

Stormwater Utility Rate and Implementation Study Update

Citizens' Stormwater
Task Force
Presentation of
Recommendations

City Council Regular Session
Thursday, October 14, 2004



August 8, 2022

Public Works Committee Meeting

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City Engineer

Stormwater Utility Update

- ❖ Historical Review
- ❖ iGNITE Critical Success Factors
 - ❖ Current initiatives underway
- ❖ Rate and Implementation Study Update

Current System

Public Infrastructure	Existing	Approved (for 2022)
Miles of Pipe	285	17
Miles of CMP	122	0
Number of Structures	17,212	437
Buried Structures	20	
City-Owned Channel (miles)	12	
19 City-owned basins	12 acres	
# of City-owned BMP	16	

Stormwater Utility Historical Review

❖ Stormwater Infrastructure

- ❖ Material/Design Changes
- ❖ Aging, Corrosion and other failures
- ❖ Capacity and Structural Issues

❖ Inventory (Scale)

- ❖ Miles of pipe (by type)
- ❖ Number of structures
- ❖ Increasing assets (CIP, Development, Annexation), Increasing Costs, Increasing Problem

❖ No dedicated funding source for Stormwater

- ❖ Improvements (repairs; flood mitigation)
- ❖ Maintenance
- ❖ Quality/Environmental
- ❖ Permitting

Stormwater Utility Historical Review

❖ Stormwater Master Plan, 1990s-2002

- ❖ Detailed list of flooding issues reported; all types
- ❖ List of capital projects and estimated costs
- ❖ No funding for work; no prioritization of work

❖ 2003-2004 Stormwater Citizens Task Force

- ❖ 14 citizens; 4 Development Reps; Park Board Member; City Staff; Consultant
- ❖ First effort to prioritize work identified in Stormwater Master Plan
- ❖ 164 projects; \$34.8 million; Increased operations & maintenance
- ❖ Recommended City establish a stormwater utility based on user fee

❖ 2007: LS 360 Strategic Plan

- ❖ Plan recommended a Stormwater Utility be established
- ❖ Preliminary research on utility structures completed
- ❖ 2008-2010 Recession stymied the political support for a stormwater utility ballot measure
- ❖ Other priorities intervened a funding allocation for stormwater utility study.

Stormwater Utility Historical Review

❖ Stormwater Projects through CIP

- ❖ Stormwater improvements only in association with road projects or failed infrastructure
- ❖ 2007: \$12M G.O. bond issue for stormwater capital projects

❖ Stormwater Projects through PW Operations

- ❖ Projects funded by General Fund to address immediate life-safety threats from failed infrastructure (e.g. pipe collapse, sink holes, etc.)
- ❖ Cannot keep pace with known and emerging needs due to funding and staffing challenges

❖ 2016: Council/PWC re-started Stormwater Utility discussions


❖ 2017: CIP Sales Tax Renewal included \$12.5M for stormwater capital projects

- ❖ Limited to structural flooding mitigation, caused by failed or lack of public infrastructure
- ❖ CMP replacements (NE Lakewood Way; Ward Road near Lea Drive)

❖ 2021: Ignite! Strategic Plan

- ❖ Plan Goal supported by funding Stormwater Utility Study from General Fund in FY22 Budget

Comprehensive Plan

 **IGNITE** Fuel Our Future

[Plan Elements](#) [Development Guide](#) [Dashboard](#) [Documents](#)

Fuel Our Future Plan Elements

To continue to ignite 'a vibrant community ensuring the finest quality of life for all generations' over the next 20 years, the Lee's Summit community created plans around seven essential elements of a successful community.

 <p>Quality of Life Health Safety Arts / Culture / Preservation Education Parks & Rec</p>	 <p>Strong Neighborhoods & Housing Choice Housing</p>	 <p>Resilient Economy Economic Development</p>	 <p>Multimodal Transportation Streets Transit Sidewalks & Trails</p>
 <p>Facilities & Infrastructure City Services</p>	 <p>Sustainable Environment Environment</p>	 <p>Land Use & Community Design Land Use / Urban Design Downtown Community Appearance</p>	

Stormwater Utility in iGNITE Comp Plan

- ❖ “Create stormwater utility” in 2 Essential Elements of Success
 - ❖ Infrastructure & Resiliency to Reduce flood risk & damage to property
 - ❖ Sustainable Environment to protect water quality
- ❖ Stormwater utility supports 4 Essential Elements of Success
 - ❖ Quality of Life (parks, recreation, health, safety)
 - ❖ Resilient economy (sustainable revenues for operations & maintenance)
 - ❖ Strong Neighborhoods (preserves property values)
 - ❖ Land Use & Community Design (opportunity for watershed-based BMPs)

