

A close-up, high-speed photograph of water splashing, creating numerous bubbles and droplets. The water is clear and bright blue, with light reflecting off the surfaces of the droplets. The background is a solid, lighter blue color.

Florida Stormwater  
Association

# 2020 Assessment of Stormwater Utilities and Operating Trends

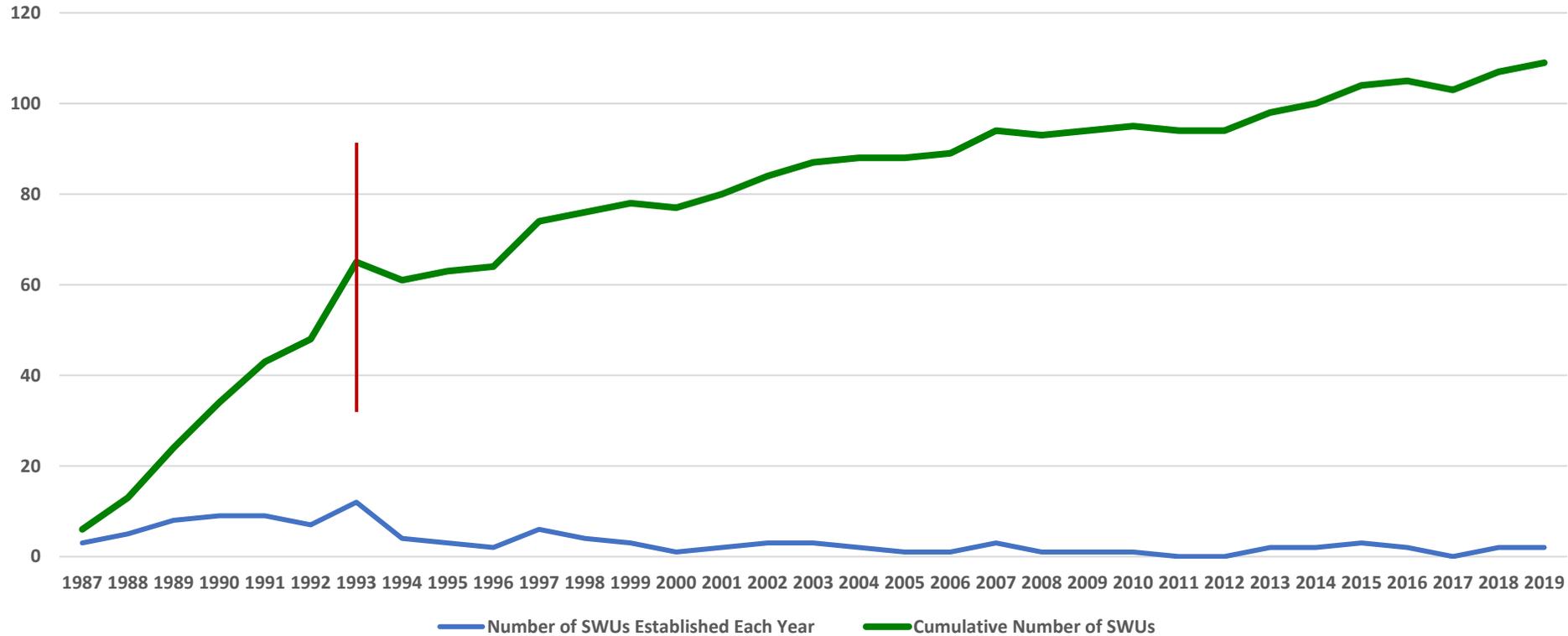
Stephen R. Lienhart, P.E.  
Black & Veatch Corporation

# KEEP CALM AND CARRY ON

1. 107+ Recognized FSA Participating Stormwater Utilities
2. Data in the Trends is “the most current” FSA Survey Information
3. FSA Survey 2013 or 2014?
4. In the absence of all information we are focusing on 2005 – 2020
5. The even vs. odd round-off process

1. Growth and Timing of SWU Establishment (1-1)

Growth of Florida SWUs

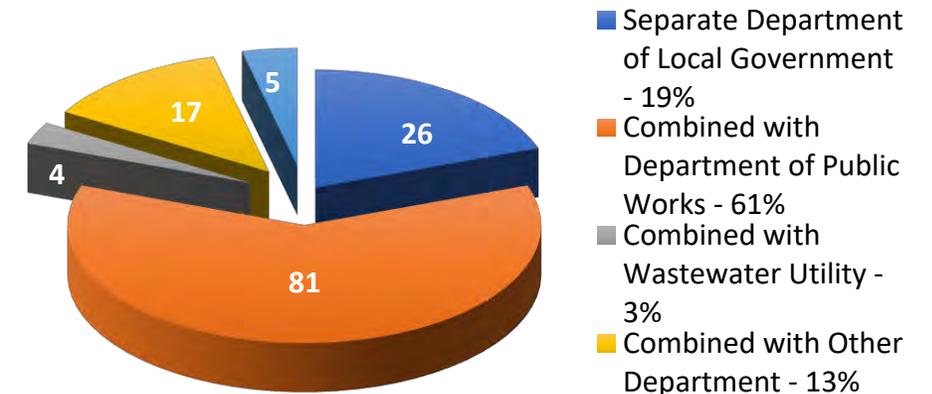


# Section 1

## Utility Characteristics

### 2. SWU Organization (1-2)

	Separate Department of Local Government	Combined with Department of Public Works	Combined with Wastewater Utility	Combined with other department	Authority or district separate from local government
2005	8%	64%	0%	27%	1%
2007	14%	64%	2%	19%	1%
2009	14%	63%	3%	20%	0%
2011	16%	56%	2%	25%	1%
2013	17%	61%	1%	20%	1%
2016	18%	60%	2%	17%	3%
2018	18%	63%	2%	13%	4%
2020	19%	81%	3%	13%	4%
<b>Average</b>	<b>16%</b>	<b>64%</b>	<b>2%</b>	<b>19%</b>	<b>2%</b>



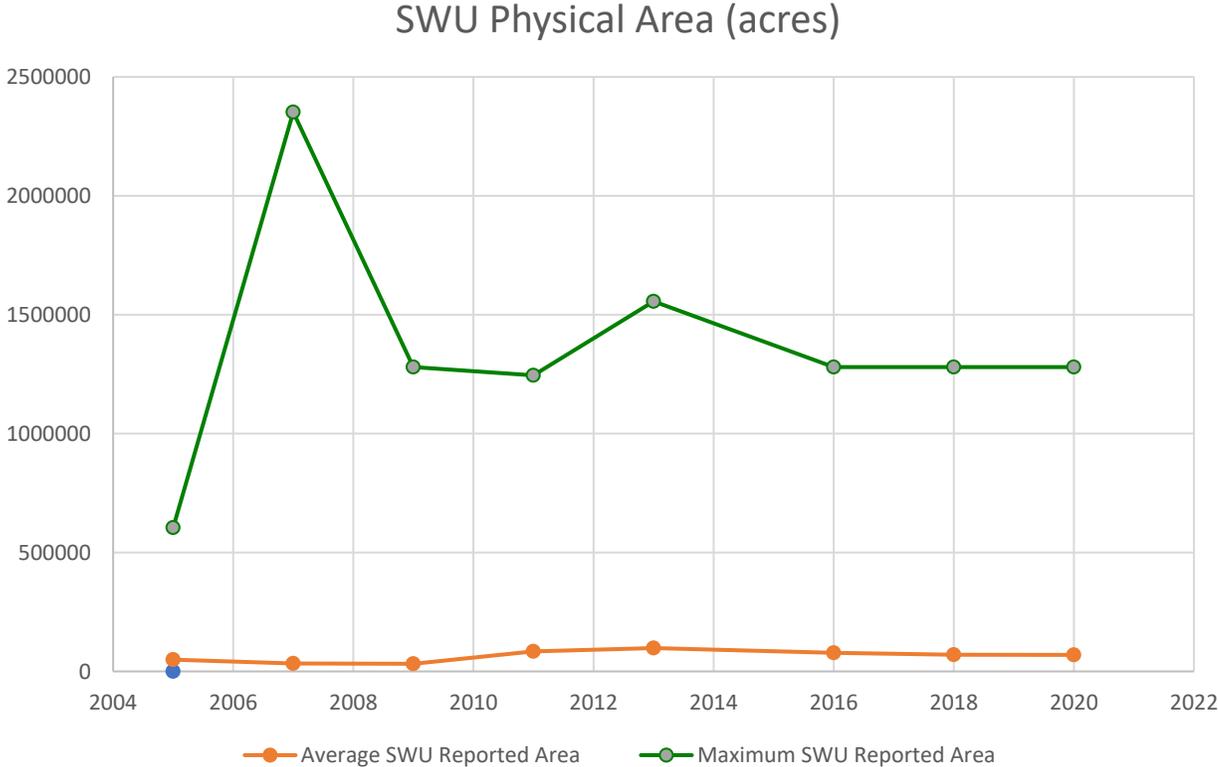
# Section 1

## Utility Characteristics

### 3. Physical Area Served by SWUs measured in acres (1-3)

	Minimum SWU Reported Physical Area (acres)	Average SWU Reported Physical Area (acres)	Maximum SWU Reported Physical Area (acres)
2005	6	49,423	604,889
2007	6	33,398	2,352,240
2009	6	31,889	1,280,000
2011	6	84,478	1,245,45
2013	6	98,250	1,555,840
2016	3	77,942	1,280,000
2018	3	70,243	1,280,000
2020	192	69,667	1,280,000

