSLY DEDICATED TO THE LOCAL GOVERNMENT
 - NATURAL CONVEYANCES (WHICH MAY BE NATURAL OR ALTERED BY MAN, BUT OF UNKNOWN ORIGIN)

WHEN DOES A GOVERNMENT EXERCISE “DOMINION AND CONTROL”

- A NATURAL DRAIN CAN BE USED TO CONVEY SURFACE WATER WITHOUT LIABILITY FOR ITS USE; PROVIDED, HOWEVER, IF THE "INDUSTRY OF MAN" INCREASES THE SERVITUDE TO THE EXTENT THAT WATER EXCEEDS THE BOUNDARY OF THE "NATURAL DRAINAGE", LIABILITY WILL RESULT.
- CONTROL OVER THE PROPERTY IN QUESTION NEED NOT BE SHOWN BY EXPRESS DEDICATION, BUT MAY RESULT FROM ACTIVELY TAKING CONTROL AND USING THE PROPERTY FOR THE CITY'S BENEFIT.
- GEORGIA COURTS HAVE FREQUENTLY HELD THAT A CITY'S DUTY TO MAINTAIN STREETS THAT IT OWNS, CONSTRUCTED, OR HAS ACCEPTED FOR FUTURE MAINTENANCE, INCLUDES THE IMPLIED DUTY TO ADDRESS THE SURFACE WATER RUNOFF FROM THOSE STREETS.
- A FORMER JUSTICE OF THE GEORGIA SUPREME COURT, SUGGESTS THAT EVEN WITHOUT CLEAR LEGAL AUTHORITY, CITIES AND COUNTIES OFTEN ARE HELD RESPONSIBLE FOR PROBLEMS THEY DID NOT CREATE SIMPLY BECAUSE OF THEIR ABILITY TO LEVY TAXES AND ADDRESS LARGE, COSTLY INFRASTRUCTURE ISSUES.

HOW HAVE OTHER LOCAL GOVERNMENTS DEFINED EOS?

- HENRY COUNTY – ACCEPTANCE AND MAINTENANCE OF DETENTION PONDS BY THE SW UTILITY?
- GRIFFIN – USED STORMWATER USER FEE REVENUE TO ADDRESS ISSUES IN THE PUBLIC SYSTEM FIRST, THEN MOVED TO “QUASI-PUBLIC” DRAINAGE ISSUES.
- DULUTH – EDUCATION ON EASEMENTS. CLEAR DEFINITION OF RESPONSIBILITY.
- GARDEN CITY – DRIVEWAY PIPE MAINTENANCE AS A SERVICE TO THE PUBLIC



NEXT STEPS

1. STORMWATER PROGRAM ASSESSMENT AND COST OF SERVICE
2. IMPERVIOUS SURFACE DELINEATIONS AND REVENUE PROJECTION
3. PUBLIC EDUCATION
4. DEVELOP STORMWATER UTILITY CREDIT POLICY
5. ORDINANCE ADOPTION BY CITY COUNCIL
6. BILLING DATABASE DEVELOPMENT AND UPLOAD
7. CUSTOMER SERVICE TRAINING AND CUSTOMER NOTIFICATION
8. FIRST SW UTILITY BILLING CYCLE

SWMP GOALS

DISCUSSION



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