2016-2020 Scenario Discussions with PWC

(costs out of date; to be re-evaluated)

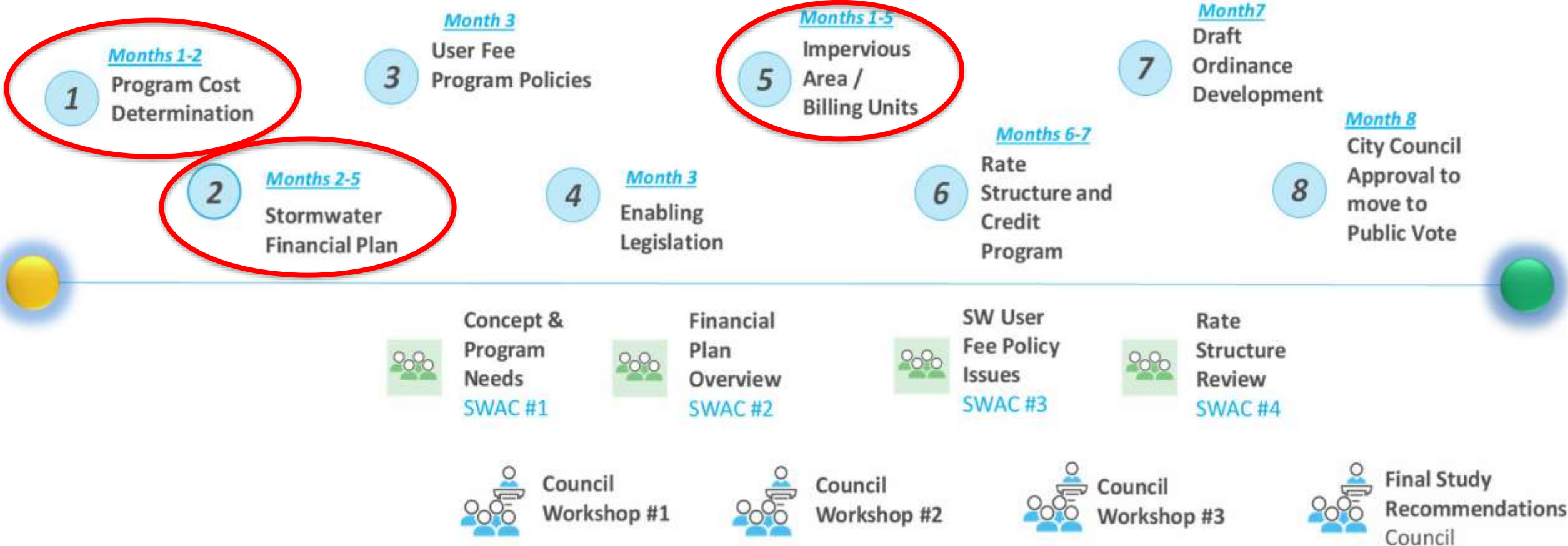
Comparison of Stormwater Scenarios 1-4: Revised Sept. 6, 2016