**Average = 64,411**

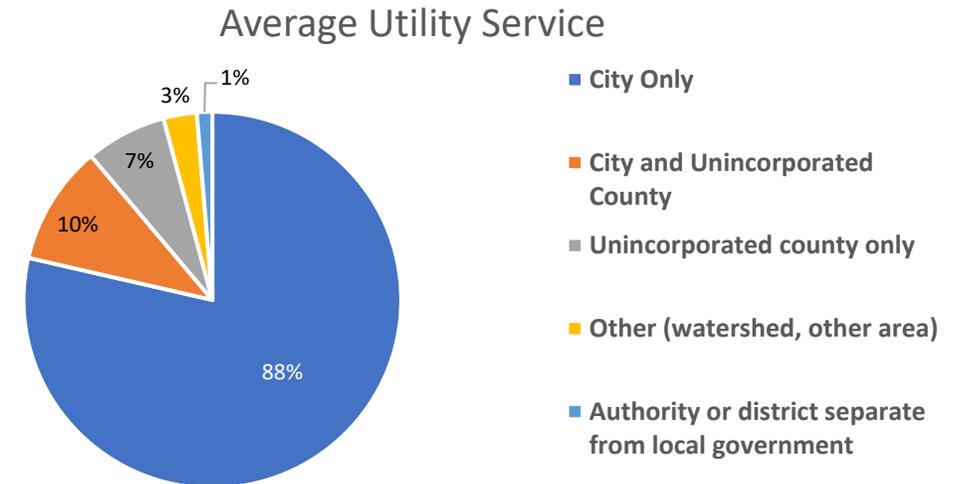


# Section 1

## Utility Characteristics

### 4. Jurisdiction Served by SWUs (1-4)

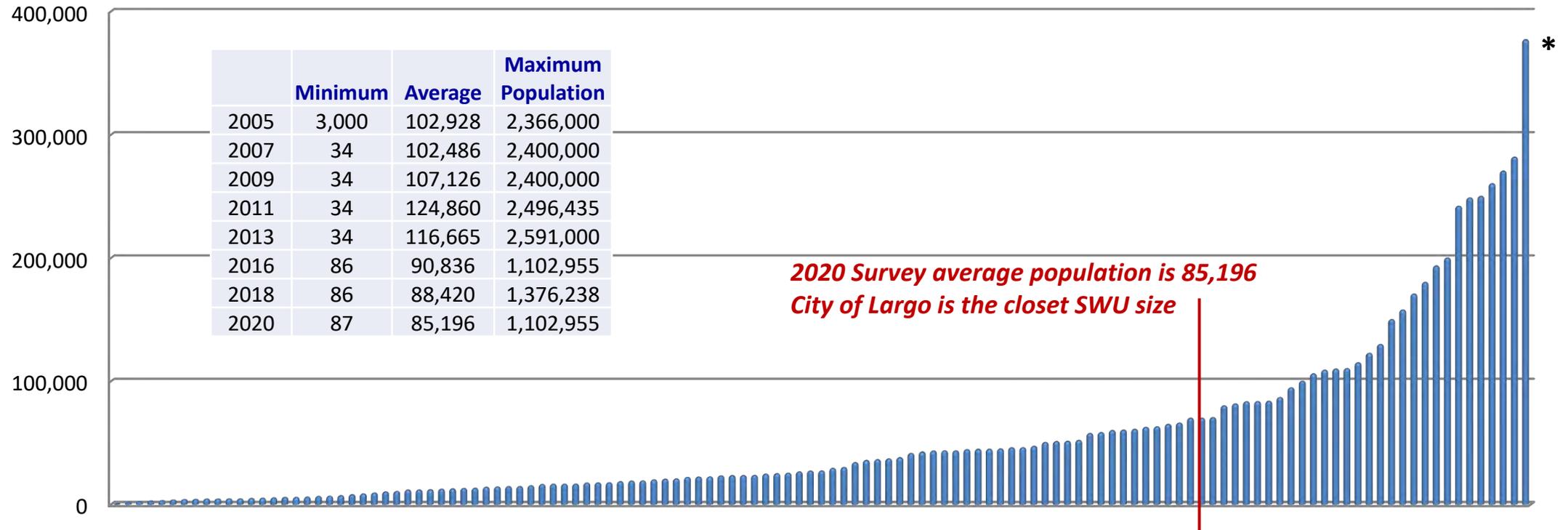
	City Only	City and Unincorporated County	Unincorporated county only	Other (watershed, other area)	Authority or district separate from local government
2005	92%	3%	4%	1%	NC
2007	88%	3%	8%	1%	NC
2009	87%	4%	8%	1%	NC
2011	86%	4%	9%	1%	NC
2013	87%	2%	10%	1%	NC
2016	81%	3%	2%	17%	3%
2018	87%	5%	7%	0%	1%
2020	89%	2%	8%	1%	0%
<b>Average</b>	<b>88%</b>	<b>3%</b>	<b>7%</b>	<b>3%</b>	<b>1%</b>



# Section 1

## Utility Characteristics

### 5. Population Served by SWU? (1-5)



\* The 2020 SWU Survey graphic excludes the 6 largest SWU which include Polk County (407,963), City of Miami (458,376), Pasco County (470,391), Hillsborough County (905,007), City of Jacksonville (913,010) and Miami-Dade County (1,102,955)

## Section 1

# Utility Characteristics

### 6. Accounts Served by SWUs (1-6)

	RESIDENTIAL				NON-RESIDENTIAL				
	Average Total Accounts	Average Accounts	Single Family	Multi Family	Average Accounts	Business	Institu- tional	Commercial	Industrial
2005	36,214	33,908	28,484	5,424	2,306	594	227	1,281	204
2007	36,618	33,464	23,622	5,182	3,154	650	478	1,325	217
2009	33,699	30,221	24,513	4,407	3,478	651	369	1,091	192
2011	43,897	40,419	29,854	8,564	3,478	845	335	1,296	193
2013	41,743	36,817	28,885	4,085	4,926	373	313	1,199	219
2016	31,086	28,320	28,320	2,766	2,766	575	1,596	448	448
2018	35,915	33,101	28,641	5,241	2,814	466	390	1,387	253
2020	34,292	31,958	31,051	5,082	2,334	374	196	1,230	128

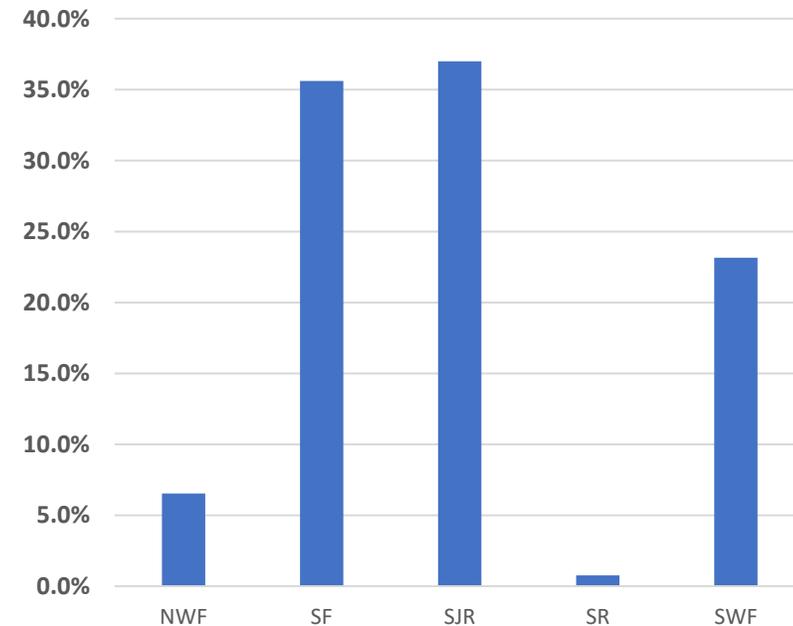
## Section 2

# Utility Fees and Rates

### 7. SWU Located in Water Management Districts (2-1)

	NWF	SF	SJR	SR	SWF
1995	5%	29%	<b>40%</b>	0%	24%
1997	6%	33%	<b>41%</b>	0%	20%
1999	5%	28%	<b>46%</b>	0%	21%
2001	3%	35%	<b>42%</b>	0%	19%
2003	3%	<b>40%</b>	<b>35%</b>	1%	21%
2005	5%	<b>41%</b>	32%	1%	23%
2007	5%	<b>39%</b>	32%	1%	23%
2009	5%	33%	<b>34%</b>	1%	24%
2011	6%	<b>56%</b>	34%	1%	24%
2013	5%	33%	<b>36%</b>	1%	21%
2016	25%	32%	<b>36%</b>	2%	32%
2018	6%	32%	<b>36%</b>	1%	25%
2020	6%	32%	<b>37%</b>	1%	24%

Water Management District Participation

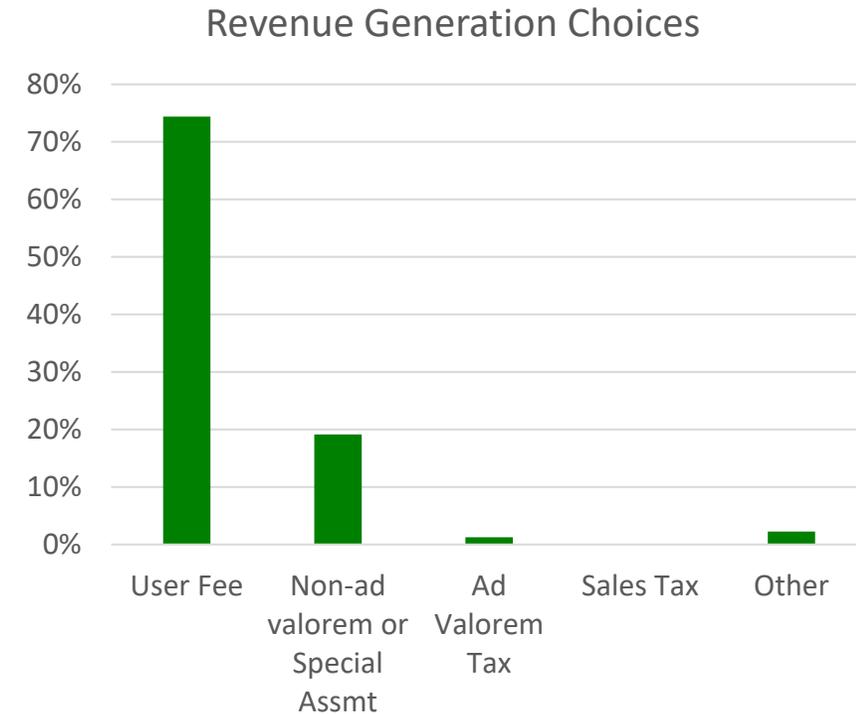


## Section 2

# Utility Fees and Rates

### 8. Basic Methodologies used for SWU Revenue Generation (2-2)

	User Fee	Non-ad valorem or Special Assmt	Ad Valorem Tax	Sales Tax	Other
2005	84%	12%	0%	0%	4%
2007	79%	18%	0%	0%	3%
2009	76%	20%	0%	0%	4%
2011	83%	15%	1%	0%	1%
2013	75%	21%	2%	0%	2%
2016	71%	3%	2%	0%	0%
2018	66%	29%	3%	0%	2%
2020	61%	35%	2%	0%	2%
<b>Average</b>	<b>74%</b>	<b>19%</b>	<b>1%</b>	<b>0%</b>	<b>2%</b>



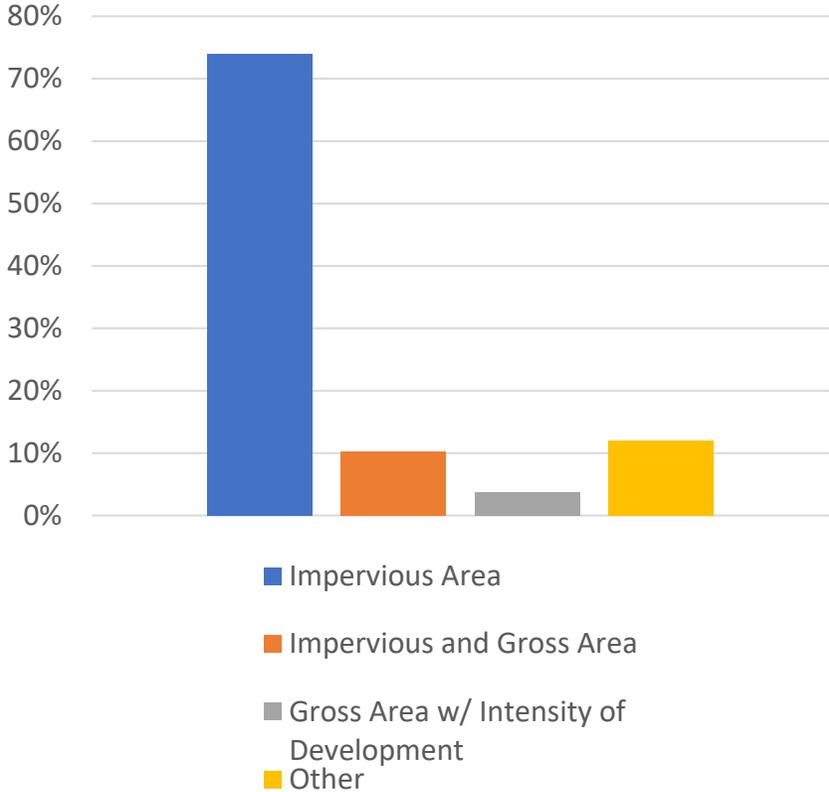
# Section 2

## Utility Fees and Rates

### 9. General Basis for SWU Establishment of Fees (2-3)

	Impervious Area	Impervious and Gross Area	Gross Area + Intensity of Development	Other
2005	81%	7%	4%	8%
2007	72%	11%	3%	14%
2009	71%	13%	3%	13%
2011	83%	7%	4%	6%
2013	76%	6%	5%	13%
2016	70%	12%	4%	14%
2018	69%	14%	3%	14%
2020	70%	12%	4%	14%
<b>Average</b>	<b>74%</b>	<b>10%</b>	<b>4%</b>	<b>12%</b>

Basic Revenue Methodologies



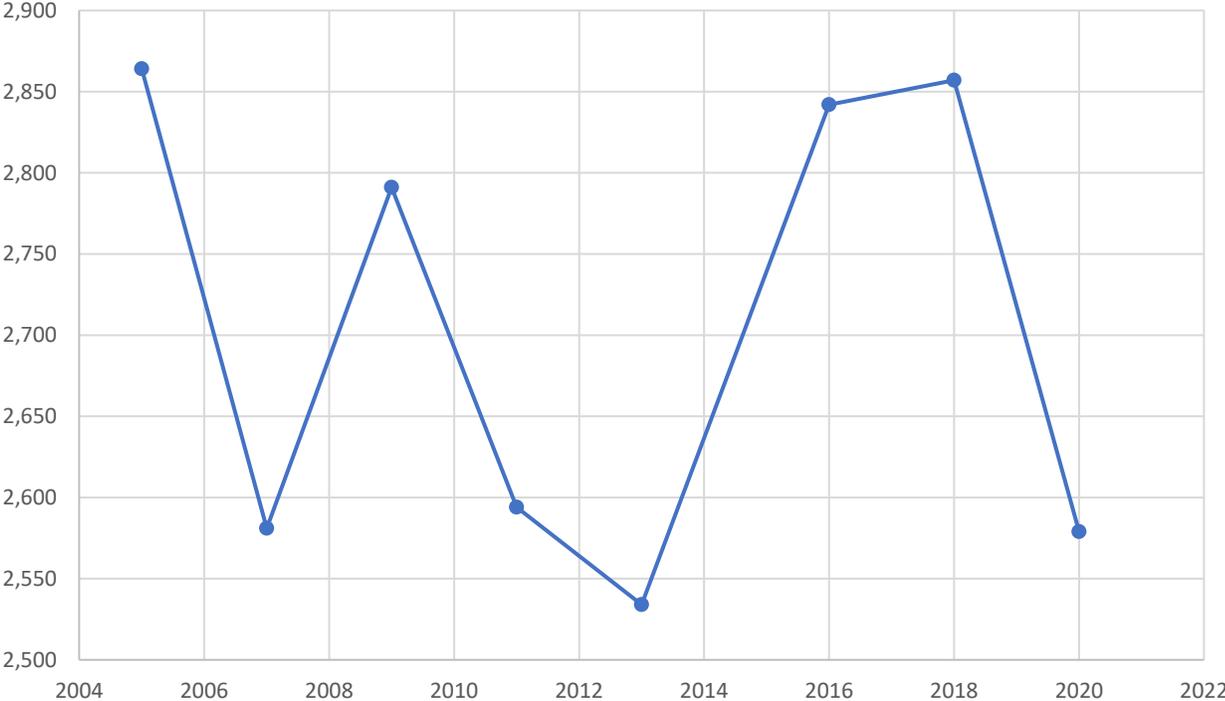
Section 2

Utility Fees and Rates

10. Square footage of the average billing units (2-4)

Average Single Family Residence size (square feet)

	Single Family Residence Average size (square feet)
2005	2,864
2007	2,581
2009	2,791
2011	2,594
2013	2,534
2016	2,842
2018	2,857
2020	2,579
<b>Average</b>	<b>2,723</b>



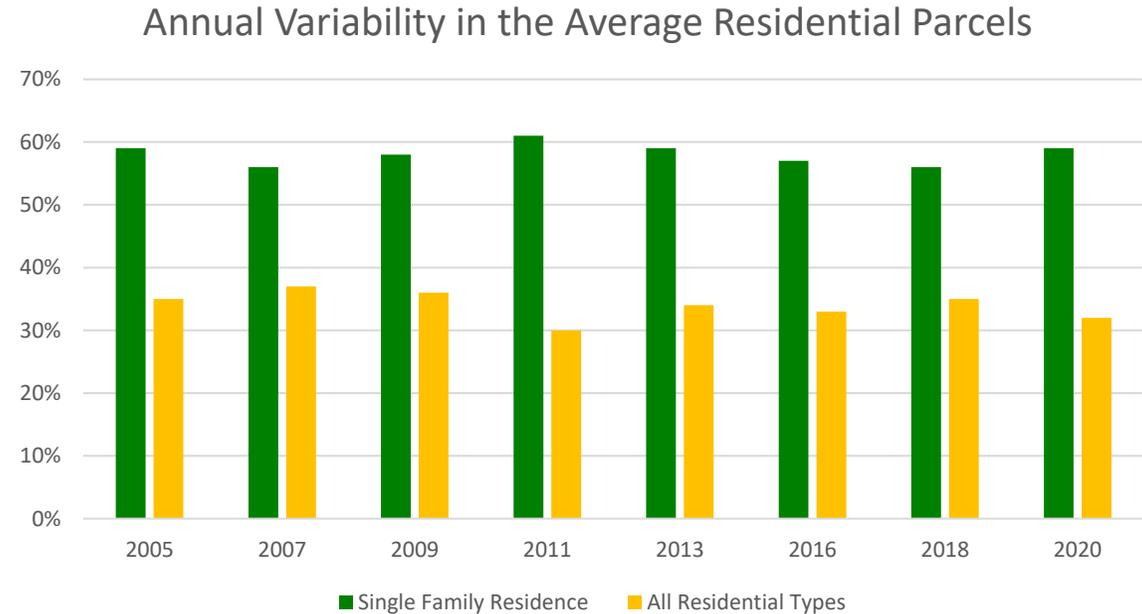
Average 2020 is 2,723 square feet

## Section 2

# Utility Fees and Rates

### 11. Establishment of the basis of an “average billing unit” for residential facilities (2-5)

	Single Family Residence	All Residential Types	Other
2005	59%	35%	6%
2007	56%	37%	7%
2009	58%	36%	6%
2011	61%	30%	9%
2013	59%	34%	7%
2016	57%	33%	10%
2018	56%	35%	9%
2020	59%	32%	9%
<b>Average</b>	<b>58%</b>	<b>34%</b>	<b>8%</b>



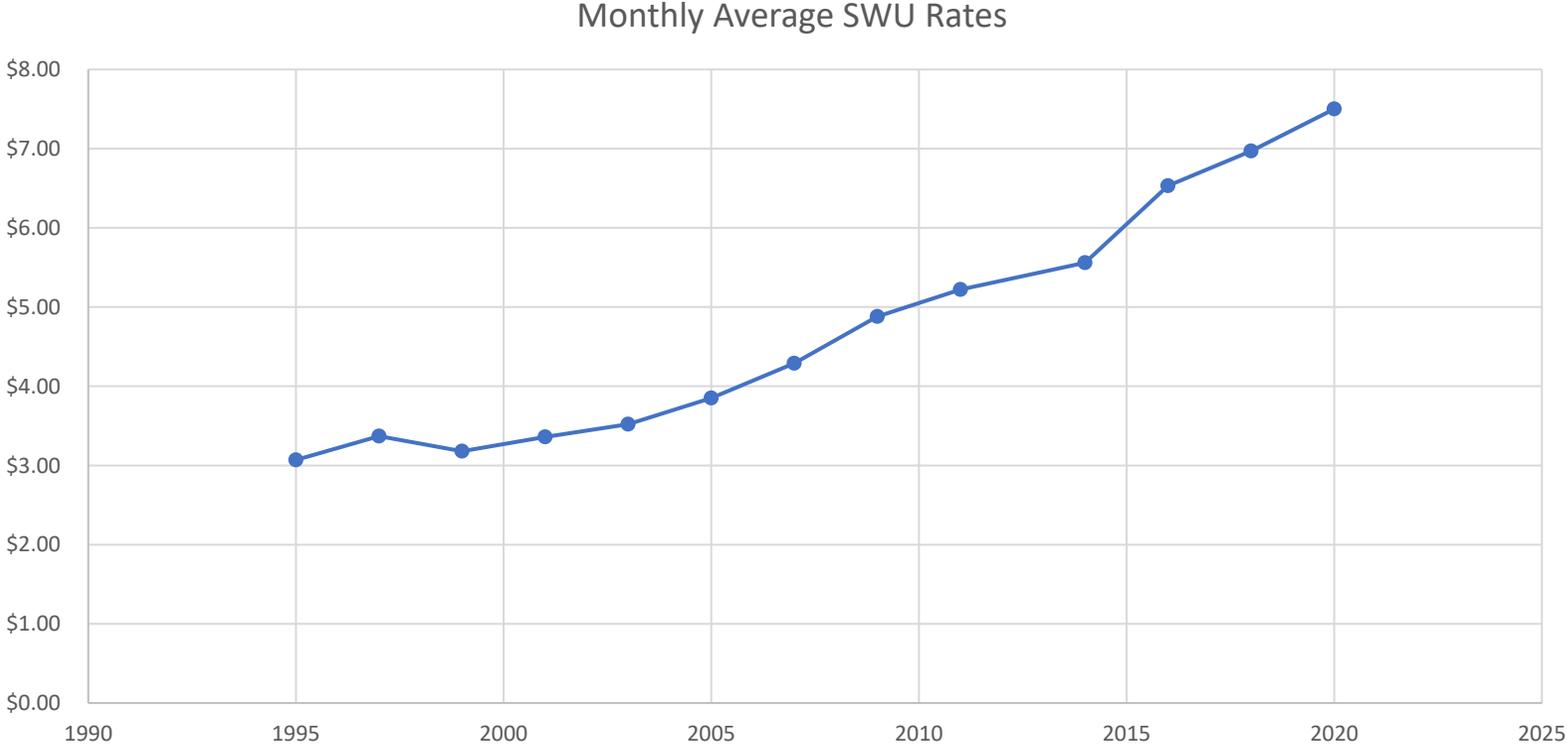
Residential types include single and multi-family, condominiums, mobile homes, etc.

Section 2

Utility Fees and Rates

12. SWU recent range of Average Monthly Residential Rate (2-6)

	Utility Rate Average
1995	\$3.07
1997	\$3.37
1999	\$3.18
2001	\$3.36
2003	\$3.52
2005	\$3.85
2007	\$4.29
2009	\$4.88
2011	\$5.22
2013	\$5.67
2016	\$6.53
2018	\$6.97
2020	\$7.50



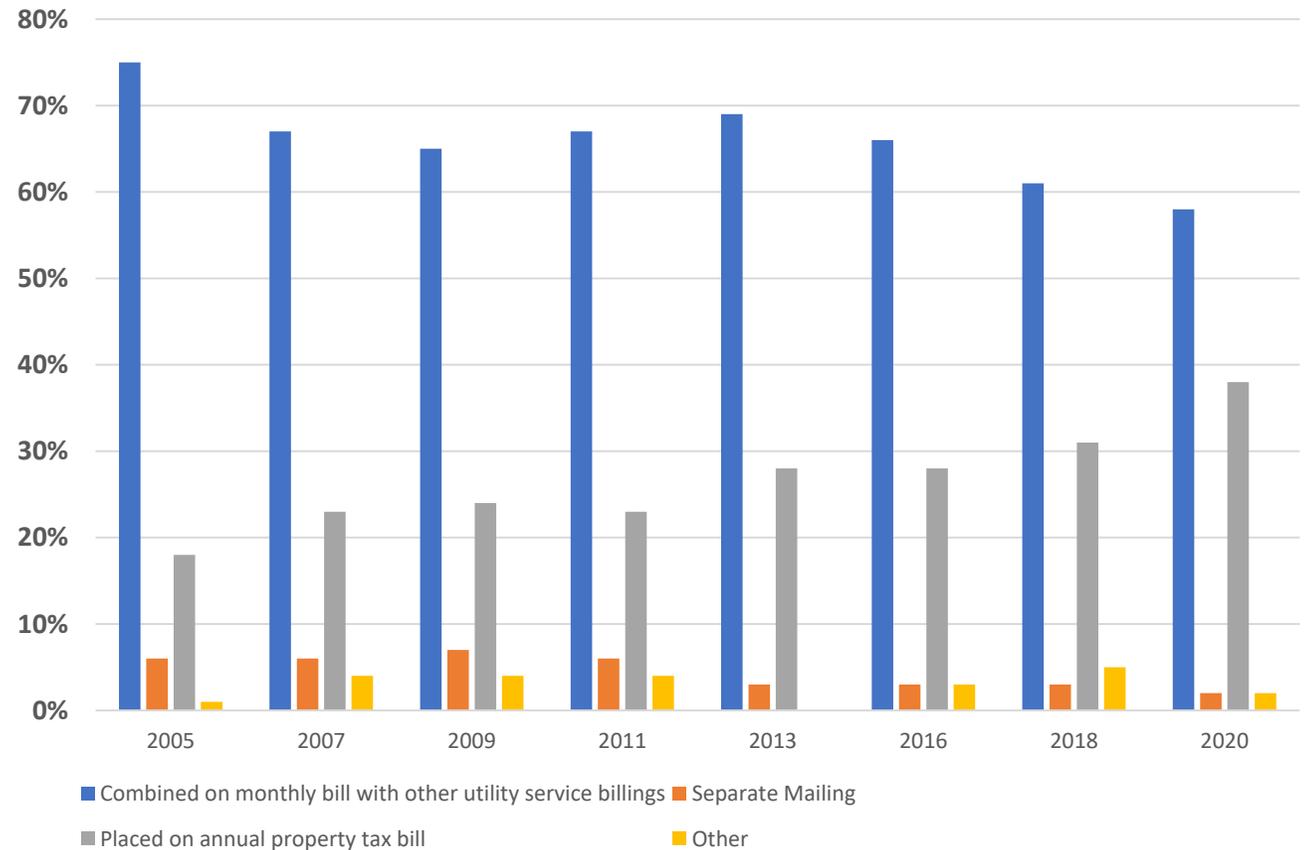
Atypical Rates include the Village of Indian Creek (\$60) and Town of Malabar (\$54) were not included in the graph