Historical Stormwater Scenario FY 2012 - 2015		Stormwater Scenario #1 Minimal Maintenance		Stormwater Scenario #2 Increased Maintenance		Stormwater Scenario #3 Recommended Maintenance		Stormwater Scenario #4 Recommended Maintenance + \$3M CIP	
SUMMARY	Stormwater not a priority 1 Part-time field crew Other Public Works priorities pull from stormwater crew <u>Snow response impact:</u> <u>Provides:</u> N/A	SUMMARY	Stormwater a priority 1 Full-time field crew Other Public Works priorities at same level of service <u>Snow response impact:</u> <u>Provides:</u> 3 Drivers	SUMMARY	Dedicated Stormwater Team 2 Full-time field crews No impact to other Public Works priorities <u>Snow response impact:</u> <u>Provides:</u> 6 Drivers 1 Dump Truck 1 Utility Truck	SUMMARY	Dedicated Stormwater Team/Impactful to Quality of Life 3 Full-time field crews Regional Leaders in Stormwater/Environmental Issues <u>Snow response impact:</u> <u>Provides:</u> 9 Drivers 2 Dump Truck 2 Utility Truck	SUMMARY	Dedicated Stormwater Team/Improved Quality of Life 3 Full-time field crews Regional Leaders in Stormwater/Environmental Issues <u>Snow response impact:</u> <u>Provides:</u> 9 Drivers 2 Dump Truck 2 Utility Truck
LEVEL OF SERVICE	Reactive repairs PW field crews construct patches only 50+ day work order response time Minimal NPDES response/training Occasional inspections Reactive customer service response	LEVEL OF SERVICE	Reduced reactive repairs, more proactive PW field crews construct CIP < \$75,000 Decreased work order response time Increased NPDES response Increased field inspections NPDES staff training Increased public involvement Increased customer service	LEVEL OF SERVICE	PW field crews construct CIP < \$150,000 Limited system replacement program Tracking of environmental permitting Proactive NPDES response Proactive field inspections System inspection program implemented Small system repairs routine Increased NPDES staff training Increased public participation Increased customer service	LEVEL OF SERVICE	Green Infrastructure projects Small Capital Projects Implementation Additional water quality programs PW field crews construct CIP < \$600,000 System deficiency replacement program Limited CIP system upgrades designed/built in-house NPDES physical improvements / training program System inspection program Environmental permitting program Increased public involvement/participation Increased customer service	LEVEL OF SERVICE	Move beyond structure flooding projects Capital Projects implementation Additional water quality programs PW field crews construct CIP < \$600,000 System deficiency replacement program CIP system upgrades designed/built in-house NPDES physical improvements / training program System inspection program Environmental permitting program Increased public involvement/participation Increased customer service Capital improvement Program of \$2.5M in projects & \$500k wft cost (staff) = \$3M
STAFF	FTE Quantity Equipment Operator 0.675 2 Maintenance Worker 0.675 1 Field Supervisor 0.675 1 Sr./Staff Engineer 0.50 1	STAFF	FTE Quantity Supervisory Engineer 0.25 1 Equipment Operator 0.80 2 Maintenance Worker 0.50 1 Field Supervisor 0.80 1 Sr./Staff Engineer 1.00 1 Sr. Engineering Tech 1.00 1 Environmental Specialist 1.00 1 Inspector - NPDES 1.00 1	STAFF	FTE Quantity Supervisory Engineer 0.50 1 Equipment Operator 0.80 4 Maintenance Worker 0.80 2 Field Supervisor 0.80 2 Sr./Staff Engineer 1.00 2 Sr. Engineering Tech 1.00 1 Environmental Specialist 1.00 1 Inspector - NPDES 1.00 1	STAFF	FTE Quantity Supervisory Engineer 1.00 1 Equipment Operator 0.80 6 Maintenance Worker 0.80 3 Field Supervisor 0.80 3 Sr./Staff Engineer 1.00 2 Sr. Engineering Tech 1.00 1 Environmental Specialist 1.00 1 Inspector - NPDES 1.00 1	STAFF	FTE Quantity Supervisory Engineer 1.00 1 Equipment Operator 0.80 6 Maintenance Worker 0.80 3 Field Supervisor 0.80 3 Sr./Staff Engineer +1 staff 1.00 3 Sr. Engineering Tech +1 staff 1.00 2 Environmental Specialist 1.00 1 Inspector - NPDES 1.00 1 Const. Project Manager 1.00 1 Construction Inspector 1.00 2
Total FTEs and positions 3.2 5		Total FTEs and positions 7.45 9		Total FTEs and positions 11.9 14		Total FTEs and positions 15.6 18		Total FTEs and positions 20.6 21	