## Section 2

# Utility Fees and Rates

### 13. Common methodologies for invoicing stormwater charges (2-7)

	Combined on monthly bill with other utility service billings	Separate Mailing	Placed on annual property tax bill	Other
2005	75%	6%	18%	1%
2007	67%	6%	23%	4%
2009	65%	7%	24%	4%
2011	67%	6%	23%	4%
2013	69%	3%	28%	0%
2016	66%	3%	28%	3%
2018	61%	3%	31%	5%
2020	58%	2%	38%	2%
<b>Average</b>	<b>67%</b>	<b>5%</b>	<b>25%</b>	<b>3%</b>



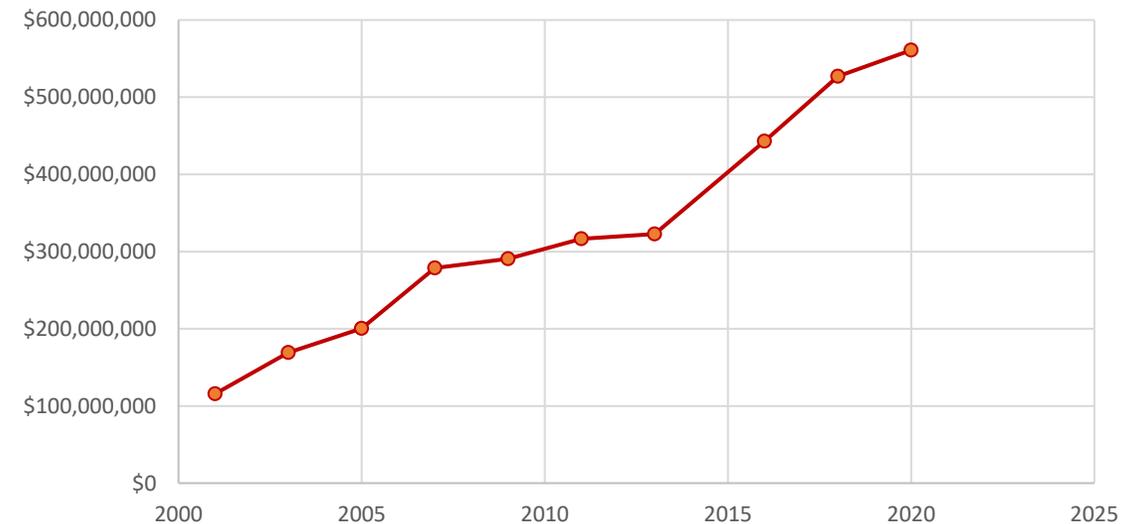
## Section 2

# Utility Fees and Rates

### 14. Total Annual vs. Average Annual SWU Stormwater Revenues (2-8)

	Number of Reporting SWUs	Total Annual Revenue Generated by SWU Revenues	Variability in Reported Total Annual Revenues	Variability in Reported Total % Revenues	Average Annual Revenue per Reporting SWU	Reported Annual Change in Revenues	Reported Annual Change in % Revenues
2001	--	\$115,824,956	--	--	\$2,144,907	--	--
2003	--	\$169,248,764	\$53,423,808	46.1%	\$2,526,101	\$381,194	15.1%
2005	74	\$200,448,474	\$31,199,710	18.4%	\$2,708,763	\$182,662	6.7%
2007	91	\$278,664,476	\$78,216,002	39.0%	\$3,062,247	\$353,484	11.5%
2009	100	\$290,723,660	\$12,059,184	4.3%	\$2,907,237	<b>-\$155,010</b>	-5.3%
2011	93	\$316,556,415	\$25,832,755	8.9%	\$3,403,832	\$496,596	14.6%
2013	51	\$322,769,203	\$6,212,788	2.0%	\$6,328,808	\$2,924,975	46.2%
2016	121	\$443,030,723	\$120,261,520	37.3%	\$3,661,411	<b>-\$2,667,397</b>	-72.9%
2018	133	\$527,064,798	\$84,034,075	19.0%	\$3,962,893	\$301,482	7.6%
2020	131	\$560,933,888	\$33,869,090	6.4%	\$4,281,938	\$319,045	7.5%

Annual Revenue Generated by SWU Revenues

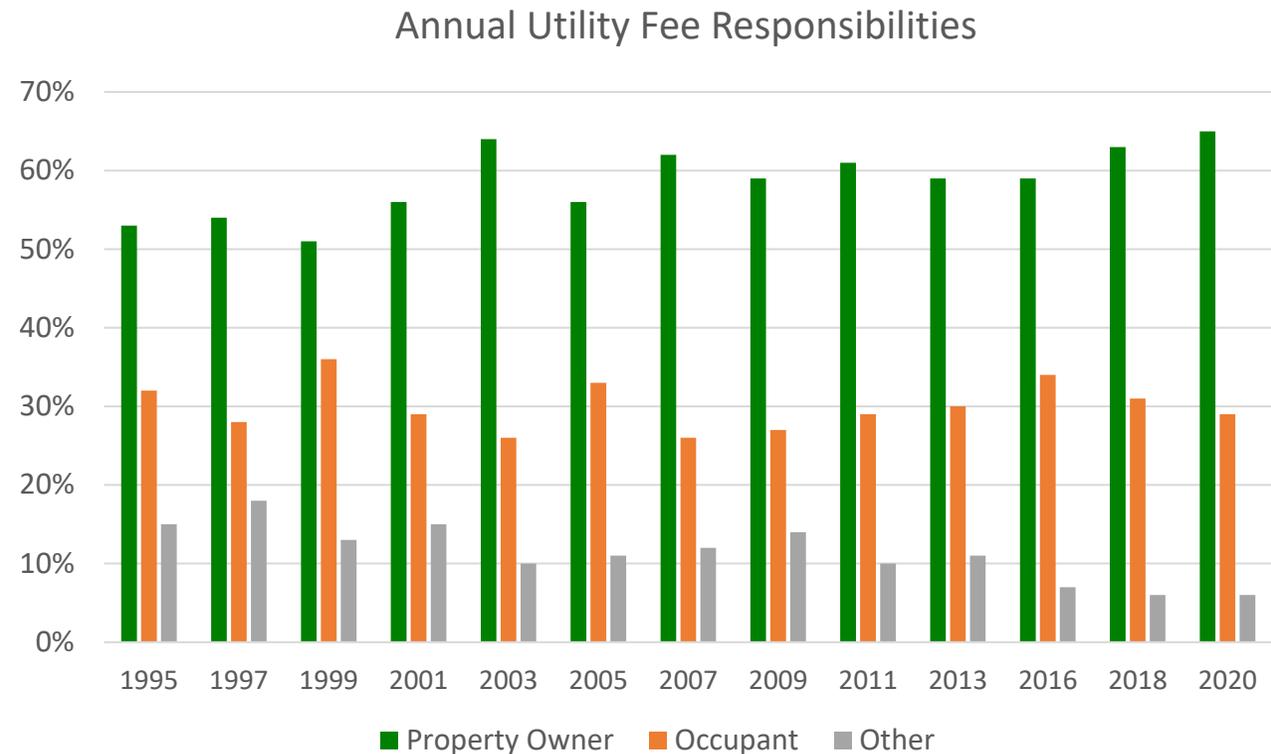


## Section 2

# Utility Fees and Rates

### 15. Responsibility for paying SWU utility fee (2-9)

	Property Owner	Occupant	Other
1995	53%	32%	15%
1997	54%	28%	18%
1999	51%	36%	13%
2001	56%	29%	15%
2003	64%	26%	10%
2005	56%	33%	11%
2007	62%	26%	12%
2009	59%	27%	14%
2011	61%	29%	10%
2013	59%	30%	11%
2016	59%	64%	7%
2018	63%	31%	6%
2020	65%	29%	6%
<b>Average</b>	<b>58%</b>	<b>33%</b>	<b>12%</b>



## Section 2

# Utility Fees and Rates

### 16. Common properties that may be exempt from user fees? (2-11)

	2005	2007	2009	2011	2013	2016	2018	2020
Streets/Highways	60	72	71	65	70	90	90	97
Undeveloped land (Non-agricultural)	49	52	57	48	58	68	88	73
Railroad Rights-of-Way	48	54	57	48	51	69	69	77
Undeveloped land (agricultural)	45	46	51	43	55	63	63	68
Public Parks	29	39	37	33	37	49	49	55
Government Facilities	17	27	28	21	25	40	40	50
Airport runways and taxiways	17	19	21	18	19	29	29	29
Properties that do not discharge	6	12	13	10	15	15	15	16
Waterfront Properties	3	3	3	4	2	3	3	3
<b>Other</b>	<b>13</b>	<b>17</b>	<b>16</b>	<b>14</b>	<b>19</b>	<b>18</b>	<b>18</b>	<b>20</b>
<b>None</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>	<b>15</b>	<b>15</b>	<b>12</b>

## Section 2

# Utility Fees and Rates

### 17A. Recent typical billing practices with regard to the governmentally owned properties (2-12)

		2005	2007	2009	2011	2013	2016	2018	2020	Average
<b>Exempt</b>										
	Federal	15	21	16	21	21	22	31	33	<b>22.5</b>
	State	15	21	16	21	21	23	33	35	<b>23.1</b>
	County	11	18	15	17	20	22	34	36	<b>21.6</b>
	City	14	18	15	15	20	20	35	38	<b>21.9</b>
	School District	15	19	15	16	24	24	37	39	<b>23.6</b>
	Special District	9	12	6	9	12	8	17	18	<b>11.4</b>
<b>Bill and Collect</b>										
	Federal	38	43	34	34	34	31	51	51	<b>39.5</b>
	State	39	44	34	29	34	30	51	49	<b>38.8</b>
	County	49	51	46	42	43	36	61	58	<b>48.3</b>
	City	43	52	43	44	50	41	65	62	<b>50.0</b>
	School District	40	47	32	34	34	34	47	43	<b>38.9</b>
	Special District	37	58	33	32	29	34	50	50	<b>40.4</b>

***This Table Continues on the Following Slide →***

## Section 2

# Utility Fees and Rates

### 17B. Recent typical billing practices with regard to the governmentally owned properties (2-12)

		2005	2007	2009	2011	2013	2016	2018	2020	Average
<b>Bill But Don't Collect</b>										
	Federal	2	4	4	6	6	4	8	7	<b>5.1</b>
	State	2	3	4	6	7	5	9	9	<b>5.6</b>
	County	0	2	1	3	3	2	4	7	<b>2.8</b>
	City	1	2	2	2	2	3	4	6	<b>2.8</b>
	School District	7	8	8	10	16	10	19	21	<b>12.4</b>
	Special District	3	3	2	2	5	3	3	4	<b>3.1</b>
<b>Not Billed</b>										
	Federal	6	7	9	8	9	9	15	16	<b>9.9</b>
	State	6	8	10	10	10	9	15	17	<b>10.6</b>
	County	4	7	7	6	7	9	13	14	<b>8.4</b>
	City	7	9	12	7	7	9	14	14	<b>9.9</b>
	School District	5	5	7	8	5	7	3	14	<b>6.8</b>
	Special District	6	8	9	8	6	6	11	11	<b>8.1</b>

Section 2

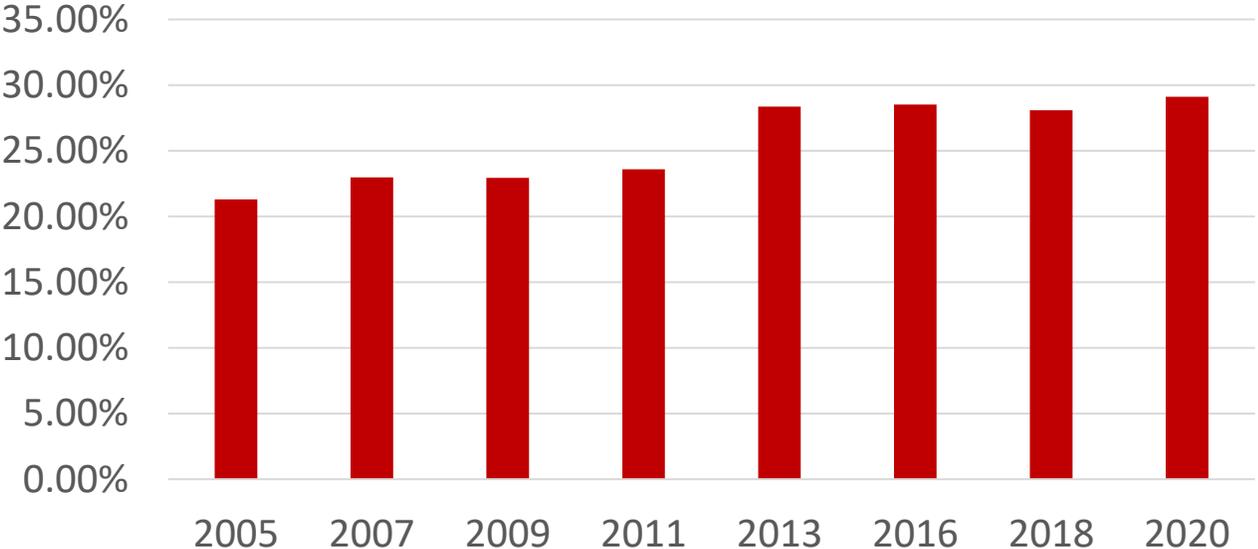
Utility Fees and Rates

18. Average percent reduction in the SWU utility fee for those accounts that received stormwater management credits (2-13)

Average SWU fee reduction

2005	21.30%
2007	22.98%
2009	22.94%
2011	23.60%
2013	28.36%
2016	28.52%
2018	28.09%
2020	29.11%
<i>Average</i>	<i>24.62%</i>

Average SWU fee reduction

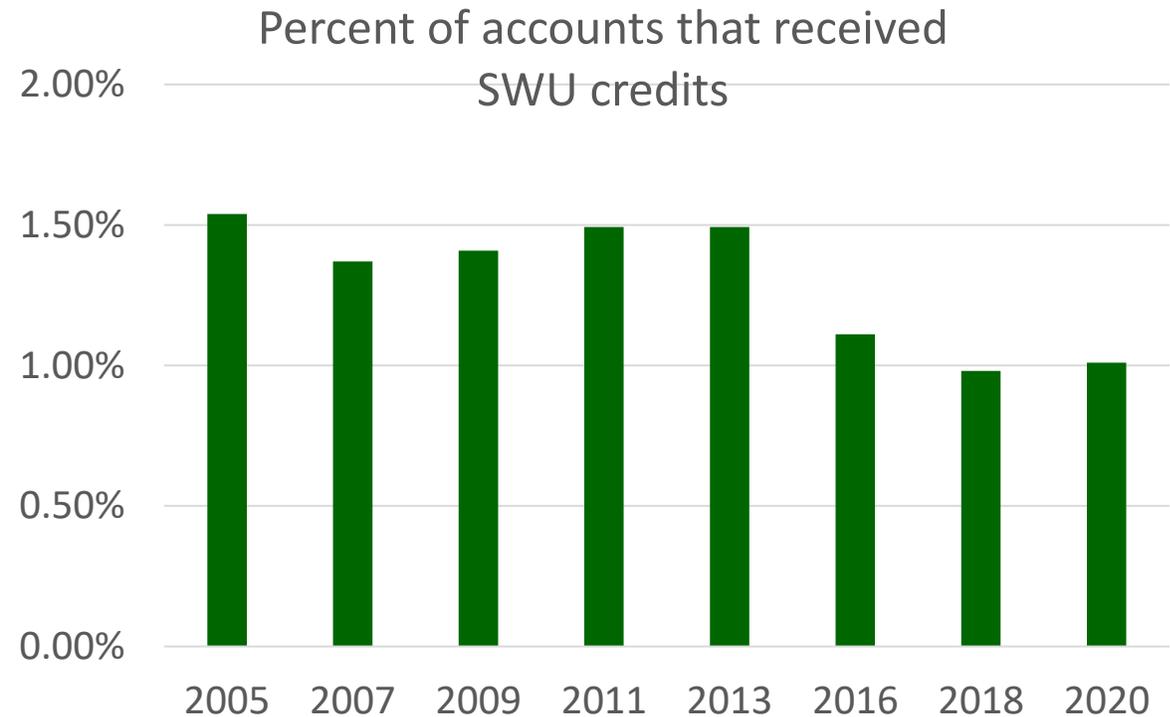


## Section 2

# Utility Fees and Rates

### 19. Annual number of credits received from the total number of SWU accounts (2-14)

	Total number of SWU accounts	Number of accounts that received credits	Percent of accounts that received credits
2005	74,475	1,146	1.54%
2007	126,414	1,732	1.37%
2009	188,021	2,648	1.41%
2011	255,656	3,816	1.49%
2013	253,006	3,776	1.49%
2016	337,797	3,753	1.11%
2018	357,197	3,502	0.98%
2020	358,915	3,625	1.01%
<b>Average</b>	<b>227,509</b>	<b>2,910</b>	<b>1.30%</b>

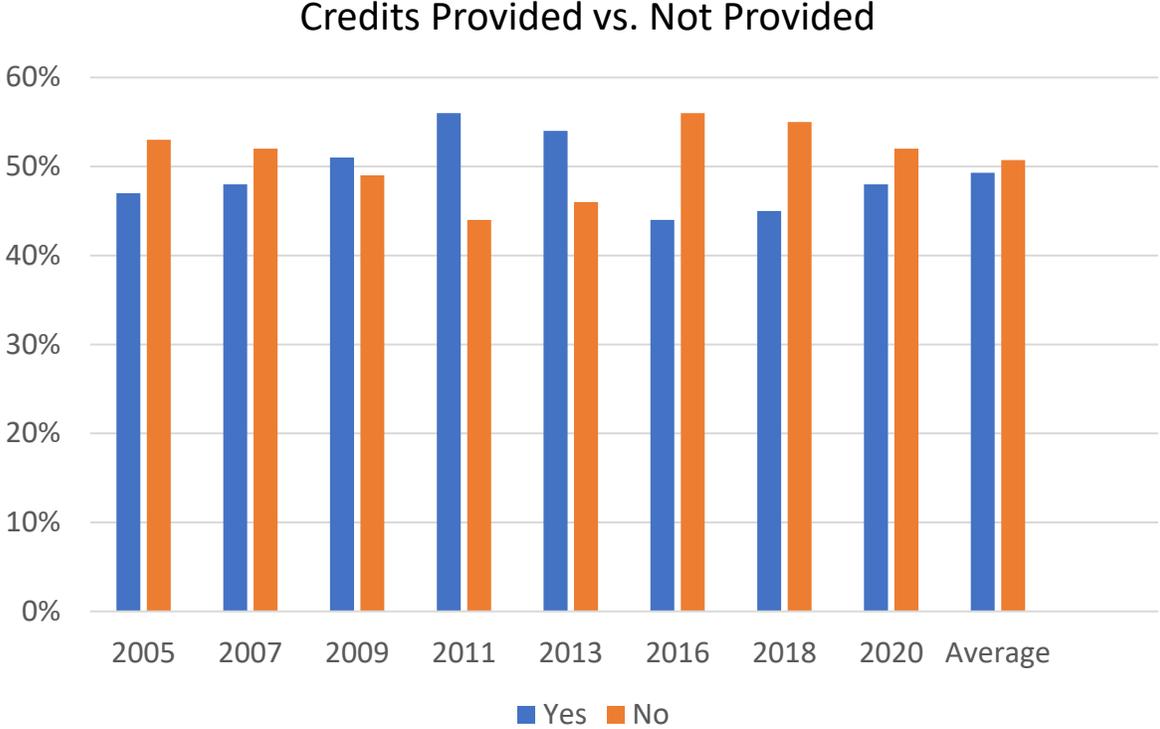


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Utility Fees and Rates

20. Annual credits provided for private detention/retention facilities (2-16)

	Yes	No
2005	47%	53%
2007	48%	52%
2009	51%	49%
2011	56%	44%
2013	54%	46%
2016	44%	56%
2018	45%	55%
2020	48%	52%
<b>Average</b>	<b>49%</b>	<b>51%</b>



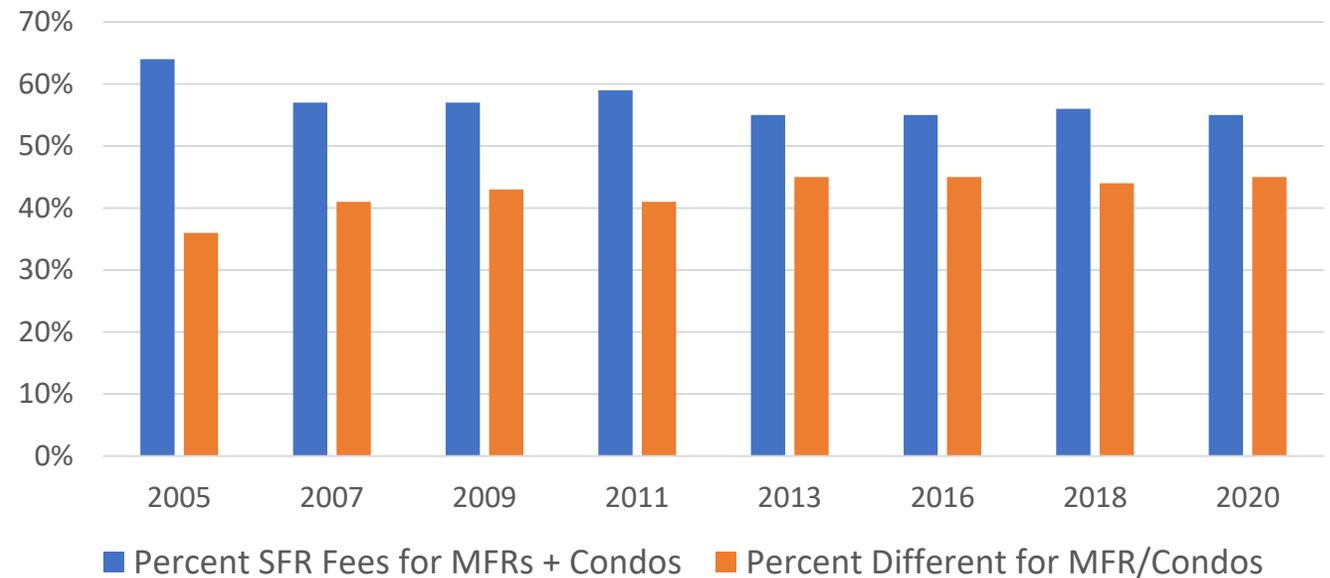
## Section 2

# Utility Fees and Rates

### 21. User fee for single-family detached dwellings vs. individual units in multi-family (e.g. apartments, condominiums)? 2-17

	<b>YES</b> Percent SFR Fees Used for MFRs + Condos	<b>NO</b> No Percent Difference for MFRs+Condos
2005	64%	36%
2007	57%	41%
2009	57%	43%
2011	59%	41%
2013	55%	45%
2016	55%	45%
2018	56%	44%
2020	55%	45%
<b>Average</b>	<b>57.57%</b>	<b>42.14%</b>