Sub-Total Annual Staff Cost \$367,514		Sub-Total Annual Staff Cost \$712,000		Sub-Total Annual Staff Cost \$1,150,000		Sub-Total Annual Staff Cost \$1,500,000		Sub-Total Annual Staff Cost \$2,000,000	
EQUIPMENT	Utility Truck n/a Backhoe n/a Dump Truck n/a Pick-up Truck n/a Skidsteer n/a Skidsteer Trailer n/a	EQUIPMENT	Utility Truck Shared PWD Backhoe \$6,994 Dump Truck Shared PWD Pick-up Truck 4 ea \$8,499 Skidsteer \$8,910 Skidsteer Trailer \$906	EQUIPMENT	Utility Truck \$4,898 Backhoe \$6,994 Dump Truck \$16,150 Pick-up Truck 5 ea \$10,615 Skidsteer \$8,910 Skidsteer Trailer \$906	EQUIPMENT	Utility Truck 2 ea \$9,792 Backhoe \$6,994 Dump Truck 2 ea \$32,300 Pick-up Truck 8 ea \$16,984 Skidsteer \$8,910 Skidsteer Trailer \$906 Trackhoe - mid size \$8,066 Trackhoe Trailer \$1,326	EQUIPMENT	Utility Truck 2 ea \$9,792 Backhoe \$6,994 Dump Truck 2 ea \$32,300 Pick-up Truck 10 ea \$21,230 Skidsteer \$8,910 Skidsteer Trailer \$906 Trackhoe - mid size \$8,066 Trackhoe Trailer \$1,326
Sub-Total Annual Equipment Costs \$0		Sub-Total Annual Equipment Costs \$23,309		Sub-Total Annual Equipment Costs \$46,471		Sub-Total Annual Equipment Costs \$83,278		Sub-Total Annual Equipment Costs \$87,524	
ANNUAL EXPENDABLE COSTS	Repairs & Maintenance \$25,304 Fuel & Lubricants \$23,816 Supplies, services, charges (1 part time crew) \$163,841	ANNUAL EXPENDABLE COSTS	Tools \$4,500 Commodities & Contractual Services \$8,780 In-House Construction Materials (2 full time crews) \$231,000	ANNUAL EXPENDABLE COSTS	Tools \$9,000 Commodities & Contractual Services \$18,000 In-House Construction Materials (3 full time crews) \$465,000	ANNUAL EXPENDABLE COSTS	Tools \$17,500 Commodities & Contractual Services \$36,000 In-House Construction Materials (3 full time crews) \$715,000	ANNUAL EXPENDABLE COSTS	Tools \$17,500 Commodities & Contractual Services \$36,000 In-House Construction Materials \$715,000 Yearly CIP Contracts \$2,500,000
SUB-TOTAL ANNUAL COSTS \$580,375		SUB-TOTAL ANNUAL COSTS \$979,589		SUB-TOTAL ANNUAL COSTS \$1,688,471		SUB-TOTAL ANNUAL COSTS \$2,351,778		SUB-TOTAL ANNUAL COSTS \$5,356,024	
ONE-TIME EQUIPMENT COSTS	Utility Truck n/a Backhoe n/a Dump Truck n/a Pick-up Truck n/a Skidsteer n/a Skidsteer Trailer n/a	ONE-TIME EQUIPMENT COSTS	Utility Truck Shared PWD Backhoe \$107,000 Dump Truck Shared PWD Pick-up Truck 4 ea \$112,000 Skidsteer \$90,000 Skidsteer Trailer \$11,000	ONE-TIME EQUIPMENT COSTS	Utility Truck \$107,000 Backhoe \$107,000 Dump Truck \$177,039 Pick-up Truck 5 ea \$140,000 Skidsteer \$90,000 Skidsteer Trailer \$11,000	ONE-TIME EQUIPMENT COSTS	Utility Truck 2 ea \$140,000 Backhoe \$107,000 Dump Truck 2 ea \$354,078 Pick-up Truck 8 ea \$224,000 Skidsteer \$90,000 Skidsteer Trailer \$11,000 Trackhoe mid size \$100,000 Trackhoe Trailer \$20,000	ONE-TIME EQUIPMENT COSTS	Utility Truck 2 ea \$140,000 Backhoe \$107,000 Dump Truck 2 ea \$354,078 Pick-up Truck 10 ea \$280,000 Skidsteer \$90,000 Skidsteer Trailer \$11,000 Trackhoe mid size \$100,000 Trackhoe Trailer \$20,000
Sub-Total One-Time Equipment Costs \$0		Sub-Total One-Time Equipment Costs \$320,000		Sub-Total One-Time Equipment Costs \$595,039		Sub-Total One-Time Equipment Costs \$1,046,078		Sub-Total One-Time Equipment Costs \$1,102,078	
TOTAL COST	\$580,375	TOTAL COST	\$1,299,589	TOTAL COST	\$2,283,510	TOTAL COST	\$3,397,856	TOTAL COST	\$6,458,102

NOTE: The LOS for each scenario increases and builds upon the previous level. Scenario 4 = Scenario 3 plus CIP.

Current Rate & Implementation Study

Jan 2022 startup; Fall 2023 election (?)



Next Steps

- ❖ Finalize concepts and program LOS options
- ❖ Recruit Stormwater Advisory Council (SWAC) and key stakeholders
- ❖ Develop scenarios, LOS proposals, questions for policy development
 - ❖ Revenue structures; could lead to credits
 - ❖ User fee program policies
 - ❖ Legal reviews
- ❖ Discuss targeted election date (?)
- ❖ Future – Projects still exceed CIP, Maintenance and Operation Funds (even with utility). A utility is critical, but also consider the need for future bond issues and sales tax measures.

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Yours Truly