Comparison of Same vs. Different Fees for Residential Units

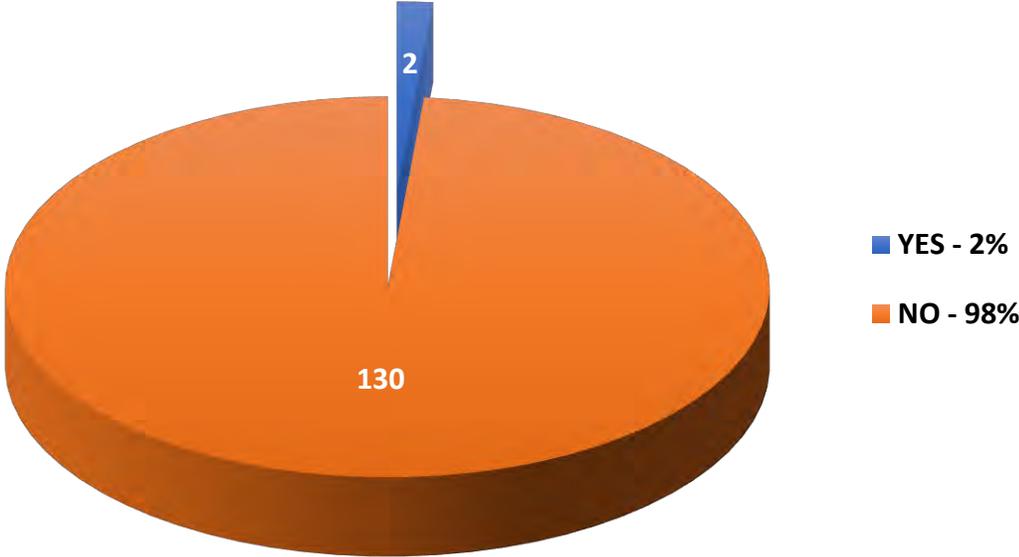


Section 2

Utility Fees and Rates

22. Variability of user fees watershed (2-18)

	Yes	No
2005	1%	99%
2007	2%	98%
2009	2%	98%
2011	2%	98%
2013	4%	96%
2016	2%	98%
2018	2%	98%
2020	2%	98%
<b>Average</b>	<b>2.14%</b>	<b>97.86%</b>

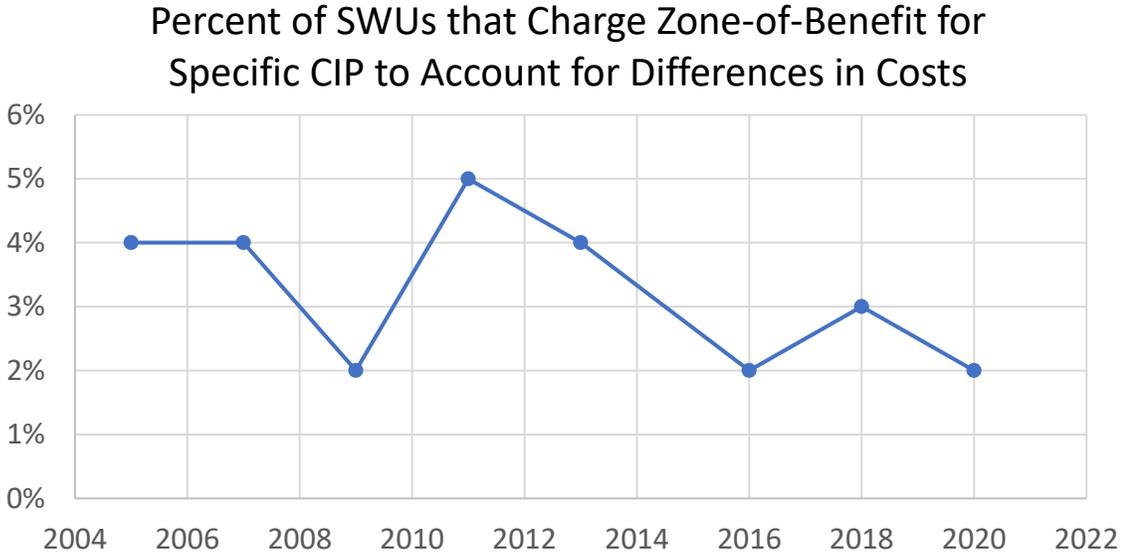


Section 2

Utility Fees and Rates

23. Variability of fees charged within the “zones-of-benefit” to specific capital projects that account for differences in capital costs (2-9)

	Yes	No
2005	4%	96%
2007	4%	96%
2009	2%	98%
2011	5%	95%
2013	4%	96%
2016	2%	98%
2018	3%	97%
2020	2%	98%
<b>Average</b>	<b>3.43%</b>	<b>96.57%</b>

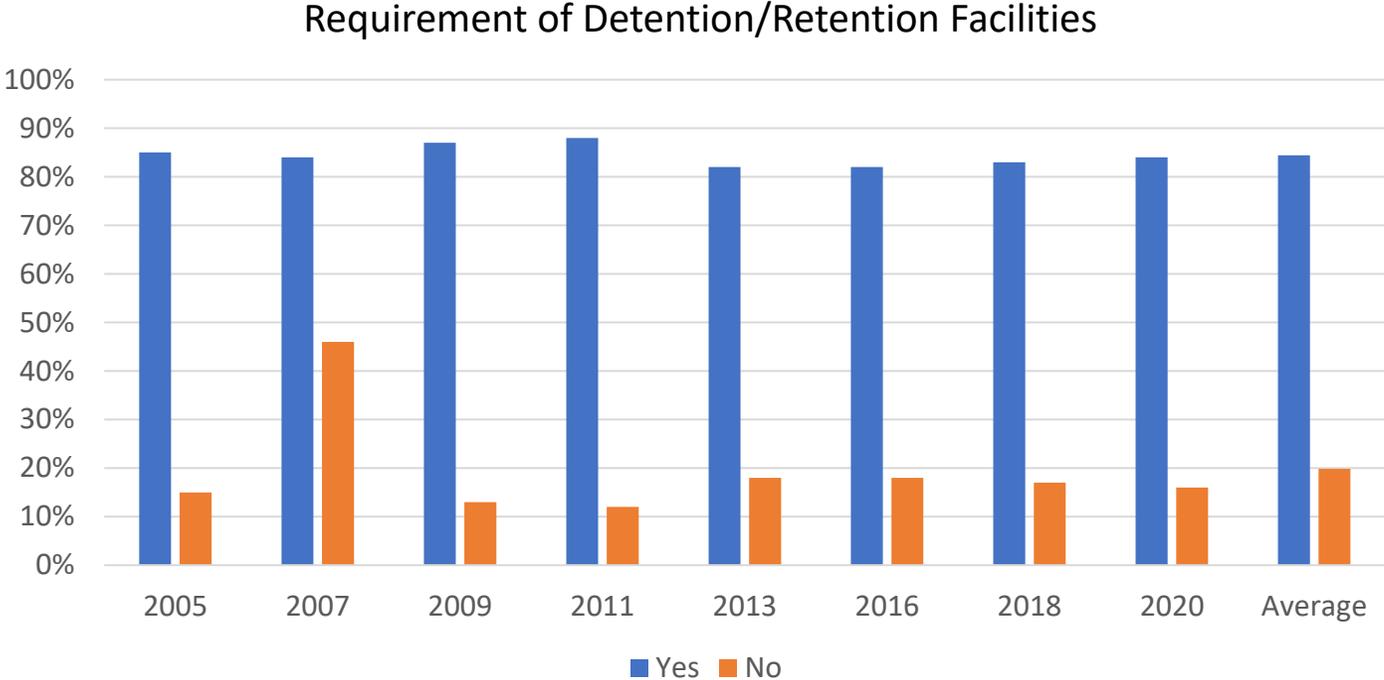


# Section 2

## Utility Fees and Rates

### 24. Requirements in SWUs local codes regarding private detention/retention facilities? (2-20)

	Required	Not Required
2005	85%	15%
2007	84%	46%
2009	87%	13%
2011	88%	12%
2013	82%	18%
2016	82%	18%
2018	83%	17%
2020	84%	16%
<b>Average</b>	<b>84.43%</b>	<b>19.86%</b>

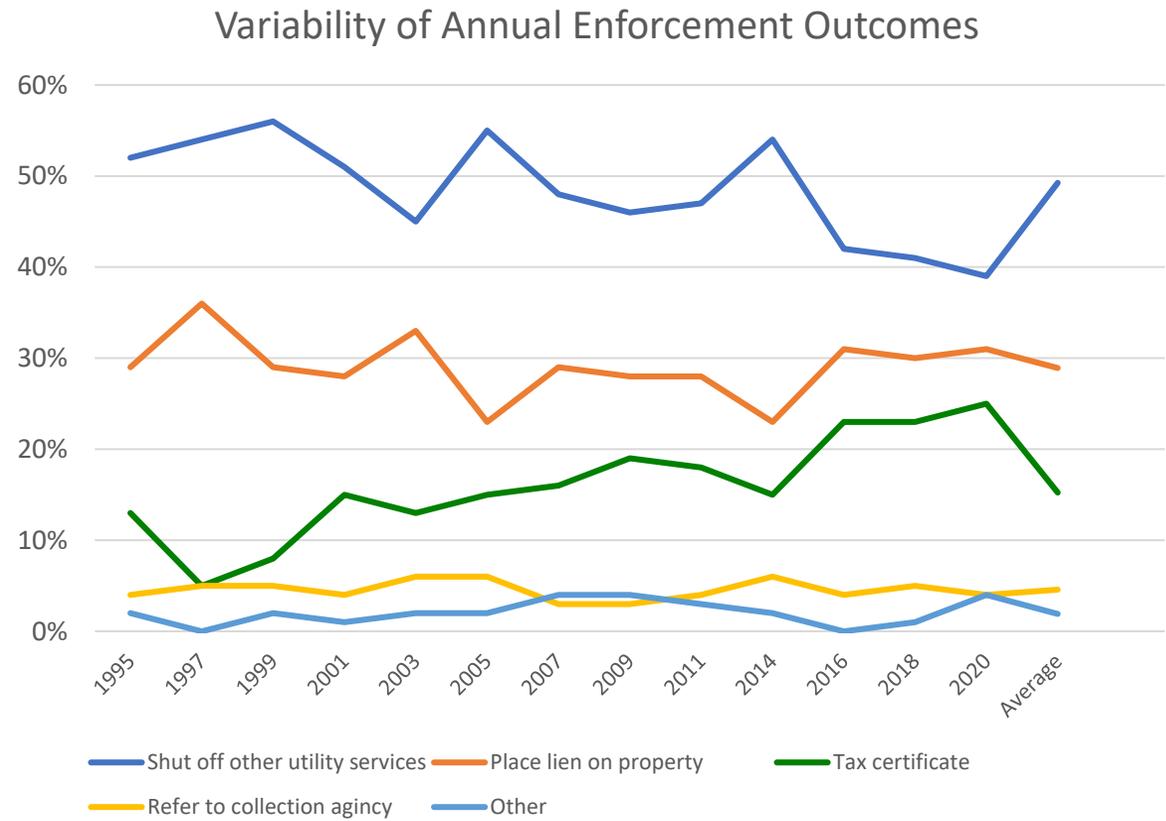


# Section 2

## Utility Fees and Rates

### 25. Methods used by SWUs to enforce collection of payments of utility charges (2-21)

	Shut off other utility services	Place lien on property	Tax certificate	Refer to collection agency	Other
1995	52%	29%	13%	4%	2%
1997	54%	36%	5%	5%	0%
1999	56%	29%	8%	5%	2%
2001	51%	28%	15%	4%	1%
2003	45%	33%	13%	6%	2%
2005	55%	23%	15%	6%	2%
2007	48%	29%	16%	3%	4%
2009	46%	28%	19%	3%	4%
2011	47%	28%	18%	4%	3%
2014	54%	23%	15%	6%	2%
2016	42%	31%	23%	4%	0%
2018	41%	30%	23%	5%	1%
2020	39%	31%	25%	4%	4%
<b>Average</b>	<b>49.25%</b>	<b>28.92%</b>	<b>15.25%</b>	<b>4.58%</b>	<b>1.92%</b>



Section 2

Utility Fees and Rates

26. Have your stormwater fees or assessments faced a legal challenge in court? (2-23)

	Yes	No
2005	15%	85%
2007	13%	87%
2009	12%	88%
2011	12%	88%
2013	12%	88%
2016	11%	89%
2018	12%	88%
2020	13%	87%
<b>Average</b>	<b>12.43%</b>	<b>87.57%</b>



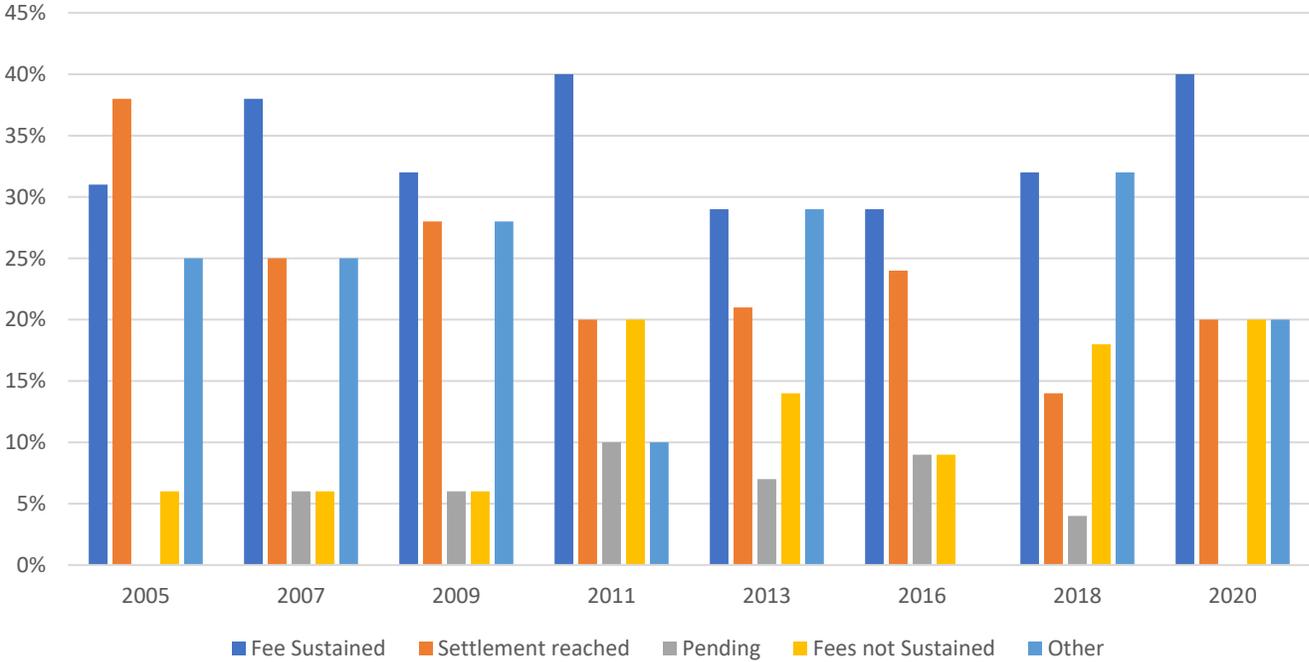
# Section 2

## Utility Fees and Rates

**27. If your charges have been challenged in court, what was the outcome? (2-24)**

	Fee Sustained	Settlement reached	Pending	Fees not Sustained	Other
2005	31%	38%	0%	6%	25%
2007	38%	25%	6%	6%	25%
2009	32%	28%	6%	6%	28%
2011	40%	20%	10%	20%	10%
2013	29%	21%	7%	14%	29%
2016	29%	24%	9%	9%	0%
2018	32%	14%	4%	18%	32%
2020	40%	20%	0%	20%	20%
<b>Average</b>	<b>34%</b>	<b>24%</b>	<b>5%</b>	<b>12%</b>	<b>21%</b>

Annual Variability of the Outcomes of Recent SWU Court Challenges

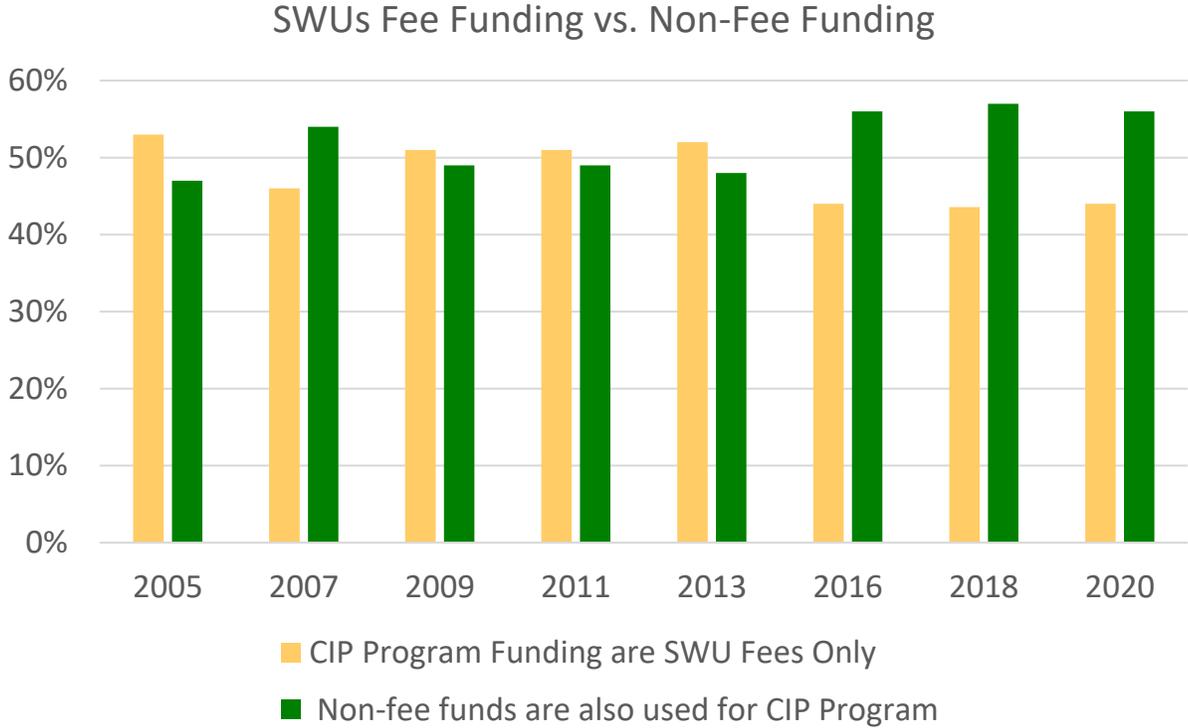


# Section 3

## Stormwater Program

### 28. Assessment of SWUs stormwater capital construction program funding from stormwater fee revenues and other non-fee funds (3-4)

	SWU funds used exclusively for CIP Program projects only	Non-SWU fee funds that are used for CIP Projects
2005	53%	47%
2007	46%	54%
2009	51%	49%
2011	51%	49%
2013	52%	48%
2016	44%	56%
2018	44%	57%
2020	44%	56%
<b>Average</b>	<b>48.07%</b>	<b>52.00%</b>



## Section 3

# Stormwater Program

### 29. Estimated total capital improvement needs for stormwater management over the next 5-, 10- and 20-year periods (3-6A)

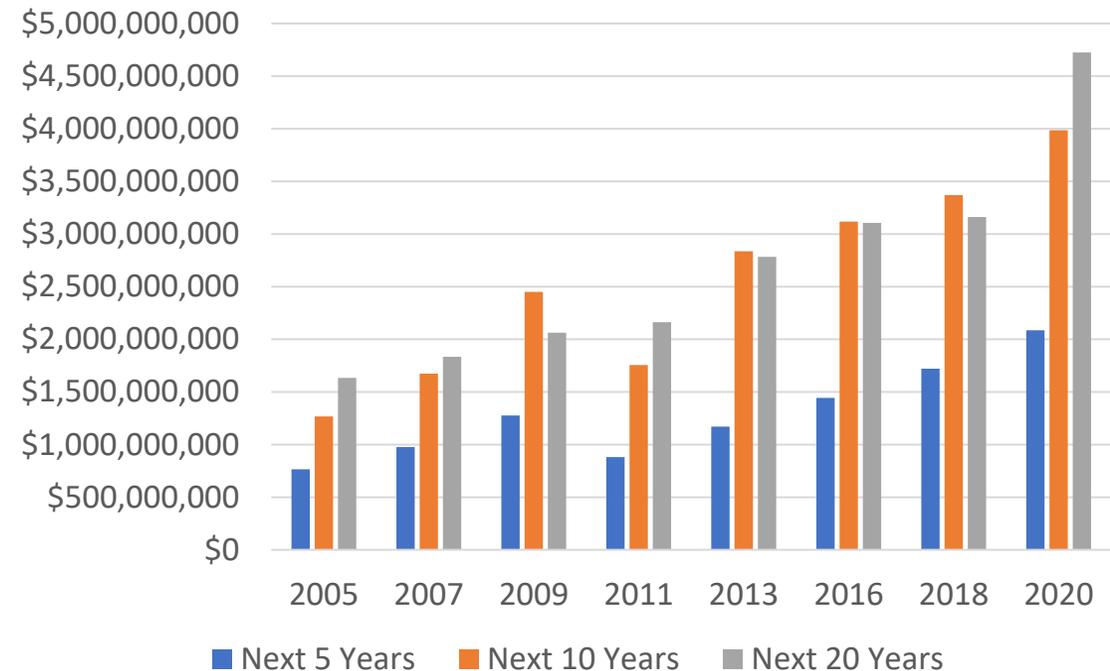
#### ESTIMATED TOTAL CAPITAL IMPROVEMENT NEEDS FOR STORMWATER MANAGEMENT

	Next 5 Years	Next 10 Years	Next 20 Years
2005	\$764,889,479	\$1,266,810,289	\$1,633,011,000
2007	\$976,318,633	\$1,674,743,081	\$1,833,404,000
2009	\$1,276,792,979	\$2,450,030,652	\$2,063,410,413
2011	\$881,836,850	\$1,755,300,549	\$2,163,231,999
2013	\$1,170,612,932	\$2,836,720,088	\$2,782,942,166
2016	\$1,443,660,028	\$3,118,330,701	\$3,105,498,921
2018	\$1,720,543,378	\$3,369,598,662	\$3,161,934,456
2020	\$2,085,770,283	\$3,986,422,129	\$4,724,944,309
<b>Average</b>	<b>\$1,290,053,070</b>	<b>\$2,557,244,519</b>	<b>\$2,683,547,158</b>

**\$6,530,884,747** 2005 - 2020 Total Capital Needs

**\$10,797,136,721** 2020 Total Capital Needs

Estimated Total Capital Improvement Needs



# Section 3

## Stormwater Program

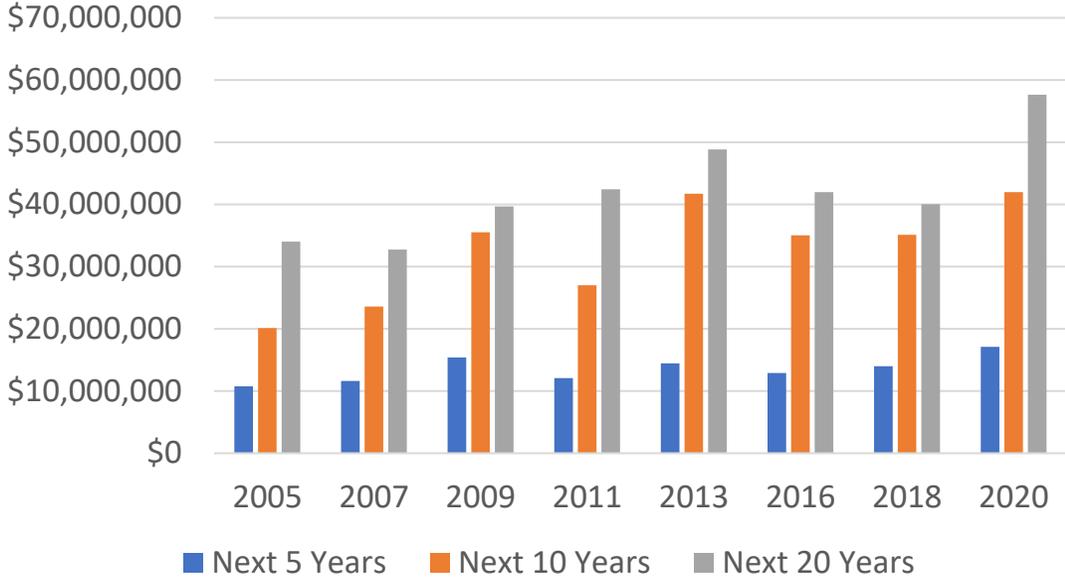
**29. Estimated average needs for capital improvement needs for stormwater management over the next 5-, 10- and 20-year periods (3-6B)**

**AVERAGE NEED FOR EACH TIME PERIOD**

	<b>Next 5 Years</b>	<b>Next 10 Years</b>	<b>Next 20 Years</b>
2005	\$10,733,091	\$20,108,100	\$34,021,063
2007	\$11,622,841	\$23,587,931	\$32,739,357
2009	\$15,383,048	\$35,507,691	\$39,680,969
2011	\$12,079,957	\$27,004,624	\$42,416,314
2013	\$14,452,012	\$41,716,472	\$48,823,547
2016	\$12,889,822	\$35,037,424	\$41,966,202
2018	\$13,988,158	35,099,986	\$40,024,487
2020	\$17,096,478	\$41,961,338	\$57,621,272
<b>Average</b>	<b>\$13,530,676</b>	<b>\$32,502,946</b>	<b>\$42,161,651</b>

**\$88,195,273      2005 - 2020 Average Needs**  
**\$116,679,088      2020 Average Needs**

**Average Need for Time Period**



## Section 3

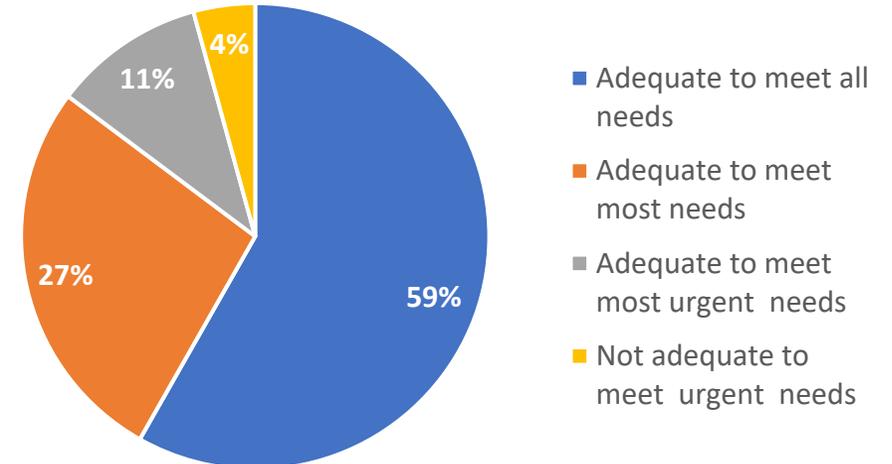
# Stormwater Program

### 30. Recent assessments of stormwater fee revenues versus the anticipated needs of SWUs for Administration programs and their requirements (3-18A)

#### Administration Programs

Time Period	Adequate to meet all needs	Adequate to meet most needs	Adequate to meet most urgent needs	Not adequate to meet urgent needs
1995	51%	13%	10%	8%
1997	64%	21%	6%	9%
1999	69%	22%	4%	4%
2001	56%	26%	12%	5%
2003	63%	23%	11%	3%
2005	63%	24%	7%	6%
2007	63%	23%	12%	5%
2009	63%	23%	11%	3%
2011	55%	36%	8%	1%
2013	53%	37%	10%	0%
2016	55%	32%	10%	3%
2018	55%	32%	10%	3%
2020	56%	44%	27%	6%
<b>Average</b>	<b>59%</b>	<b>27%</b>	<b>11%</b>	<b>4%</b>

#### Administration Findings



## Section 3

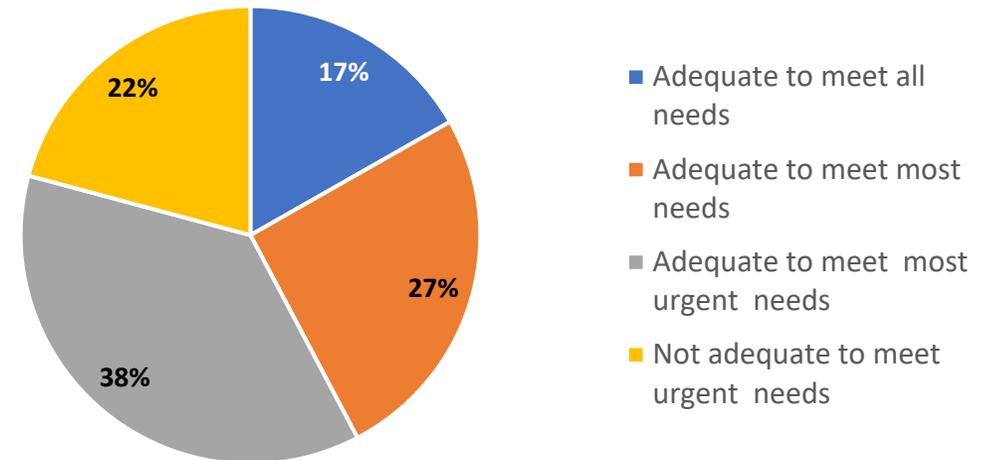
# Stormwater Program

### 30. Recent assessments of stormwater fee revenues versus the anticipated needs of SWUs for Operation and Maintenance programs and their requirements (3-18B)

#### Operations & Maintenance Programs

Time Period	Adequate to meet all needs	Adequate to meet most needs	Adequate to meet most urgent needs	Not adequate to meet urgent needs
1995	10%	10%	36%	44%
1997	13%	20%	46%	24%
1999	18%	18%	42%	22%
2001	12%	20%	42%	25%
2003	14%	17%	49%	20%
2005	21%	20%	49%	27%
2007	20%	21%	43%	27%
2009	14%	17%	49%	25%
2011	11%	25%	36%	20%
2013	22%	44%	27%	28%
2016	25%	49%	27%	7%
2018	25%	41%	27%	7%
2020	22%	44%	27%	6%
<b>Average</b>	<b>17%</b>	<b>27%</b>	<b>38%</b>	<b>22%</b>

Operation & Maintenance



## Section 3

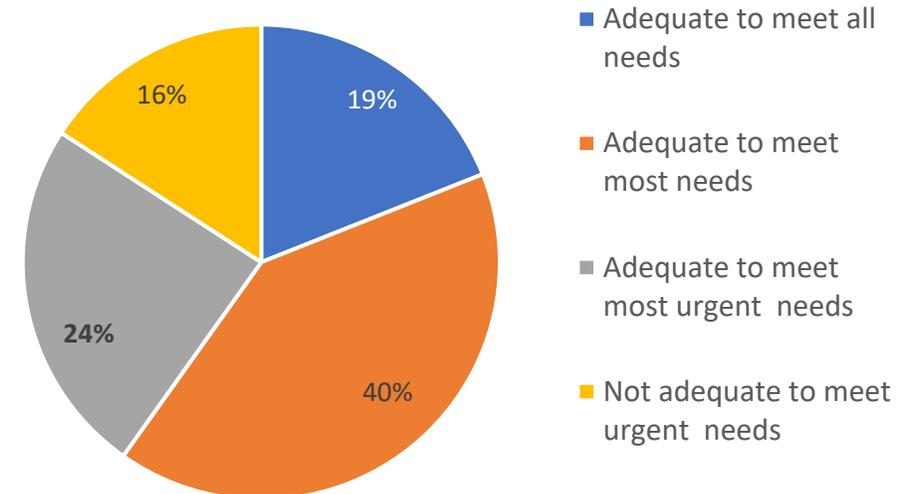
# Stormwater Program

### 30. Recent assessments of stormwater fee revenues versus the anticipated needs of SWUs for Capital Improvement programs and their requirements (3-18C)

#### Capital Improvement Programs

Time Period	Adequate to meet all needs	Adequate to meet most needs	Adequate to meet most urgent needs	Not adequate to meet urgent needs
1995	26%	39%	21%	13%
1997	24%	53%	8%	14%
1999	27%	56%	10%	6%
2001	17%	47%	25%	10%
2003	23%	50%	22%	6%
2005	24%	50%	19%	9%
2007	17%	40%	25%	10%
2009	22%	50%	22%	6%
2011	24%	45%	23%	8%
2013	9%	25%	33%	33%
2016	10%	23%	36%	31%
2018	10%	23%	27%	31%
2020	10%	23%	41%	26%
<b>Average</b>	<b>19%</b>	<b>40%</b>	<b>24%</b>	<b>16%</b>

Capital Improvement Program



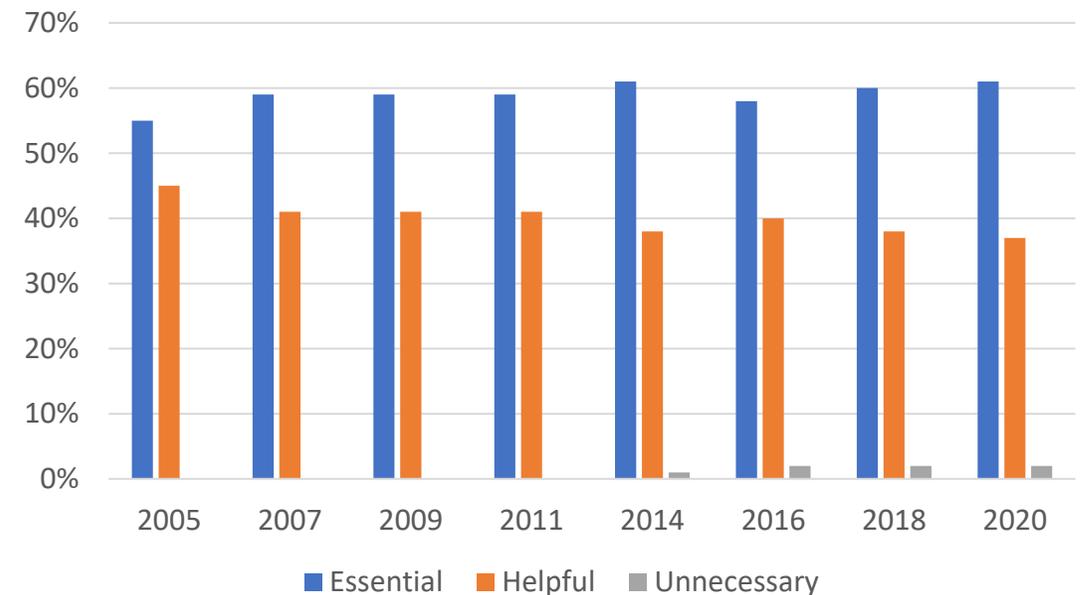
## Section 4

# Public Information Effort

31. SWUs have assessed the importance and refined the degree of essential value for using Public Information, as summarized in recent years (4-1)20

	Essential	Helpful	Unnecessary
2005	55%	45%	0%
2007	59%	41%	0%
2009	59%	41%	0%
2011	59%	41%	0%
2014	61%	38%	1%
2016	58%	40%	2%
2018	60%	38%	2%
2020	61%	37%	2%
<i>Average</i>	<i>59%</i>	<i>40%</i>	<i>1%</i>

Measures of Importance in the SWUs to Organize Public Information/Education



## Section 4

# Public Information Effort

**32. Media have found a set of effective strategies and tools for in educating the public about utility services, program needs and financing, and citizen responsibilities (4-2)**

	1995	1997	1999	2001	2005	2007	2009	2011	2013	2016	2018	2020	Total	
Brochures	73	30	65	67	54	71	74	65	67	97	97	102	862	 <p><i>More Effective</i></p> <p><i>Less Effective</i></p>
Social Media/Internet	45	34	64	38	33	51	64	64	72	97	97	107	766	
Neighborhood Meetings	72	38	54	57	63	55	57	54	57	75	75	51	708	
Bill Inserts	58	23	54	30	43	55	56	54	60	77	77	9	596	
Press Releases	39	43	37	42	29	35	32	37	42	58	58	66	518	
Public Hearings	46	55	20	38	34	42	41	29	38	56	56	62	517	
Public Service Announcements	28	77	33	33	21	32	30	33	36	50	50	49	472	
Public Schools	23	76	30	33	17	22	28	30	33	44	44	51	431	
Telephone Hotline	12	100	17	16	9	13	17	17	16	25	25	22	289	
Advisory Groups	22	16	20	21	16	21	22	20	21	32	32	35	278	
Speakers	14	86	13	16	10	11	12	13	16	15	15	17	238	
Other	18	41	20	23	13	18	25	20	23	30	3	3	237	

